Appendix G

Traffic Technical Report

John Wayne Airport

Transportation Impact Analysis

Report

Prepared for:
County of Orange

April 30, 2014

OC13-0266

FEHR PEERS

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1.0 INTRODUCTION

This chapter provides background relevant to the analysis presented in this traffic analysis.

1.1 PROJECT BACKGROUND

The John Wayne Airport (JWA) is the only airport in Orange County which provides commercial passenger and cargo service. JWA also provides general aviation services for private planes. The service area for JWA includes over 3 million people currently and includes 34 cities along with the unincorporated areas of Orange County. The County of Orange owns and operates JWA.

Capacity of operations at JWA are governed by a series of settlement agreements entered into among the following parties:

- County of Orange
- City of Newport Beach
- The Airport Working Group (AWG)
- Stop Polluting Our Newport (SPON)

The settlement agreement was adjudicated in 1985 which restricted capacity at the airport. In 2003, the 1985 Settlement Agreement was amended to reflect the following:

- Extended the term of the agreement through December 31, 2015;
- Restricted the number of average daily departures (ADD) to 85 per day for Class A passenger service'
- Restricted the number of cargo ADD to four per day;
- Restricted the numbers of passengers to 10.3 Million Annual Passengers (MAP) through December 31, 2010 and 10.8 MAP by December 31, 2015;
- Placed no limits on the size of the terminal, the size of the departure lounge, or the number of parking spaces; and
- Limited the number of passenger loading bridges to 20 in total.

Since the 2003 amendment will expire in December 2015, the four original signatories began discussions regarding a second extension in early 2012. Since that time, the signatories have reached agreement on the key elements of a second extension, some key elements of this second extension include:

- An evaluation of multiple scenarios allowing increases in MAP from 12.5 to 16.9
- An evaluation of multiple time periods ranging from 2016 to 2030
- An evaluation of different increases in the number of flights ranging from 85 to 228
- A potential elimination of the limit on the number of loading bridges

To facilitate a second extension, this technical report provides the supporting analysis of potential traffic-related impacts necessary for entry into a second extension. Additional information regarding each of the proposed alternatives is provided in subsequent chapters, including estimates of the likely vehicular traffic increase, and the effect of such increase on adjacent intersections and freeway facilities.

1.2 NO PROJECT ALTERNATIVE

One aspect of the current settlement agreement amendment is that it allows the overall MAP at JWA to increase to 10.8 without any overt action by Orange County. Therefore, this traffic analysis also evaluates the potential impacts associated with a No Project Scenario in which the 10.8 MAP is assumed to remain in place throughout all analysis periods.

However; it should be noted that an increase in MAP to only 10.8 is unlikely to satisfy the regional demand for air travel. Both FAA and SCAG projections indicate that forecasted passenger demand at JWA exceeds the current Settlement Agreement limits of 10.8 MAP. The FAA projections anticipate unconstrained passenger demand at JWA reaching 12.8 MAP by 2030. (See, Technical Report Capacity Analysis, AECOM, Section **7** (February 2014).) JWA currently serves approximately 9 million annual passengers and allowing an increase in MAP to only 10.8 MAP likely would cause residents of Orange County to divert to other facilities in the region to satisfy their air travel needs. (Id.) This diversion of workers and residents to other facilities such as Los Angeles International Airport (LAX) and Ontario would likely result in additional travel on the regional roadway system, which could result in additional congestion, vehicle miles traveled (VMT), and emissions for these longer distance trips.

2.0 REGULATORY SETTING

The regulatory framework is used to inform decision makers about the regulatory agencies/policies that affect transportation in the project area. This enables them to make informed decisions about planning improvements to transportation systems. This document includes a discussion of funding as well as regulation. Major policy documents impacting the transportation system in the project area include laws at the federal and state level, and planning documents at a regional level.

2.1 FEDERAL REGULATIONS

In 1982, the federal government passed the Surface Transportation Assistance Act (STAA). This act requires states to allow larger trucks on the "National Network", which is comprised of the Interstate System plus the non-Interstate Federal-Aid Primary System. "Larger trucks" include (1) doubles with 28.5 foot trailers, (2) singles with 48-foot semi-trailers and unlimited kingpin-to-rear axle (KPRA) distance, (3) unlimited length for both vehicle combinations, and (4) widths up to 102 inches.

2.2 STATE REGULATIONS

2.2.1 AB 1358- COMPLETE STREETS ACT

The California Complete Streets Act of 2008 was signed into law on September 30, 2008. Beginning January 1, 2011, AB 1358 required circulation elements to address the transportation system from a multi-modal perspective. The bill states that streets, roads, and highways must "meet the needs of all users…in a manner suitable to the rural, suburban, or urban context of the general plan." Essentially, this bill requires a circulation element to plan for all modes of transportation where appropriate – including walking, biking, car travel, and transit.

The Complete Streets Act also requires circulation elements to consider the multiple users of the transportation system, including children, adults, seniors, and the disabled. For further clarity, AB 1358 tasks the Governor's Office of Planning and Research to release guidelines for compliance with this legislation by January 1, 2014.

2.2.2 AB 32- GLOBAL WARMING SOLUTIONS ACT

With the passage of the Global Warming Solution Act of 2006, the State of California committed itself to reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. The California Air Resource Board (ARB), which is coordinating the response to comply with AB 32, is currently on schedule to meet this deadline.

In 2007, ARB adopted a list of early action programs that could be put in place by January 1, 2010. In 2008, ARB defined its 1990 baseline level of emissions, and by 2011 it completed its major rule making for reducing GHG emissions. Rules on emissions, as well as market-based mechanisms like the proposed cap and trade program, came into effect January 1, 2012. The cap and trade program controls pollution by a governing agency selling permits on the amount of pollutants a firm can emit. A firm's pollutants cannot exceed the limit. Firms requiring the need to increase their emissions must purchase permits from other firms requiring fewer permits.

2.2.3 SB 375

On December 11, 2008, the ARB adopted its Proposed Scoping Plan for AB 32. This scoping plan included the approval of SB 375 as the means for achieving regional transportation-related GHG targets. SB 375 provides guidance on how curbing emissions from cars and light trucks can help the state comply with AB 32.

There are five major components to SB 375. First, SB 375 will address regional GHG emission targets. ARB's Regional Targets Advisory Committee will guide the adoption of targets to be met by 2020 and 2035 for each Metropolitan Planning Organization (MPO) in the State. These targets, which MPOs may propose themselves, will be updated every eight years in conjunction with the revision schedule of housing and transportation elements.

Second, MPOs will be required to create a Sustainable Communities Strategy (SCS) that provides a plan for meeting regional targets. The SCS and the Regional Transportation Plan (RTP) must be consistent with each other, including action items and financing decisions. If the SCS does not meet the regional target, the MPO must produce an Alternative Planning Strategy that details an alternative plan to meet the target.

Third, SB 375 requires that regional housing elements and transportation plans be synchronized on eight-year schedules. In addition, Regional Housing Needs Assessment (RHNA) allocation numbers must conform to the SCS. If local jurisdictions are required to rezone land as a result of changes in the housing element, rezoning must take place within three years.

Fourth, SB 375 provides CEQA streamlining incentives for preferred development types. Residential or mixed-use projects qualify if they conform to the SCS. Transit oriented developments (TODs) also qualify if they 1) are at least 50% residential, 2) meet density requirements, and 3) are within one-half mile of a transit stop. The degree of CEQA streamlining is based on the degree of compliance with these development preferences.

Finally, MPOs must use transportation and air emission modeling techniques consistent with guidelines prepared by the California Transportation Commission (CTC). Regional Transportation Planning Agencies, cities, and counties are encouraged, but not required, to use travel demand models consistent with the CTC guidelines.

2.2.4 SB 97

While AB 32 places a limit on GHG emissions, it does not specify how climate change regulations affect requirements of the California Environmental Quality Act (CEQA). SB 97, passed in 2007, required the Governor's Office of Planning and Research to develop CEQA guidelines which were subsequently adopted on March 18, 2010. Key requirements of these guidelines include:

- Lead agencies must analyze GHG emissions related to projects
- If a project's GHG emissions may result in a significant impact, then a range of potential mitigation measures should be considered
- Agencies may streamline the analysis of GHG emissions through a programmatic approach

2.3 REGIONAL REGULATIONS

2.3.1 ORANGE COUNTY CONGESTION MANAGEMENT PROGRAM

The Orange County Congestion Management Program (CMP) was originally adopted in 1991 and updated most recently in 2011. The goals of the Orange County CMP are to support regional mobility and air quality objectives by reducing traffic congestion; provide a mechanism for coordinating land use and development decisions that support the regional economy; and determine gas tax fund eligibility.
To meet these goals, the CMP contains a number of policies designed to monitor and address system performance issues. OCTA was designated by Orange County's local governments as the Congestion Management Agency (CMA) for the County. As a result, OCTA is responsible for the development, monitoring, and biennial updating of Orange County's CMP.

A key element of the current Land Use Analysis Program of the CMP is the Traffic Impact Analysis Study (TIS), to be prepared by local jurisdictions. The TIS reports are designed to provide an improved basis for assessing the impacts of land use decisions on the regional transportation system, both within and outside the permitting jurisdiction, by providing a consistent format to identify impacts and mitigations, and to evaluate mitigation costs. TIS reports shall be prepared for projects when required by local thresholds and criteria, but must be prepared for land use decisions that are equal to or greater than half the thresholds for regional review defined by the California Environmental Quality Act (CEQA). A traffic study is typically required when there is the potential for the project to generate significant traffic to the local transportation network. If it is determined that a CMP TIS report is required, the entity with local land use authority shall prepare or cause to be prepared a TIS report consistent with the procedure and methodology specified in Appendix B of CMP and the local jurisdiction's Land Use/Transportation Analysis Program. A CMP TIS has additional requirements and evaluations compared to a typical traffic study. A traffic study is required as part of the project due to the land use and transportation changes proposed for future conditions. Without a traffic study, an accurate evaluation of how traffic patterns will change and the potential impacts they will have on the local network cannot be determined.

If it is determined that a project qualified for the preparation of a TIS report but no report was prepared, adjacent potentially impacted jurisdictions, OCTA, or Caltrans may request that such a report be prepared, even though it may be after-the-fact. The permitting jurisdiction shall prepare, or cause to be prepared, a TIS report in order to determine appropriate mitigation measures and financial responsibilities for

resolution of the ongoing CMP system impacts and for developing appropriate mitigations for future development projects.

2.3.2 RENEWED MEASURE M (M2)

In 1990, Orange County voters approved Measure M (M1), a 20-year program for local transportation improvements funded by a half-cent sales tax. OCTA was designated to administer Measure M funds for the improvement of Orange County's freeways, streets and roads, and transit system. On November 7, 2006, Orange County voters approved the renewal of the Measure M one-half cent sales tax for the transportation improvements. The renewal of Measure M (M2) offers the opportunity to replicate, and perhaps exceed, the performance in delivering on the original.

According to the Renewed Measure M Early Action Plan Report prepared by OCTA, more than $1.6 billion in transportation improvements, promised to the voters in M2 could be underway by 2012.

2.3.3 2009 OCTA COMMUTER BIKEWAYS STRATEGIC PLAN

The *Commuter Bikeways Strategic Plan (CBSP)* was developed by OCTA in 2009 to encourage the enhancement of Orange County's regional bikeways network, in order to make bicycle commuting a more viable and attractive travel option. The goal of the CBSP is to help address the many challenges by providing: a strategy for improving the regional bikeway network; eligibility for state Bicycle Transportation Account (BTA) funds; identification of roles and responsibilities for OCTA regarding bikeways; and documentation of existing and planned Orange County bikeways. The CBSP is a long range, financially unconstrained planning document. Funding for these projects will not be limited to the OCTA Call for Projects. It will be the responsibility of each implementing agency to identify funding sources for the projects within their purview.

2.4 LOCAL REGULATIONS

2.4.1 CITY OF NEWPORT BEACH

The following are the general plan policies and objectives of the cities of Newport Beach, Irvine, and Costa Mesa that are potentially applicable to the proposed project:

Policy CE 1.1.1 Comprehensive Transportation System

Provide a diverse transportation system that provides mobility options for the community. *(Imp 16.8, 16.11)*

Policy CE 1.1.2 Integrated System of Multiple Modes

Provide an integrated transportation system that supports the land use plan set forth in the Land Use Element. *(Imp 2.1)*

Policy CE 2.1.1 Level of Service Standards

Plan the arterial roadway system to accommodate projected traffic at the following level of service standards:

A. Level of Service (LOS) "D" throughout the City, unless otherwise noted

B. LOS "E" at any intersection in the Airport Area shared with Irvine

C. LOS "E" at Coast Highway (EW) and Dover Drive (NS) due to right-of-way Limitations

D. LOS "E" at Marguerite Avenue (NS) and Coast Highway (EW) in the pedestrian oriented area of Corona del Mar

E. LOS "E" at Goldenrod Avenue (NS) and Coast Highway (EW) in the pedestrian oriented area of Corona del Mar *(Imp 16.3)*

Policy CE 2.1.5 MacArthur Boulevard Widening

Plan the addition of lanes to MacArthur Boulevard between Harbor View Drive and the prolongation of Crown Drive so that more than four lanes are constructed only when the daily volume to capacity ratio equals 1.0 in that section of MacArthur Boulevard, not counting trips generated by the MacArthur Boulevard access drive to Corona del Mar Plaza, and after public hearings before the Planning Commission and City Council, and only by narrowing the median. *(Imp 16.3)*

Policy CE 3.1.2 Integration of Transportation Systems with Adjoining Communities and the Region

Interface with regional and surrounding local agencies, such as Caltrans, OCTA, the County of Orange, John Wayne Airport, the Cities of Irvine, Costa Mesa, and Huntington Beach, and the University of California, Irvine to implement systems that serve the needs of regional travelers in a way that minimizes impacts on Newport Beach residents. *(Imp 14.9, 14.10, 16.5)*

Policy CE 4.1.5 John Wayne Airport Shuttles

Encourage the use of airport shuttle services to minimize the impacts of air travelers on the local roadway system. *(Imp 14.4, 16.8)*

Policy CE 6.1.3 Coordination with Adjacent Jurisdictions

Coordinate operations with adjacent jurisdictions to enhance the efficiency of inter-jurisdictional roadway system operations. *(Imp 14.1, 14.3)*

Policy CE 8.1.11 Joint Funding with Adjoining Jurisdictions

Pursue joint funding of improvements in areas (such as the Airport Area) where traffic growth and/or needed improvements are demonstrably based upon traffic contributions or improvements that are a joint responsibility of Newport Beach and one or more adjacent jurisdictions/agencies. *(Imp 14.1)*

2.4.2 CITY OF IRVINE

Objective B-1 Policy (c)

Develop, on an incremental basis, a vehicular circulation system responding to local and regional access requirements. The following Level of Service (LOS) Standards shall be the goal applied to arterial highways, which are in the City of Irvine or its sphere of influence, and which are under the City's jurisdiction.

- LOS "E" or better shall be considered acceptable within the Irvine Business Complex (IBC-PA 36), Irvine Center (PA 33), and at the intersection of Bake Parkway and the I-5 northbound off-ramp.
- In conjunction with individual subdivision map level traffic studies for development proposed in Planning Areas 5B, 6, 8A and 9, a LOS "E" standard would be considered acceptable for application to intersections impacted in Planning Areas 13, 31, 32, 34, 35 and 39.
- In conjunction with individual subdivision map level traffic studies for development proposed in Planning Areas 30 and 51, a LOS "E" standard would be considered acceptable for application to intersections impacted in Planning Areas 13, 30, 31, 32, 34, 35 and 39.

Objective B-1 Policy (e)

Cooperate with state, county and local governments to assure orderly development.

Objective B-1 Policy (f)

Work with the county, landowners, and other agencies in developing compatible land use and circulation plans for the area northerly of the sphere of influence, recognizing that new development in this area can have a significant impact on the existing City circulation system.

Objective B-1 Policy (i)

Actively lobby with appropriate state commissions, committees, and legislators for funding to upgrade the Costa Mesa, San Diego and Santa Ana Freeways.

Objective B-7 Policy (a)

Coordinate public and local transit with planning for air transportation.

Objective B-7 Policy (b)

Support expansion of service at John Wayne Airport as long as all environmental impacts such as noise, air pollution, and traffic congestion can be mitigated.

Objective B-7 Policy (d)

Encourage use of Los Angeles and Ontario International Airports for continental and international flights. Explore commercial airport potential of existing and closing military facilities within Los Angeles, San Bernardino, Riverside and San Diego counties, as well as existing commercial airport and general aviation airports which have expansion potential in order to meet the growing passenger demand on a regional basis. Discourage the development or expansion of airfields which are not now operating as commercial airports, or the expansion of existing commercial airports which would adversely impact existing urban communities.

Objective B-7 Policy (e)

Develop, in cooperation with the City of Newport Beach, an activity center transportation system to alleviate the ground access congestion related to John Wayne Airport.

Objective B-7 Policy (f)

Encourage the development of high-speed ground transportation systems to supplement the air system for meeting regional travel needs.

2.4.3 CITY OF COSTA MESA

Policy CIR-1A.11

Attempt to maintain or improve mobility within the City to achieve a standard level of service not worse than Level of Service "D" at all intersections under the sole control of the City. Intersection level of service analyses for General Plan conditions shall be updated periodically and presented to City Council.

Policy CIR-1A.12

Cooperate with adjacent jurisdictions to maintain or improve mobility within the City to achieve a standard level of service no worse than "D" at all intersections under State or joint control. Intersection level of service analyses for General Plan conditions for locations under State or joint control shall be updated periodically and presented to City Council.

Policy CIR-1A.15

Prioritize intersection improvements which improve through traffic flow on major, primary, and secondary arterials, and reduce impacts on local neighborhood streets with emphasis on pedestrian safety.

Policy CIR-1A.16

Maintain balance between land use and circulation systems by phasing new development to levels that can be accommodated by roadways existing or planned to exist at the time of completion of each phase of the project.

Policy CIR-1A.17

Work closely with the State of California and other government agencies to control traffic-related impacts of uses on State- or other agency-owned land (i.e., Orange County Fairgrounds, Orange Coast College, etc.).

Policy CIR-2A.2

Coordinate with the Orange County Transportation Authority and with adjacent jurisdictions to improve signal timing and coordination along major arterials.

Policy CIR-2D.1

Circulation improvements required to provide or attain the minimum traffic level of service standard at an intersection to which a development project contributes measurable traffic shall be completed within three years of issuance of the first building permit for said project, unless additional right-of-way or coordination with other government agencies is required to complete the improvement. Improvements may be required sooner if, because of extraordinary traffic generation characteristics of the project or extraordinary impacts to the surrounding circulation system, such improvements are necessary to prevent significant adverse impacts.

Policy CIR-2D.2

Construction of circulation improvements for phased development projects may be constructed commensurate with the project construction based upon the findings of a traffic study approved by the City of Costa Mesa.

Policy CIR-2D.3

A traffic impact fee shall be maintained for circulation system improvements to the Master Plan of Highways within the community and updated annually.

Policy CIR-2D.4

Require discussion of transit service needs and site design amenities for transit ridership in EIRs for major projects.

3.0 EXISTING CONDITIONS

3.1 EXISTING ROADWAY FACILITIES

Regional access to John Wayne Airport is provided by Interstate 405 (I-405), State Route 55 (SR-55), and State Route 73 (SR-73). Local access is provided by MacArthur Boulevard, Jamboree Road, Irvine Avenue/Campus Drive, Santa Ana Avenue/Red Hill Avenue, Von Karman Avenue, Birch Street, and Newport Boulevard. Regional and local roadway facilities are described in detail below. An exhibit showing the locations of these facilities are provided in Figure 4-1.

3.1.1 REGIONAL ROADWAYS

- Interstate 405 Freeway (I-405) – I-405 is a north-south freeway that extends from Los Angeles County down to Orange County, terminating at Interstate 5 at both the northern and southern ends. In the study area, I-405 generally has ten general purpose lanes (five in each direction) as well as an HOV lane in each direction. Access to the project site is provided via the MacArthur Boulevard exit.
- State Route 55 (SR-55) – SR-55 is a north-south freeway within Orange County that extends from SR-91 in Anaheim to Costa Mesa just past John Wayne Airport. In the study area, SR-55 generally has eight lanes (four in each direction). Access to the project site is provided via direct ramps to the airport if traveling southbound, while northbound travelers must use the I-405 MacArthur Boulevard exit.
- State Route 73 (SR-73) –SR-73 is a north-south freeway that extends through Orange County, beginning in the north at the I-405 freeway just north of John Wayne Airport and terminating at I-5 in Mission Viejo. In the study area SR-73 generally has ten lanes (five in each direction). Access to the project site is provided via the Bristol Street ramps to Campus Drive.

3.1.2 LOCAL ACCESS ROADS

- MacArthur Boulevard – MacArthur Boulevard runs in the east-west direction north of the project site and in the north-south direction south of the airport. MacArthur Boulevard is generally a six to eight lane facility with a center median and provides access via Airport Way or Campus Drive.

On-street parking is not permitted along MacArthur Boulevard and the posted speed limit is 50-60 miles per hour (mph).

- Jamboree Road – Jamboree Road runs in the north-south direction south of the project site providing indirect connection to the airport via I-405, Campus Drive, or MacArthur Boulevard. Jamboree Road is generally a six lane facility with a center median. On-street parking is not permitted along Jamboree Road and the posted speed limit is 50 miles per hour (mph).
- Irvine Avenue/Campus Drive – Irvine Avenue begins in Newport Beach running east-west towards the airport. At the SR-73 junction, Irvine Avenue turns into Campus Drive and eventually becomes a north-south facility that terminates a few miles south of the airport. Near the project site, Irvine Avenue is a 4-lane facility and Campus Drive is a 6-lane facility with a center median and provides direct access to the airport. On-street parking is not permitted near the airport and the posted speed limit is 35-50 miles per hour (mph).
- Von Karman Avenue – Von Karman Avenue runs in the east-west direction just south of the project site providing indirect connection to the airport via Campus Drive or MacArthur Boulevard. Von Karman Avenue is a 4-lane facility with no on-street parking permitted. The posted speed limit is 45 miles per hour (mph).
- Birch Street – Birch Street runs in the east-west direction just south of the project site, and becomes a north-south facility at MacArthur Boulevard. Birch Street provides indirect connection to the airport via MacArthur Boulevard. Birch Street is a 4-lane facility with no on-street parking permitted and the posted speed limit is 45 miles per hour (mph).
- Santa Ana Ave/Red Hill Avenue – Santa Ana Avenue begins in Newport Beach running east-west towards the airport. At the SR-73 junction, Santa Ana Avenue turns into Red Hill Avenue and runs north of the airport. Near the project site, Santa Ana Avenue is a 3-lane facility and Red Hill Avenue is a 4-lane facility providing direct access to the airport via Airway Avenue. And Paularino Avenue. On-street parking is not permitted near the airport and the posted speed limit is 30-50 miles per hour (mph).
- Newport Boulevard – Newport Boulevard begins in Newport Beach and runs in an east-west direction parallel to SR-55. It is a divided facility near the airport, running on either side of SR-55, with 2-3 lanes in either direction, and provides an indirect connection to the airport. On-street parking is not permitted and the posted speed limit is 45 miles per hour (mph).
- Alton Parkway – Alton Parkway begins in Santa Ana and runs in the east-west direction north of the airport. Alton Parkway becomes a north-south corridor near the I-405 and I-5 interchange.

Near the project site, Alton Parkway is generally a four lane facility with a center left turn median. Between Jamboree Road and Culver Drive, Alton Parkway is a 6 lane facility. On-street parking is not permitted and the posted speed limit ranges from 45 to 55 miles per hour (mph).

- Barranca Parkway – Barranca Parkway begins as E Dyer Road at the Santa Ana/Irvine border and runs in the east-west direction north of the airport. Near the project site Barranca Parkway is a 6 to 8 lane facility with a center median. On-street parking is not permitted on Barranca Parkway and the posted speed limit ranges from 50 to 60 miles per hour (mph).

3.2 EXISTING BUS TRANSIT

The study area is serviced by OCTA, Metrolink, iShuttle and Amtrak. The nearby routes provided by each agency are described in detail below:

3.2.1 OCTA REGIONAL BUS ROUTES

Route 76 – OCTA Route 76 provides north-south service between Huntington Beach and Newport Beach via Talbert Avenue/MacArthur Boulevard. This route provides direct access to John Wayne Airport, with weekday-only service at headways of 45-75 minutes.

Route 212- OCTA Route 212 provides north-south service between Irvine and San Juan Capistrano via the I-405 freeway. This route provides direct access to John Wayne Airport, with limited weekday-only service. Northbound buses arrive at the airport twice in the early morning and southbound buses leave the airport twice in the late afternoon.

3.2.2 METROLINK

Inland Empire-Orange County Line - This Metrolink line provides north-south service between the cities of San Bernardino and Oceanside. The closest station to John Wayne is the Tustin stop, five miles northeast of the airport. The iShuttle Route A serves as a connection between the Tustin station and the airport via Von Karman Avenue. This line runs at 30-45 minute headways during the weekday morning and evening peak hours and limited service during the midday off-peak period. This line provides limited service on weekends.

Orange County Line – The Orange County Metrolink line provides north-south service between the cities Los Angeles (Union Station) and Oceanside. The closest station to John Wayne is the Tustin stop, five

miles northeast of the airport. The iShuttle Route A serves as a connection between the Tustin station and the airport via Von Karman Avenue. This line runs at 30-50 minute headways during the weekday morning and evening peak hours and limited service during the midday off-peak period. This line provides limited service on weekends.

3.2.3 ISHUTTLE

Route A – Route A serves the Irvine Business Complex including stops at the Tustin Metrolink Station and John Wayne Airport. This route operates on weekdays with headways of 10-30 minutes in the AM and PM peak periods.

3.2.4 AMTRAK

Pacific Surfliner – The Pacific Surfliner serves major cities from San Luis Obispo south to San Diego along the California coastline. The closest stations to John Wayne Airport are located in Anaheim, Santa Ana, and Irvine, and are located 10, 7, and 8 miles, respectively, from the airport. Since there is no direct connection from AMTRAK to JWA, persons using AMTRAK must transfer to OCTA buses, use taxis, or other travel options. Weekday headways range from 20 to 60 minutes. Numerous lines provide service on Saturday and Sunday.

3.3 BICYCLE AND PEDESTRIAN NETWORK

John Wayne Airport is primarily designed for vehicular access; therefore bicycle and pedestrian facilities are limited within the airport facility but do exist more extensively in the surrounding project area.

The Caltrans Highway Design Manual defines bikeway facilities within the following three categories:

- *Class I Bikeway (Bicycle Path)* – Provides a completely separated right-of-way for the exclusive use of bicycles
- *Class II Bikeway (Bicycle Lane)* – Provides a striped lane for one-way bicycle travel alongside traffic on a street or highway
- *Class III Bikeway (Bicycle Route)* – Provides for shared use with pedestrian or motor vehicle traffic, designated with signage such as sharrows.

There are numerous bicycle facilities throughout the John Wayne Airport study area. A Class I bicycle path is provided along San Diego Creek, just south of the airport. Class II facilities exist within the City of Irvine, Newport Beach, and Costa Mesa and are designated on portions of the following roadways within the project area:

- Von Karman Avenue
- Main Street
- Red Hill Avenue
- Campus Drive
- Michelson Drive
- Bristol Street
- Newport Boulevard
- Paularino Avenue

There are no bicycle routes which connect directly to JWA. Persons wishing to access JWA using a bicycle must use one of the pedestrian connections identified below.

Pedestrian facilities in the project study area are well developed along most major roadways. Direct pedestrian access to the main airport terminal is provided on the south side of the airport facility via Airport way at MacArthur Boulevard. Pedestrians can also enter the airport facility on the southeast side using Campus Drive.

3.4 TRAFFIC DATA COLLECTION

As explained in Section 4.1, Selection of the Study Area, the study area was identified through several processes, including application of the OCTAM model and meetings with each of the jurisdictions potentially impacted by project traffic.

Traffic counts were collected in the study area using a variety of sources. Intersection traffic counts were collected in September and October 2013. Counts were collected at all intersections during the morning (7:00 AM to 9:00 AM) peak periods and the afternoon (4:00 PM to 6:00 PM) peak periods. These intersection counts are provided in Appendix A. These volumes are also shown on Figure 3-1.

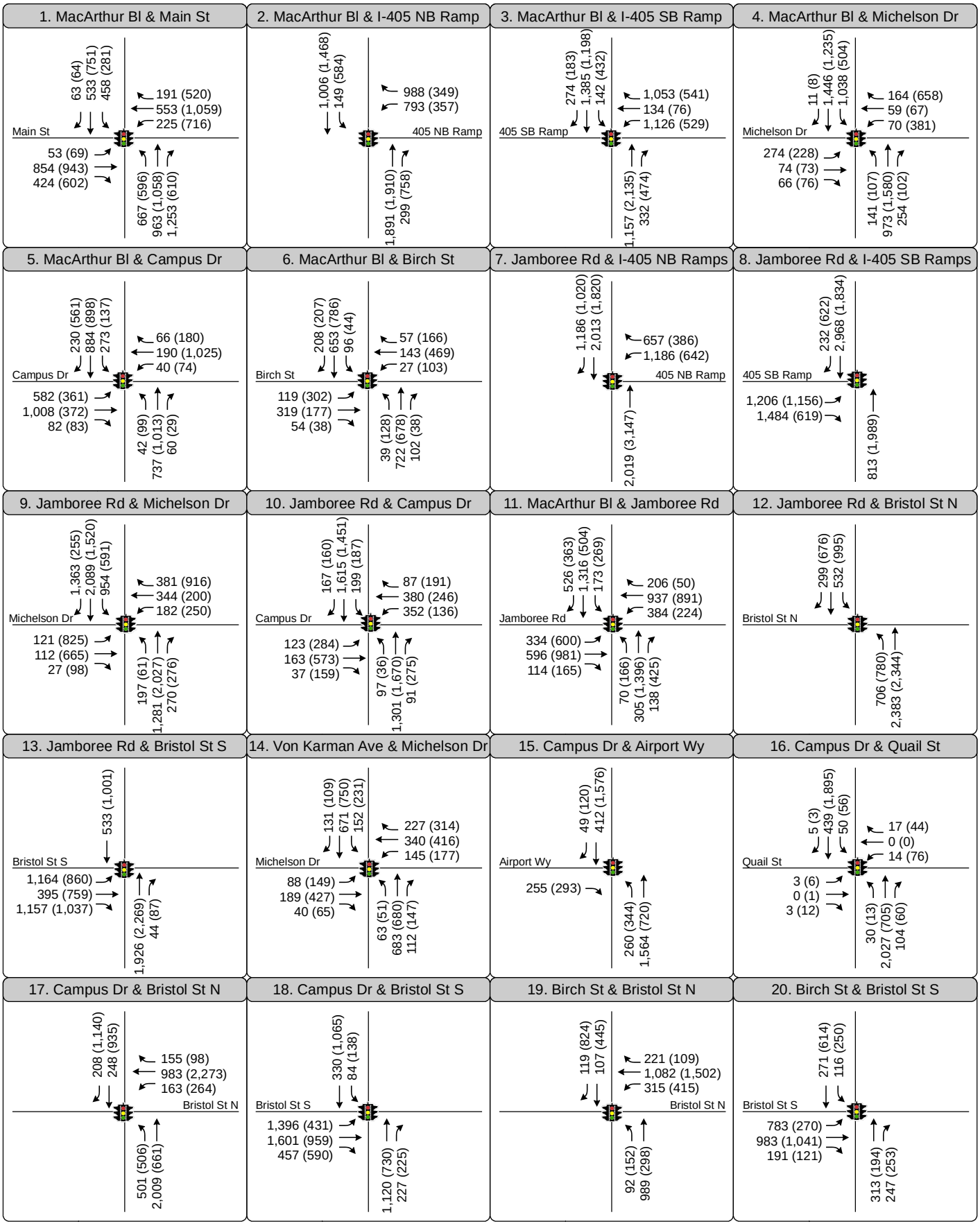
The Project Team chose to obtain count data during the fall of 2013 since it corresponds to a period of peak activity within the overall transportation system. While the peak of airport travel occurs during the

summer, overall traffic counts are lower within this time period. Therefore, traffic counts were taken during the highest level of traffic for the roadway system, which is a common approach taken within traffic studies.

3.5 EXISTING INTERSECTION OPERATIONS

Table 3-1 documents the existing intersection Level of Service (LOS) based on methodologies outlined in Chapter 4 as related to the study area cities. As shown in the table, under existing conditions all of the study intersections are operating at an acceptable LOS based on the application of the ICU methodology.

Table 3-2 documents the intersection LOS using the methodology from the Highway Capacity Manual (HCM) for intersections under the jurisdiction of Caltrans. Additional information regarding this methodology is provided in Chapter 4.



LEGEND

Turn Lane AM (PM) Peak Hour Traffic Volume Traffic Signal Stop Sign

EXISTING CONDITIONS

AM (PM) PEAK HOUR TRAFFIC VOLUMES AND TURNING MOVEMENTS

FIGURE 3-1

FEHR & PEERS

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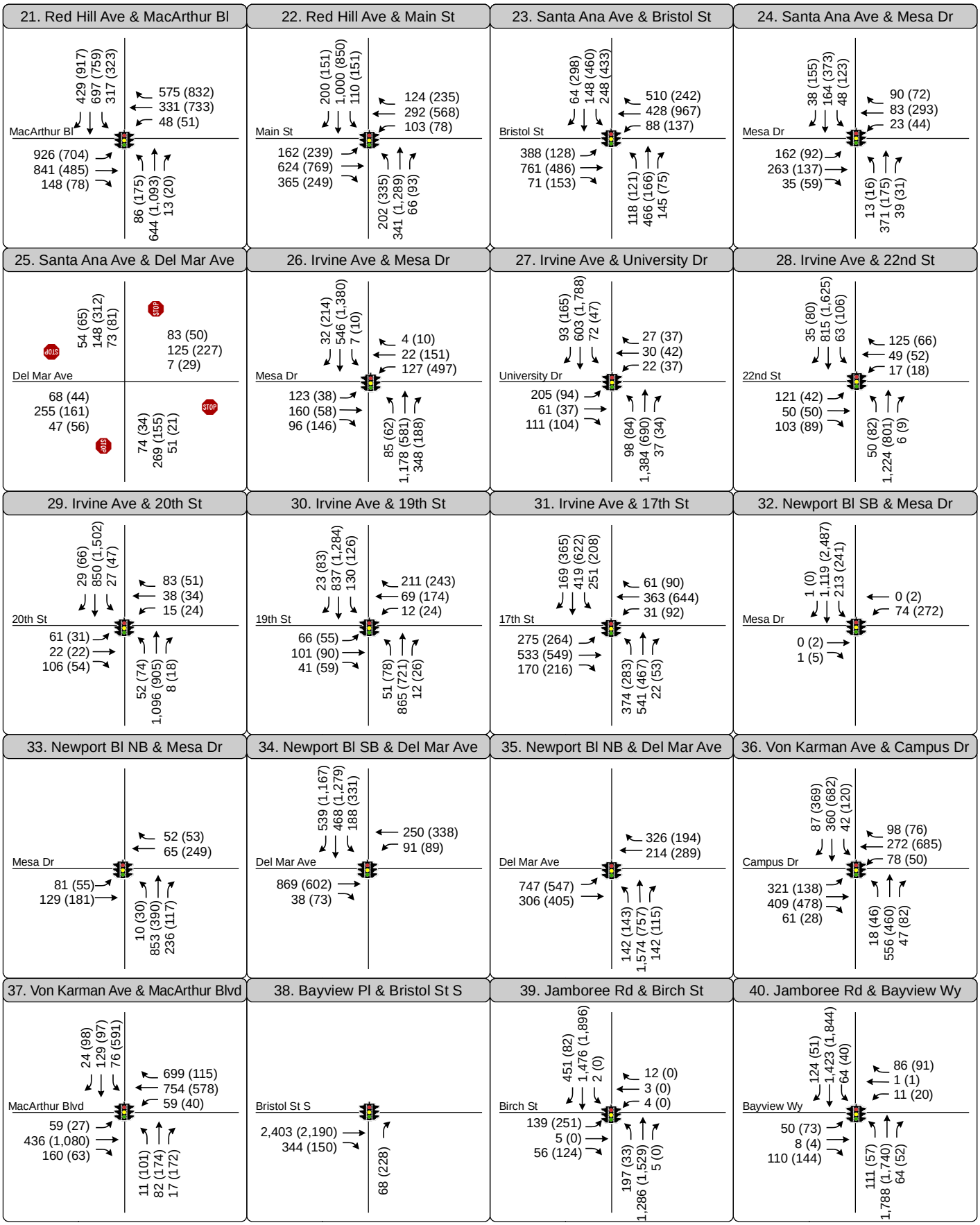

LEGEND

Turn Lane AM (PM) Peak Hour Traffic Volume Traffic Signal Stop Sign

EXISTING CONDITIONS

AM (PM) PEAK HOUR TRAFFIC VOLUMES AND TURNING MOVEMENTS

FIGURE 3-1

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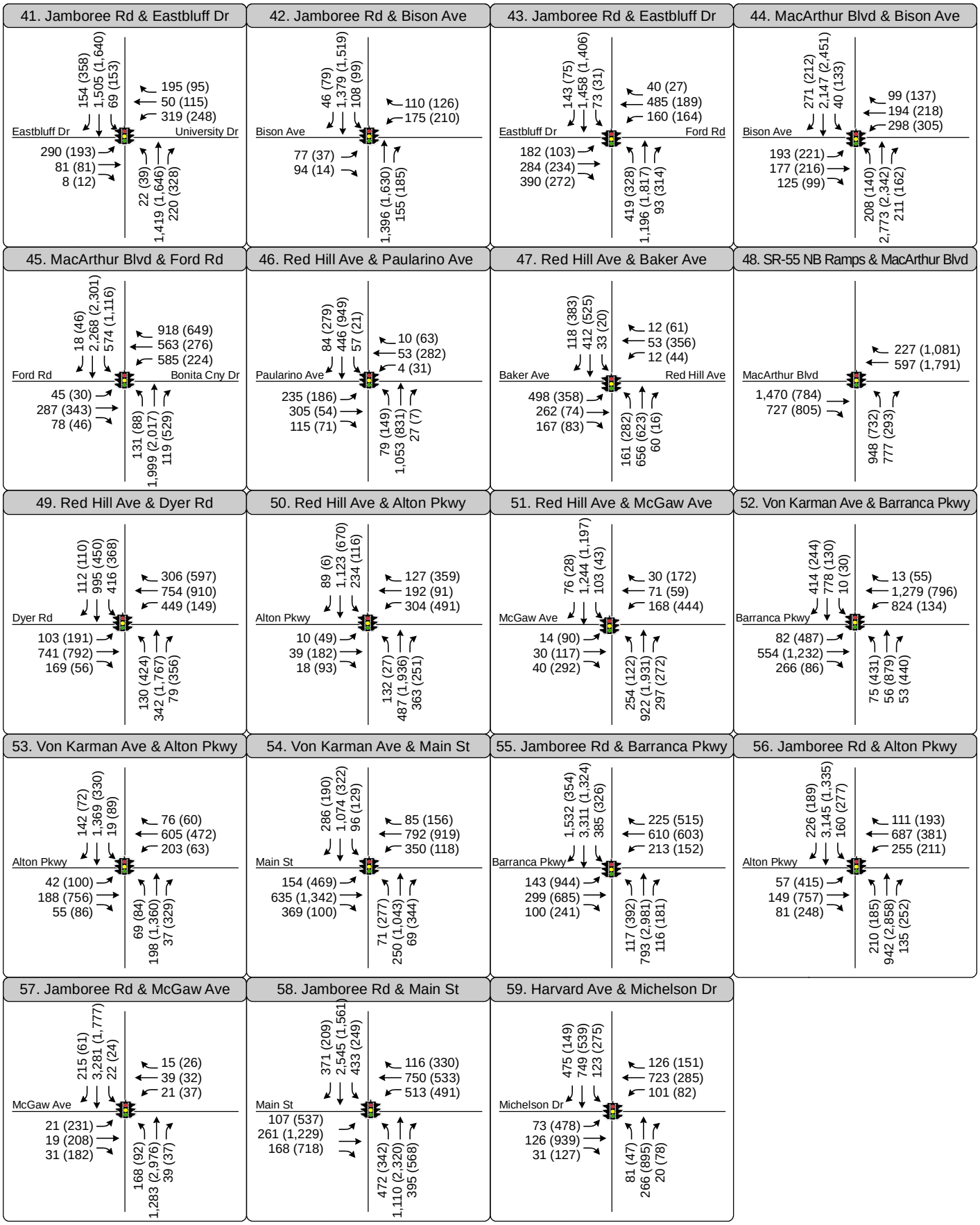

LEGEND

Turn Lane AM (PM) Peak Hour Traffic Volume Traffic Signal Stop Sign

EXISTING CONDITIONS

AM (PM) PEAK HOUR TRAFFIC VOLUMES AND TURNING MOVEMENTS

FIGURE 3-1

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**TABLE 3-1 INTERSECTION LEVEL OF SERVICE:
EXISTING (2013) CONDITIONS**

Intersection	Traffic Control	Peak Hour	V/C	LOS
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.56	A
		PM	0.730	C
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.68	B
		PM	0.64	B
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.59	A
		PM	0.65	B
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.68	B
		PM	0.89	D
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.54	A
		PM	0.75	C
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.374	A
		PM	0.490	A
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.68	B
		PM	0.79	C
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.88	D
		PM	0.78	C
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.66	B
		PM	0.82	D
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.58	A
		PM	0.60	A
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.650	B
		PM	0.714	C
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.496	A
		PM	0.488	A
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.610	B
		PM	0.632	B
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.49	A
		PM	0.64	B
15. Campus Dr at Airport Way[2]	Signal	AM	0.338	A
		PM	0.660	B
16. Campus Dr at Quail St[2]	Signal	AM	0.484	A
		PM	0.463	A
17. Campus Dr at Bristol St North[2]	Signal	AM	0.596	A
		PM	0.885	D
18. Campus Dr at Bristol St South[2]	Signal	AM	0.689	B
		PM	0.439	A
19. Birch St at Bristol St North[2]	Signal	AM	0.581	A
		PM	0.581	A
20. Birch St at Bristol St South[2]	Signal	AM	0.400	A
		PM	0.434	A
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.61	B
		PM	0.71	C
22. Red Hill Ave at Main St[1]	Signal	AM	0.71	C

**TABLE 3-1 INTERSECTION LEVEL OF SERVICE:
EXISTING (2013) CONDITIONS**

Intersection	Traffic Control	Peak Hour	V/C	LOS
		PM	0.70	C
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.50	A
		PM	0.47	A
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.50	A
		PM	0.53	A
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	18.7	C
		PM	19.4	C
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.369	A
		PM	0.573	A
27. Irvine Ave at University Dr[2]	Signal	AM	0.641	B
		PM	0.719	C
28. Irvine Ave at 22nd St[2]	Signal	AM	0.619	B
		PM	0.695	B
29. Irvine Ave at 20th St[2]	Signal	AM	0.485	A
		PM	0.624	B
30. Irvine Ave at 19th St[2]	Signal	AM	0.528	A
		PM	0.662	B
31. Irvine Ave at 17th St[2]	Signal	AM	0.540	A
		PM	0.709	C
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.22	A
		PM	0.56	A
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.44	A
		PM	0.36	A
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.32	A
		PM	0.43	A
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.82	D
		PM	0.50	A
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.531	A
		PM	0.681	B
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.576	A
		PM	0.543	A
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.397	A
		PM	0.413	A
39. Jamboree Rd at Birch St[2]	Signal	AM	0.488	A
		PM	0.494	A
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.441	A
		PM	0.522	A
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.535	A
		PM	0.558	A
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.470	A
		PM	0.498	A
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.830	D
		PM	0.707	C

**TABLE 3-1 INTERSECTION LEVEL OF SERVICE:
EXISTING (2013) CONDITIONS**

Intersection	Traffic Control	Peak Hour	V/C	LOS
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.594	A
		PM	0.590	A
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.764	C
		PM	0.841	D
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.54	A
		PM	0.65	B
47. Red Hill Ave at Baker St[3]	Signal	AM	0.42	A
		PM	0.61	B
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C
		PM	0.62	B
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.52	A
		PM	0.88	D
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.52	A
		PM	0.79	C
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.45	A
		PM	0.74	C
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.70	C
		PM	0.89	D
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.76	C
		PM	0.880	D
54. Von Karman Ave at Main St[1]	Signal	AM	0.60	B
		PM	0.78	C
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.73	C
		PM	0.89	D
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.78	C
		PM	0.81	D
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.64	B
		PM	0.65	B
58. Jamboree Rd at Main St[1]	Signal	AM	0.77	C
		PM	0.85	D
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.65	B
		PM	0.82	D

Notes: Signalized intersections evaluated using ICU methodology.

1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.

TABLE 3-2 CALTRANS INTERSECTION LEVEL OF SERVICE: EXISTING (2013) CONDITIONS

Intersection	Control	AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	22.1	C	23.3	C
MacArthur Blvd at I-405 SB Ramps	Signal	21.9	C	22.6	C
Jamboree Rd at I-405 NB Ramps	Signal	15.8	B	20.6	C
Jamboree Rd at I-405 SB Ramps	Signal	**90.8**	**F**	30.7	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

The four intersections shown in this table are within the jurisdiction of both Caltrans and the City of Irvine. (See Table 3-1, Intersections 2, 3, 7 and 8.) As shown in Table 3-2, one of the intersections operates at LOS F under existing conditions based on the application of the Highway Capacity Manual (HCM) methodology. This methodology considers the effects of traffic signal timing and adjacent intersections and may yield different results than the application of the ICU methodology presented in Table 3-1.

All existing intersection LOS results are provided in Appendix B.

3.6 EXISTING FREEWAY AND RAMP OPERATIONS

Tables 3-3, 3-4, and 3-5 provide the freeway LOS for the mainline, weave, and diverge segments for the SR-55, SR-73, and the I-405 in the study area. Additional information regarding each of these items is provided in Chapter 4. As shown in the above referenced tables, there are numerous freeway facilities in the study area which operate deficiently under existing conditions. Large portions of the SR-55 and the I-405 operate at LOS F either in the AM or PM Peak Hour or both. This deficient operation is supported by the findings of the most recent California Department of Transportation *Mobility Performance Report* which indicates that segments of the SR-55 and I-405 adjacent to John Wayne have some of the highest delay in Orange County. Deficient locations are shown in bold in all subsequent tables.

TABLE 3-3
EXISTING (2013) FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55

Location	Type	AM		PM	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
Northbound SR-55					
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	-	**F**	-	**F**
SR-73 Off Ramp to Baker St Off Ramp	Basic	28.8	D	10.7	A
Baker St Off Ramp	Diverge	21.6	C	3.4	A
Baker St Off Ramp to SR-73 On Ramp	Basic	**24.9**	**F**	14.3	B
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	-	**F**	32.8	D
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**28.3**	**F**	16.0	B
Paularino Ave On Ramp	Merge	29.6	D	**14.9**	**F**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	34.3	D	**15.9**	**F**
On Ramp from I-405 SB	Basic	-	**F**	**15.5**	**F**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	-	**F**	**23.0**	**F**
Southbound SR-55					
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.1	D	**36.5**	**E**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**
Off Ramp to I-405 NB	Diverge	29.1	D	33.7	D
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	23.2	C	25.8	C
Paularino Ave Off Ramp	Diverge	28.3	D	30.6	D
Lane Drop	Basic	28.3	D	33.0	D

TABLE 3-3
EXISTING (2013) FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55

Location	Type	AM		PM	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**
Baker St On Ramp	Basic	17.0	B	23.7	C
On Ramp from SR-73 NB	Merge	20.9	C	30.2	D
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	20.0	C	30.1	D
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	30.0	D	-	**F**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	16.5	B	23.5	C
Newport Blvd S/Fair Dr On Ramp	Merge	17.7	B	22.9	C

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 3-4
EXISTING (2013) FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73

Location	Type	AM		PM	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
Northbound SR-73					
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.3**	**E**	27.6	D
MacArthur Blvd On Ramp	Basic	**36.6**	**E**	28.6	D
Jamboree Rd On Ramp	Merge	34.8	D	32.3	D
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	23.7	C	23.3	C
Bristol St N Off Ramp	Diverge	30.5	D	27.9	C

TABLE 3-4
EXISTING (2013) FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73

Location	Type	AM		PM	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	32.1	D	**-**	**F**
Off Ramp to SR-55 SB	Diverge	24.1	C	**35.5**	**E**
On Ramp from SR-55 NB	Weave	33.1	D	**-**	**F**
Bear St Off Ramp to Bear St On Ramp	Basic	13.8	B	24.3	C
Southbound SR-73					
Bear St On Ramp to SR-55 SB Off Ramp	Weave	**38.7**	**E**	32.5	D
On Ramp from SR-55 NB	Merge	29.9	D	29.5	D
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	26.2	D	21.4	C
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**
Campus/Bristol St S Off Ramp to Jamboree Rd Off	Basic	29.4	D	20.6	C
Jamboree Rd/Bristol St S Off Ramp	Diverge	31.1	D	21.4	C
Jamboree Rd Off to Lane Add	Basic	26.3	D	31.2	D
University Dr Off Ramp	Basic	15.5	B	17.7	B
University Off to Jamboree Rd On Ramp	Basic	15.6	B	23.6	C

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 3-5
EXISTING (2013) FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405

Location	Type	AM		PM	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
Northbound I-405					
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.7**	**E**	**25.5**	**F**
Jamboree Rd Off Ramp	Diverge	28.7	D	**18.2**	**F**
Jamboree Rd Loop On Ramp	Merge	27.3	C	**24.2**	**F**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**41.6**	**F**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**40.8**	**E**	**-**	**F**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	31.6	D	**33.9**	**F**
Bristol St/Ave of the Arts Off Ramp	Diverge	34.8	D	**36.1**	**F**
On Ramp from SR-55 SB	Basic	27.0	D	**27.2**	**F**
Bristol St N On Ramp	Merge	22.9	C	**23.9**	**F**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**
Southbound I-405					
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**30.8**	**36**	19.7	C
Fairview Rd On Ramp	Merge	**34.1**	**36**	25.6	C
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**38.6**	**36**	23.3	C
Bristol St Off Ramp	Diverge	**27.2**	**36**	18.0	B
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**45**	29.4	D
Lane Drop	Basic	**36.9**	**45**	25.3	C
On Ramp from SR-55 NB	Basic	**37.0**	**45**	25.6	C
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**50**	**43.6**	**E**

TABLE 3-5
EXISTING (2013) FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405

Location	Type	AM		PM	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	-	**F**	**44.8**	**E**
Jamboree Rd Loop On Ramp	Merge	18.6	B	**21.3**	**F**
Jamboree Rd Direct On Ramp	Merge	17.2	B	**21.4**	**F**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

Freeway LOS results are provide in Appendix CD.

4.0 Methodology

This chapter documents the analysis methodologies used in this study. Specific items addressed include selection of the study area, the LOS methodologies, analysis scenarios, future traffic forecasts, airport trip distribution, and airport trip generation.

4.1 SELECTION OF THE STUDY AREA

The study area was identified through an iterative process which incorporated the following major elements:

The starting point to determine the study area was to utilize the same study area as used in connection with the previous settlement agreement traffic analysis, which was completed in 2001.

This study area was then provided to state, regional, and local agencies for their review and comment during face-to-face meetings on the following dates:

- Orange County Transportation Authority (September 18, 2013)
- Costa Mesa (September 9, 2013)
- Irvine (September 20, 2013)
- Orange County (September 24, 2013)
- Newport Beach (September 24, 2013)
- California Department of Transportation (September 27, 2013)
- Transportation Corridor Authority (October 3, 2013)

Several of the agencies requested additional study locations, which were then reviewed with Orange County Staff. As a result of this process, the study area was modified to include additional locations in the Cities of Costa Mesa and Newport Beach at their request.

Subsequent to this initial analysis, the City of Irvine requested that we evaluate potential impacts to additional intersections in the City of Irvine through a four-step process.

In the first step, the Orange County Transportation Analysis Model (OCTAM) was used to identify all intersections in the City of Irvine that would carry one percent or more of project traffic. One percent is a commonly used metric used to identify a potential study area. For example, one percent is often used to note those locations where the addition of traffic to a congested location is indicative of a significant impact. In the second step, Alternative C, which would generate the highest number of trips, was used in place of the proposed project and all city intersections carrying one percent or more of Alternative C

traffic were identified. Application of the one percent metric translated to the addition of 50 or more peak hour vehicle trips. The locations with an increase of more than 50 project trips are as follows:

- SR-55 NB Ramps at MacArthur Blvd
- Red Hill Ave at Dyer Rd
- Red Hill Ave at Alton Pkwy
- Red Hill Ave at McGaw Ave
- Von Karman Ave at Main St
- Jamboree Rd at Barranca Pkwy
- Jamboree Rd at Alton Pkwy
- Jamboree Rd at McGaw Ave
- Jamboree Rd at Main St
- Harvard Ave at Michelson Dr

In the third step, recent traffic studies were reviewed to determine which locations are projected to operate deficiently either in a near-term or a longer-term scenario. One readily available and comprehensive study is the Environmental Impact Report (EIR) for the Irvine Business Center (IBC) which has a recent traffic analysis that was completed in 2011.

In the fourth step, the list of intersections which carry more than 50 additional project trips and the list of deficient locations were combined to identify the following locations:

- Jamboree Rd at Barranca Pkwy
- Jamboree Rd at Main St
- Harvard Ave at Michelson Dr

As these locations would carry more than 50 peak hour project trips and were identified in a previous study to be operating deficiently, these three locations were added to the traffic study area. With these revisions, the City of Irvine is in agreement with the scope of the analysis study area.

The final recommended study area and study intersections are shown on Figure 4-1.

Additional information regarding these agency meetings is provided in Appendix D.

4.2 LOS METHODOLOGIES

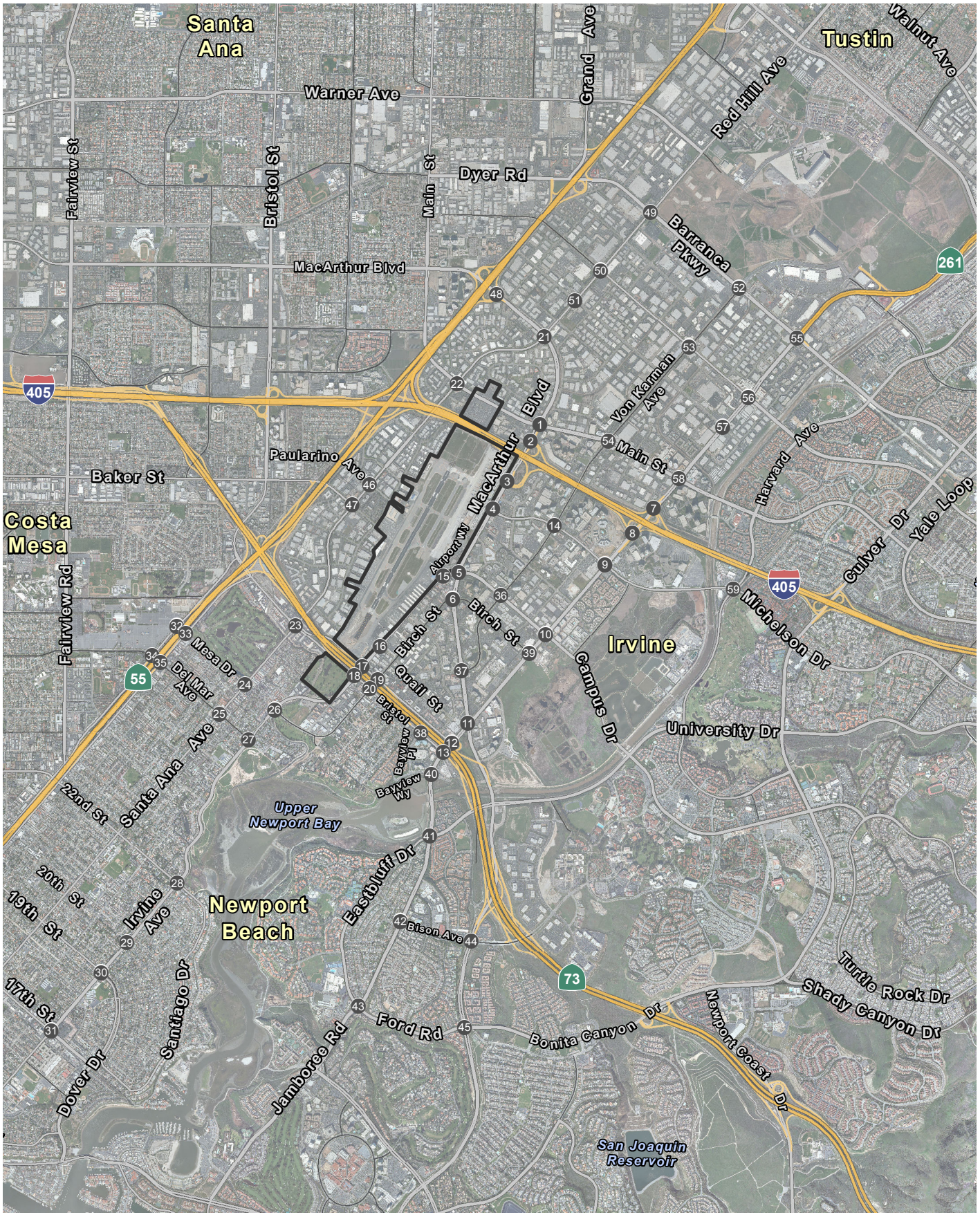
The primary performance measure applied in the analysis is level of service, which is reported for intersections, freeway mainline segments, and ramps.

4.2.1 INTERSECTION LOS

Intersection level of service evaluates the capacity of an intersection as compared to the volume of traffic traveling through the intersection. There are two main approaches used for intersection LOS including:

- Intersection Capacity Utilization (ICU) - ICU approaches are commonly used throughout Orange County including agencies such as the Orange County Transportation Authority, and the Cities of Newport Beach, Irvine, and Costa Mesa. ICU calculates LOS based on the ratio of intersection volume to capacity.
- Highway Capacity Manual (HCM) - HCM methodologies are required by the California Department of Transportation (Caltrans). LOS for signalized intersections under HCM methodology is determined based on average delay, while unsignalized intersection LOS is based on worse case approach delay. Delay calculations incorporate traffic volumes, intersection configuration, traffic control (signal, stop sign), and other related items. Delay (in seconds) was calculated at each study intersection using Trafficware Synchro software v.7, and compared to the LOS thresholds outlined in the HCM 2001.

Table 4-1 provides the LOS ranges for the ICU volume/capacity analysis, the HCM signalized delay analysis, and the HCM unsignalized delay analysis.



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Analyzed Intersections and Project Study Area - 2013/10/07

Figure 4-1

John Wayne Airport Settlement Agreement Extension

N W E S

1 0.5 0 1 Miles

JOHN WAYNE AIRPORT ORANGE COUNTY

TABLE 4-1
INTERSECTION AND ROADWAY SEGMENT LOS CRITERIA

Level of Service	Description	ICU Volume / Capacity	HCM Signalized Delay (Seconds)	HCM Unsignalized Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	<0.60	≤ 10.0	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	0.61–0.70	> 10.0 to 20.0	>10.0 to 15.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	0.71–0.80	> 20.0 to 35.0	>15.0 to 25.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	0.81–0.90	> 35.0 to 55.0	>25.0 to 35.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	0.91–1.00	> 55.0 to 80.0	>35.0 to 50.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	>1.00	> 80.0	>50.0

Source: *Highway Capacity Manual* (Transportation Research Board, 2001).

Table 4-2 documents the location of each intersection by the jurisdiction and the LOS methodology applied. Several of the intersections have overlapping jurisdictions in which multiple agencies apply different LOS approaches such as the on-ramps which have shared jurisdiction with Caltrans and the local cities. Three of the intersections also fall within the jurisdiction of the OCTA CMP, as shown in the table.

TABLE 4-2
INTERSECTION JURISDICTION & LOS METHODOLOGY

Intersection	LOS Methodology		Jurisdiction				
	HCM	ICU	Irvine (ICU)	Newport Beach (ICU)	Costa Mesa (ICU)	CMP (ICU)	Caltrans (HCM)
1. MacArthur Blvd at Main Street		✓	✓				
2. MacArthur Blvd at I-405 NB Ramps	✓	✓	✓			✓	✓
3. MacArthur Blvd at I-405 SB Ramps	✓	✓	✓			✓	✓
4. MacArthur Blvd at Michelson Dr		✓	✓				
5. MacArthur Blvd at Campus Dr		✓	✓	✓			
6. MacArthur Blvd at Birch St		✓		✓			
7. Jamboree Rd at I-405 NB Ramps	✓	✓	✓				✓
8. Jamboree Rd at I-405 SB Ramps	✓	✓	✓				✓
9. Jamboree Rd at Michelson Dr		✓	✓				
10. Jamboree Rd at Campus Dr		✓	✓	✓			
11. Jamboree Rd at MacArthur Blvd		✓		✓		✓	
12. Jamboree Rd at Bristol St North		✓		✓			
13. Jamboree Rd at Bristol St South		✓		✓			
14. Von Karman Ave at Michelson Dr		✓	✓				
15. Campus Dr at Airport Way		✓		✓			
16. Campus Dr at Quail St		✓		✓			
17. Campus Dr at Bristol St North		✓		✓			
18. Campus Dr at Bristol St South		✓		✓			
19. Birch St at Bristol St North		✓		✓			
20. Birch St at Bristol St South		✓		✓			
21. Red Hill Ave at MacArthur Blvd		✓	✓				
22. Red Hill Ave at Main St		✓	✓				
23. Santa Ana Ave at Bristol St		✓			✓		
24. Santa Ana Ave at Mesa Dr		✓			✓		
25. Santa Ana Ave at Del Mar Ave		✓			✓		

TABLE 4-2
INTERSECTION JURISDICTION & LOS METHODOLOGY

Intersection	LOS Methodology		Jurisdiction				
	HCM	ICU	Irvine (ICU)	Newport Beach (ICU)	Costa Mesa (ICU)	CMP (ICU)	Caltrans (HCM)
26. Irvine Ave at Mesa Dr		✓		✓			
27. Irvine Ave at University Dr		✓		✓			
28. Irvine Ave at 22nd St		✓		✓			
29. Irvine Ave at 20th St		✓		✓			
30. Irvine Ave at 19th St		✓		✓			
31. Irvine Ave at 17th St		✓		✓			
32. Newport Blvd SB at Mesa Dr		✓			✓		
33. Newport Blvd NB at Mesa Dr		✓			✓		
34. Newport Blvd SB at Del Mar Ave		✓			✓		
35. Newport Blvd NB at Del Mar Ave		✓			✓		
36. Von Karman Ave at Campus Dr		✓		✓			
37. Von Karman Ave at MacArthur Blvd		✓		✓			
38. Bayview Pl at Bristol St South		✓		✓			
39. Jamboree Rd at Birch St		✓		✓			
40. Jamboree Rd at Bayview Way		✓		✓			
41. Jamboree Rd at University Dr/Eastbluff Dr		✓		✓			
42. Jamboree Rd at Bison Ave		✓		✓			
43. Jamboree Rd at Eastbluff Dr/Ford Rd		✓		✓			
44. MacArthur Blvd at Bison Ave		✓		✓			
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr		✓		✓			
46. Red Hill Ave at Paularino		✓			✓		
47. Red Hill Ave at Baker		✓			✓		
48. MacArthur Boulevard at SR-55 NB Ramps		✓	✓				
49. Red Hill Avenue at Dyer Road		✓	✓				

TABLE 4-2
INTERSECTION JURISDICTION & LOS METHODOLOGY

Intersection	LOS Methodology		Jurisdiction				
	HCM	ICU	Irvine (ICU)	Newport Beach (ICU)	Costa Mesa (ICU)	CMP (ICU)	Caltrans (HCM)
50. Red Hill Avenue at Alton Parkway		✓	✓				
51. Red Hill Avenue at McGaw Avenue		✓	✓				
52. Von Karman Avenue at Barranca Parkway		✓	✓				
53. Von Karman Avenue at Alton Parkway		✓	✓				
54. Von Karman Avenue at Main Street		✓	✓				
55. Jamboree Road at Barranca Parkway		✓	✓				
56. Jamboree Road at Alton Parkway		✓	✓				
57. Jamboree Road at McGaw Avenue		✓	✓				
58. Jamboree Road at Main Street		✓	✓				
59. Harvard Avenue at Michelson Drive		✓	✓				

Source: Fehr & Peers, 2013

4.2.2 FREEWAY AND RAMP LOS

The freeway segments within the study area were analyzed for the basic, merge, and diverge components where capacity constraints typically occur on the freeway system utilizing the HCM 2010 methodologies. LOS for each of these segments is defined on the basis of density (passenger cars/mile/lane). Table 4-3 presents the LOS criteria for basic (or mainline) freeway segments. Table 4-4 provides the LOS criteria for merge and diverge segments.

TABLE 4-3
LOS CRITERIA FOR BASIC OR MAINLINE FREEWAY SEGMENTS

LOS	Density (pc/mi/ln)
A	≤11
B	<11-18
C	<18-26
D	<26-35
E	<35-45
F	Demand exceeds capacity >45

Source: Highway Capacity Manual 2010

TABLE 4-4
LOS CRITERIA FOR MERGE AND DIVERGE SEGMENTS

LOS	Density (pc/mi/ln)	Comments
A	≤10	Unrestricted operations
B	>10-20	Merging and diverging maneuvers noticeable to drivers
C	>20-28	Influence area speeds begin to decline
D	>28-35	Influence area turbulence becomes intrusive
E	>35	Turbulence felt by virtually all drivers
F	Demand exceeds capacity	Ramp and freeway queues form

Source: Highway Capacity Manual 2010

4.3 ANALYSIS SCENARIOS

One specific aspect of the Settlement Agreement Extension is the numerical thresholds of passengers and flights, which are tied to specific years. As with the previous Settlement Agreement, there will be limits on the number of annual passengers and daily flights. This study evaluates twenty scenarios as outlined in Table 4-5. With respect to the future years that are studied, the proposed MAP increase benchmark years are 2020, 2025, and 2030, meaning that the respective MAP levels cannot be exceeded during that timeframe. However, it is possible that the actual increase in MAP could occur as early as the first year of the benchmark period, or Year 2016, 2021, or 2026, respectively. Therefore, in order to account for this potentiality, the analyses presented in this report assume the MAP increase would occur in 2016, 2021, and 2026, which are the earliest possible years.

TABLE 4-5
ANALYSIS SCENARIOS

Year	Proposed Project	Alternative A	Alternative B	Alternative C	No Project
2013 (Existing)	12.5 MAP	12.8 MAP	15.0 MAP	16.9 MAP	10.8 MAP
2016	10.8 MAP	10.8 MAP	10.8 MAP	16.9 MAP	10.8 MAP
2021	11.8 MAP	11.4 MAP	13.0 MAP	16.9 MAP	10.8 MAP
2026	12.5 MAP	12.8 MAP	15.0 MAP	16.9 MAP	10.8 MAP

MAP= Million Annual Passengers
Source: *Orange County, 2013*

4.4 FUTURE FORECASTS

Several alternatives were considered in developing the future forecasts for 2016, 2021, and 2026 analysis years including:

- Approach #1- Application of growth rates combined with manual distribution of traffic from approved and pending projects, which is the approach traditionally taken for projects in Orange County
- Approach #2- Application of Regional Travel Demand Model maintained by OCTA (OCTAM)
- Approach #3- Application of City of Irvine Citywide Travel Demand Model (ITAM)

Given the regional nature of John Wayne Airport, the first approach was screened out because of its specifically local nature, and the use of a Travel Demand Model was prioritized. Given the two potential models that could be employed, the positive and negative aspects of each tool were evaluated.

OCTAM was developed and maintained by OCTA for use in preparing regional transportation studies while ITAM was developed and maintained by the City of Irvine for use in studies for the City of Irvine. ITAM is derived from OCTAM but includes additional data within the City of Irvine.

After consulting with the Project Team, the OCTAM was selected for use in this study. The version we use in this study is version 3.4, which incorporates the latest available land use forecasts for Orange County, Orange County Projections 2012. The latest version of OCTAM incorporates traffic count data from 2010 for validation purposes and was finalized in August of 2012. The key reason for using OCTAM was that the airport is a regional facility and distributes traffic throughout Orange County and the larger region. The ITAM model, in comparison, is specific to the city of Irvine, which represents a relatively limited portion of the overall study area. OCTAM, as a regional model, would be better suited to analyze traffic throughout the region. OCTAM would also provide the flexibility to evaluate potential impacts to the freeway system outside of the immediate study area, should such a request be forthcoming at a later date.

Consistent with state-of-the-practice travel demand forecasting, model error was corrected using the methodologies identified in the National Cooperative Highway Research Program Report 255 (Transportation Research Board, 1982) using the "difference method" for roadway segments and intersections (e.g. add model predicted growth existing volumes).

OCTAM data is available for forecast years 2010 and 2035; therefore; growth at the various intersections was interpolated for the various intervening analysis years. As part of the forecasting process, OCTAM was reviewed to determine whether there are any significant Cumulative Projects which are not accounted for in the Model. Traffic from these cumulative projects not otherwise included was added manually to the forecasts for the appropriate analysis year.

An additional review was conducted to determine whether the use of ITAM would result in the identification of any significant impacts at locations within the City of Irvine not otherwise identified with use of the OCTAM. As part of this review, the results for a version of ITAM for 2017 were compared against the 2016 No Project and With Project results. This comparison determined that the LOS was similar between the two models at the common intersections and that the ITAM results were often the same as the OCTAM results. This review of OCTAM to ITAM for the same time period indicated that the use of ITAM would not result in the identification of any additional significant impacts in the city of Irvine; therefore OCTAM was utilized for the entire study area for consistency purposes.

4.5 AIRPORT TRIP DISTRIBUTION

A key aspect of the analysis is the distribution of trips, which refers to the starting point or ending point of trips associated with JWA. As a regional destination, JWA draws traffic from the overall region, although most trips begin or end in Orange County. The trip distribution was quantified through a three step process as defined below:

- We first ran a select zone/select-link analysis using OCTAM for both the 2010 Base Year and the 2035 Forecast Year. Distribution was tracked for both inbound and outbound trips for the AM and PM Peak hours.
- The distributions were compared to each other and were determined to be nearly identical. Therefore, the assumption was made that the same trip distribution would be applied across all analysis years and scenarios.
- We then compared the distribution results against the most recent passenger survey, which identified the most common locations associated with air passengers. This comparison indicated that the major origins and destinations were consistent with the OCTAM results, which were then used in the study.

4.6 AIRPORT TRIP GENERATION

The anticipated trip generation associated with JWA is derived from a variety of sources including:

- Existing traffic counts
- Projected increases in MAP
- Projected increases in the number of flights

Additional documentation regarding the calculations used to estimate trip generation at the airport are provided in Appendix E.

Table 4-6 provides the existing traffic counts at JWA, which were taken at various locations in September 2013. For purposes of the table, data is grouped by geographic locations as follows:

- Terminal- This location includes rental car, passenger cars parking, and drop-off vehicles.
- Main Street Passengers- This location is an off-site location for passenger use only.
- Employee Lot- This location is also an off-site location for employee use only. This facility is located near to the Main Street Passenger lot
- Cargo- This driveway provides accessibility for service and cargo facilities located on Paularino Avenue.

TABLE 4-6
EXISTING JWA TRIP GENERATION (2013 COUNT DATA)

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	1,174	1,121	2,295	1,111	1,194	2,305
Main Street (passengers)	27	12	38	16	35	51
Employee lot	45	26	71	24	46	70
Cargo	54	19	73	17	65	82
Total	**1,300**	**1,177**	**2,477**	**1,168**	**1,339**	**2,508**

MAP= Million Annual Passengers
Source: *Fehr & Peers, 2013*

Table 4-7 provides the estimated increase in traffic volumes by location that would result from a projected increase in MAP from the existing levels (approximately 9.2 MAP) to 10.8 MAP, the MAP ceiling under the current settlement agreement. As shown in the table, an additional 442 AM Peak Hour and 448 PM Peak Hour trips would result as the MAP increases to 10.8.

TABLE 4-7
JWA INCREMENTAL TRIPS ASSOCIATED WITH 10.8 MAP INCREASE

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	204	195	399	193	208	401
Main Street (passengers)	5	2	7	3	6	9
Employee lot	11	6	17	6	12	18
Cargo	14	5	19	4	16	20
Total	**234**	**208**	**442**	**206**	**242**	**448**

MAP= Million Annual Passengers
Source: *Fehr & Peers, 2013*

4.6.1 PROPOSED PROJECT

Table 4-8 illustrates the projected increase in trips (i.e., the incremental increase in trips) associated with the Proposed Project in 2016. As shown in the table, for 2016, the incremental increase in MAP to 10.8 MAP over existing MAP levels would result in an additional 442 trips in the AM Peak Hour and 448 trips in the PM Peak Hour.

TABLE 4-8
PROPOSED PROJECT 2016 – 10.8 MAP (INCREASE FROM EXISTING)

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	204	195	399	193	208	401
Main Street (passengers)	5	2	7	3	6	9
Employee lot	11	6	17	6	12	18
Cargo	14	5	19	4	16	20
Total	**234**	**208**	**442**	**206**	**242**	**448**

MAP= Million Annual Passengers
Source: *Fehr & Peers, 2013*

As shown in Table 4-9, in 2021, the incremental increase in MAP to 11.8 over existing levels would result in an additional 711 trips in the AM Peak Hour and 720 trips in the PM Peak Hour.

TABLE 4-9 PROPOSED PROJECT 2021 – 11.8 MAP (INCREASE FROM EXISTING)						
LOCATION	**AM Peak Hour (7:00 AM to 9:00 AM)**			**PM Peak Hour (4:00 PM to 6:00 PM)**		
	Inbound	**Outbound**	**Total**	**Inbound**	**Outbound**	**Total**
Terminal	332	317	649	314	337	651
Main Street (passengers)	8	3	11	5	10	15
Employee lot	16	9	25	9	16	25
Cargo	19	7	26	6	23	29
Total	**375**	**336**	**711**	**334**	**386**	**720**
MAP= Million Annual Passengers Source: *Fehr & Peers, 2013*						

As shown in Table 4-10, in 2026, the incremental increase in MAP to 12.5 from existing levels would result in an additional 900 AM Peak Hour and 911 PM Peak Hour trips due to the increases in passenger travel and flights.

TABLE 4-10 PROPOSED PROJECT 2026 – 12.5 MAP (INCREASE FROM EXISTING)						
LOCATION	**AM Peak Hour (7:00 AM to 9:00 AM)**			**PM Peak Hour (4:00 PM to 6:00 PM)**		
	Inbound	**Outbound**	**Total**	**Inbound**	**Outbound**	**Total**
Terminal	421	402	823	399	428	827
Main Street (passengers)	10	4	14	6	12	18
Employee lot	20	11	31	11	20	31
Cargo	24	8	32	7	28	35
Total	**475**	**425**	**900**	**423**	**488**	**911**
MAP= Million Annual Passengers Source: *Fehr & Peers, 2013*						

4.6.2 ALTERNATIVE A

Table 4-11 illustrates the trip generation associated with Alternative A in 2016 relative to existing levels. Comparable to the Proposed Project, the incremental increase in trips under this alternative would be 438 AM Peak Hour Trips and 443 PM Peak Hour Trips as compared to existing traffic levels. Please note that the trip generation for Alternative A differs slightly from the Proposed Project since the number of daily and hourly flights differs slightly, which influences the number of employee and cargo trips.

TABLE 4-11
ALTERNATIVE A 2016 – 10.8 MAP (INCREASE FROM EXISTING)

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	204	195	399	193	208	401
Main Street (passengers)	5	2	7	3	6	9
Employee lot	10	6	16	5	10	15
Cargo	12	4	16	4	14	18
Total	**231**	**207**	**438**	**205**	**238**	**443**

MAP= Million Annual Passengers
Source: *Fehr & Peers, 2013*

Table 4-12 illustrates the incremental increase in trip generation associated with JWA in 2021 for Alternative A. As shown in this table, the incremental change in Peak Hour Trips under this alternative would be 597 for the AM Peak Hour and 605 for the PM Peak Hour relative to existing traffic levels.

TABLE 4-12
ALTERNATIVE A 2021 – 11.4 MAP (INCREASE FROM EXISTING)

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	281	268	549	266	286	552
Main Street (passengers)	6	3	9	4	8	12
Employee lot	12	7	19	7	12	19
Cargo	15	5	20	5	17	22
Total	**314**	**283**	**597**	**282**	**323**	**605**

MAP= Million Annual Passengers
Source: *Fehr & Peers, 2013*

Table 4-13 illustrates the incremental increase in trips associated with Alternative A in 2026. As shown in this table, the incremental increase in trip generation under this alternative would be 898 for the AM Peak Hour and 902 for the PM Peak Hour relative to existing traffic levels.

TABLE 4-13
ALTERNATIVE A 2026 – 12.8 MAP (INCREASE FROM EXISTING)

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	459	439	898	435	467	902
Main Street (passengers)	10	5	15	6	14	20
Employee lot	19	11	30	10	19	29
Cargo	22	8	30	7	27	34
Total	**459**	**439**	**898**	**435**	**467**	**902**

MAP= Million Annual Passengers
Source: *Orange County, 2013*

4.6.3 ALTERNATIVE B

Table 4-14 illustrates the incremental increase in trips for Alternative B in 2016. As shown in the table, under this alternative, vehicle trips would increase 438 trips in the AM Peak Hour and 445 trips in the PM Peak Hour relative to existing traffic levels. Similar to Alternative A, the incremental trip generation is slightly different from the Proposed Project because of a slight change in the number of flights, which influences the number of vehicle trips.

TABLE 4-14
ALTERNATIVE B 2016 – 10.8 MAP (INCREASE FROM EXISTING)

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	204	195	399	193	208	401
Main Street (passengers)	5	2	7	3	6	9
Employee lot	10	6	16	6	10	16
Cargo	12	4	16	4	15	19
Total	**231**	**207**	**438**	**206**	**239**	**445**

MAP= Million Annual Passengers
Source: *Fehr & Peers, 2013*

Table 4-15 illustrates the incremental increase in trips for Alternative B in 2021. As the table shows, this alternative would result in an increase of 1,031 trips in the AM Peak Hour and 1,044 trips in the PM Peak Hour over existing traffic levels.

TABLE 4-15
ALTERNATIVE B 2021 – 13.0 MAP (INCREASE FROM EXISTING)

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	485	463	948	459	493	952
Main Street (passengers)	11	5	16	7	14	21
Employee lot	21	12	33	11	21	32
Cargo	25	9	34	8	31	39
Total	**542**	**489**	**1031**	**485**	**559**	**1044**

MAP= Million Annual Passengers
Source: *Fehr & Peers, 2013*

As shown in Table 4-16, in 2026, Alternative B would result in an incremental increase of 1,572 AM Peak Hour trips and 1,592 PM Peak Hour trips over existing traffic levels.

TABLE 4-16
ALTERNATIVE B 2026 – 15.0 MAP (INCREASE FROM EXISTING)

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	740	707	1,447	700	753	1,453
Main Street (passengers)	17	7	24	10	22	32
Employee lot	32	18	50	17	32	49
Cargo	38	13	51	12	46	58
Total	**827**	**745**	**1,572**	**739**	**853**	**1,592**

MAP= Million Annual Passengers
Source: *Orange County, 2013*

4.6.4 ALTERNATIVE C

Table 4-17 illustrates the incremental increase in trips for Alternative C in 2016 relative to existing traffic levels. Unlike Alternatives A and B, this alternative has a significant increase in MAP from 9.2 to 16.9. With this increase in MAP and the corresponding increase in flights, the incremental increase in trips would be 2,091 in the AM Peak Hour and 2,116 in the PM Peak Hour relative to existing levels. As shown in Tables 4-18 and 4-19, as MAP levels under Alternative C would remain unchanged at 16.9 MAP through 2030, these same increases shown under 2016 would carry over to the other analysis years as well. It also is noted, that the proposed project will not result in any physical changes to the airport facilities itself, including on-site roadways or parking lots. This is the case for all alternatives, including Alternative C, which would result in the greatest increase in MAP levels. Notwithstanding, there is adequate parking on-site to meet the projected parking demands, even under Alternative C.

TABLE 4-17
ALTERNATIVE C 2016 – 16.9 MAP (INCREASE FROM EXISTING)

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	983	938	1921	930	999	1929
Main Street (passengers)	22	10	32	13	29	42
Employee lot	43	25	68	23	44	67
Cargo	52	18	70	16	62	78
Total	**1,100**	**991**	**2,091**	**982**	**1,134**	**2,116**

MAP= Million Annual Passengers
Source: *Fehr & Peers, 2013*

TABLE 4-18
ALTERNATIVE C 2021 – 16.9 MAP (INCREASE FROM EXISTING)

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	983	938	1921	930	999	1929
Main Street (passengers)	22	10	32	13	29	42
Employee lot	43	25	68	23	44	67
Cargo	52	18	70	16	62	78
Total	**1,100**	**991**	**2,091**	**982**	**1,134**	**2,116**

MAP= Million Annual Passengers
Source: *Fehr & Peers, 2013*

TABLE 4-19
ALTERNATIVE C 2026 – 16.9 MAP (INCREASE FROM EXISTING)

LOCATION	AM Peak Hour (7:00 AM to 9:00 AM)			PM Peak Hour (4:00 PM to 6:00 PM)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Terminal	983	938	1,921	930	999	1,929
Main Street (passengers)	22	10	32	13	29	42
Employee lot	43	25	68	23	44	67
Cargo	52	18	70	16	62	78
Total	**1,100**	**991**	**2,091**	**982**	**1,134**	**2,116**

MAP= Million Annual Passengers
Source: *Orange County, 2013*

Additional information regarding the ability of JWA to provide sufficient parking for each of these analyzed alternatives is provided in Appendix F.

5.0 Impact Thresholds

This chapter provides impact thresholds for all of the jurisdictions including both vehicular and non-vehicular thresholds.

5.1 VEHICULAR LOS THRESHOLD

5.1.1 CITY OF IRVINE

Thresholds from the City of Irvine were taken from the City's *Traffic Impact Guidelines (City of Irvine, August 24, 2004)*.

A significant traffic impact occurs if any of the following conditions occur in the City of Irvine under any of the following conditions:

5.1.1.1 **Threshold T-1**

In the City of Irvine outside of the Irvine Business Complex, the addition of project-generated trips increases the ICU at a study intersection by 0.01 or more of capacity, causing the intersection to change from an acceptable LOS D to LOS E or LOS F.

5.1.1.2 **Threshold T-2**

In the City of Irvine inside the Irvine Business Complex, the addition of project-generated trips increases the ICU at a study intersection by 0.01 or more of capacity, causing the intersection to change from an acceptable LOS E to LOS F.

5.1.1.3 **Threshold T-3**

In the City of Irvine outside of the Irvine Business Complex, the addition of project-generated trips increases the ICU by 0.02 or more at a study intersection operating at LOS E or F under baseline conditions.

5.1.1.4 **Threshold T-4**

In the City of Irvine inside the Irvine Business Complex, the addition of project-generated trips increases the ICU by 0.02 more at a study intersection operating at LOS E or F under baseline conditions.

5.1.2 CITY OF NEWPORT BEACH

Significance thresholds for the City of Newport Beach were taken from the Traffic Phasing Ordinance, which is incorporated within the City's Municipal Code.

A significant traffic impact occurs if any of the following conditions occur in the City of Newport Beach under any of the following conditions:

5.1.2.1 **Threshold T-5**

In the City of Newport Beach outside of the John Wayne Airport Area shared with the City of Irvine, the addition of project-generated trips causes the LOS at a study intersection to change from LOS D to LOS E or F.

5.1.2.2 **Threshold T-6**

In the City of Newport Beach inside the John Wayne Airport Area shared with the City of Irvine, the addition of project-generated trips causes the LOS at a study intersection to change from an acceptable LOS E to LOS F.

5.1.2.3 **Threshold T-7**

In the City of Newport Beach outside of the John Wayne Airport Area shared with the City of Irvine, the addition of project-generated trips increases the ICU by 0.010 or more at a study intersection operating at LOS E or F under baseline conditions.

5.1.2.4 **Threshold T-8**

In the City of Newport Beach inside of the John Wayne Airport Area shared with the City of Irvine, the addition of project-generated trips increases the ICU by 0.010 or more at a study intersection operating at LOS F under baseline conditions.

5.1.3 CITY OF COSTA MESA

The significance threshold for the City of Costa Mesa was taken from a Traffic Study (*Tentative Tract No. 17423 Project Traffic Impact Analysis (RBF Consulting, July 8, 2011)* completed by another firm and subsequently approved by the City of Costa Mesa. Based on the criteria used in this study, a significant traffic impact occurs if any of the following conditions occur in the City of Costa Mesa under any of the following conditions:

5.1.3.1 **Threshold T-9**

The addition of project-generated trips causes the LOS at a study intersection to change from LOS D to LOS E or F.

5.1.4 CALTRANS

Significance thresholds were identified through coordination with Caltrans District 12 Staff through a series of meetings and emails that occurred in January and February 2014. The significance criteria utilized in this analysis were presented to Caltrans staff for their review during these meetings.

Initial thresholds were identified based on the Caltrans *Guide for the Preparation of Traffic Impact Studies* (December 2002). This document provides recommendations regarding impact thresholds for a variety of facilities including freeways, ramp terminals, and signalized intersections. Based on the Caltrans Guide and direction from Caltrans, LOS D was utilized as an acceptable threshold for all Caltrans study facilities. This threshold was applied to determine when a facility degrades from acceptable to unacceptable levels.

The Caltrans Guide provides limited guidance on how to identify an impact on a facility which is already operating in a deficient fashion. This issue is an important one since several freeway segments already operate at a deficient level of service under existing conditions; based on data provided by Caltrans, segments of the I-405 and SR-55 adjacent to the airport presently operate as some of the most congested freeway facilities in the airport vicinity. To identify the increase in traffic on a deficient facility attributable to the project before a significant impact would be identified, the following factors were considered, resulting in application of a 2% increase in traffic attributable to JWA as the applicable threshold:

- The 2% threshold is substantially lower than the threshold employed by the OCTA CMP to identify deficient regional facilities (Threshold T-15). The CMP threshold allows an increase of 10% on a deficient segment before a location is identified as deficient. The use of a 2% threshold, therefore, is substantially more conservative than the criteria used by OCTA;

- The 2% threshold is also employed for deficient facilities within the City of Irvine (Threshold T-3 and T-4). Under the City's thresholds, an LOS E or F facility is allowed an increase of 2% before a significant impact is identified. Therefore, the 2% allowable increase is comparable to the criteria utilized by an adjacent jurisdiction;

- As shown below, for many of the deficient freeway segments, a 2% increase is a relatively minimal amount as it equates to between 100 and 200 cars in a peak hour on freeways that carry upwards of 8,000 vehicles per hour in each direction of travel. Therefore, the 2% threshold provides for a minimal increase in traffic before a significant impact is identified; and

- The use of a 2% threshold recognizes that JWA is a unique land use within Orange County in that it distributes trips throughout the entire region to numerous destinations. As such, many of these trips use freeways throughout the region to travel to and from the airport. A 2% threshold accurately identifies those segments which carry an appreciable number of vehicles as

significantly impacted and, thereby, results in an analysis that does not overstate project impacts and mislead reviewers.

Caltrans Intersections

5.1.4.1 Threshold T-10

The addition of project-generated trips causes the LOS at a study intersection to degrade from LOS A, B, C, or D to LOS E or F (as measured by the application of the HCM methodologies).

5.1.4.2 Threshold T-11

The addition of project-generated trips causes a 2 second increase in delay at a study intersection (as measured by the application of HCM methodologies), where the intersection operates at LOS E or LOS F prior to the addition of project traffic.

Caltrans Freeway Facilities (Mainline, ramp, merge/diverge)

5.1.4.3 Threshold T-12

The addition of project-generated trips increases the traffic on a freeway mainline, freeway ramp, or merge/diverge section by 2 percent or more, and causes the LOS to degrade from LOS A, B, C, or D to LOS E or F.

5.1.4.4 Threshold T-13

The addition of project-generated trips increases the traffic on a freeway mainline, freeway ramp, or merge/diverge section by 2 percent or more on a facility operating at LOS E or F prior to the addition of project traffic.

5.1.5 ORANGE COUNTY TRANSPORTATION AUTHORITY CMP

Thresholds for facilities under the jurisdiction of the Orange County Transportation Authority (OCTA) Congestion Management Program (CMP) are identified in the *2011 Orange County Congestion Management Program*.

5.1.5.1 Threshold T-14

The addition of project-generated trips causes the LOS at a study intersection in the Orange County Transportation Authority Congestion Management Program to change from an acceptable LOS E to LOS F.

5.1.5.2 **Threshold T-15**

The addition of project-generated trips increases the ICU by 0.10 or more at a study intersection operating at LOS F under baseline conditions.

6.0 Proposed Project

6.1 EXISTING PLUS PROJECT SCENARIO

6.1.1 DESCRIPTION

For the Proposed Project, the addition of project traffic reflects the incremental MAP between the Proposed Project at 12.5 MAP and the existing MAP of 9.2. The trip generation associated with this increase in MAP is provided in Table 4-10.

This section provides an analysis of project traffic impacts by comparing "pre-project" existing traffic conditions and "with-project" traffic conditions. This CEQA impact analysis documents project-related trips and their addition to the existing, observed traffic count data (i.e., existing conditions) in order to identify potential traffic impacts. This analysis is referred to as the existing plus project scenario.

In general, an existing plus project traffic analysis is regarded by traffic engineers as a hypothetical scenario when used in connection with a long-range project such as the proposed JWA Settlement Agreement project, which is not anticipated to reach full implementation until 2026 at the earliest. The analysis is hypothetical because it incorrectly assumes that the proposed project would be fully implemented immediately and the corresponding full implementation traffic volumes would be added to existing roadway volumes and infrastructure.

This assumption is incorrect because a long-range project is implemented incrementally and full implementation is not realized until a future projected date. Additionally, an existing plus project analysis presumes that the existing environment (existing traffic volumes, existing roadway infrastructure, and existing land uses) will not change over the long-term implementation of the proposed project. As a result, future increases in traffic volumes attributable to other development projects (i.e., cumulative traffic volumes) are not accounted for in this analysis. This can then result in understating project impacts because capacity that otherwise would be utilized by future development that precedes a proposed project is now available to that project. Conversely, because this analysis does not account for future planned roadway network improvements that would increase roadway capacities, it also potentially can result in overstating project impacts. Furthermore, because the analysis does not account for future development and related changing land uses, it does not account for the corresponding change in trip distribution patterns that accompany changing land uses.

As shown in the following tables, specific to the proposed project, the Existing Plus Project analysis understates impacts as compared to the evaluation of future scenarios. Under the Existing Plus Project

scenario, significant impacts are identified at one intersection (Campus Drive/Bristol Street North) and one Caltrans facility (On-ramp from I-405 northbound to MacArthur Blvd Off-ramp). However, under the 2026 scenario, which takes into account future cumulative traffic as well as project traffic, the proposed project would result in significant impacts at three intersections (MacArthur Boulevard/Michelson Drive, Von Karman Avenue/Alton Parkway, and Campus Drive/Bristol Street North) and one Caltrans (On-ramp from I-405 northbound to MacArthur Blvd Off-ramp). Therefore, the Existing Plus Project analysis is misleading since it does not identify several impacts, which occur as a result of both project trips and ambient growth in background traffic.

Thus, if used to measure significance as to the proposed project, the existing plus project scenario would understate project impacts. *Therefore, it would be misleading to the public and decision makers to rely on this scenario for purposes of identifying project impacts and mitigation. As a result, this scenario is provided for disclosure, information, and comparison purposes only.* Significant traffic impacts and recommended mitigation are assessed under the Year 2016, 2021, and 2026 cumulative conditions scenario because those scenarios accurately account for the long-range projected development of the proposed project within the context of an ever-changing traffic network and associated land uses.

6.1.2 RESULTS

Table 6-1 illustrates the intersection V/C ratio and corresponding incremental change, as well as LOS for each of the 59 study intersections under the existing plus proposed project scenario. As shown in this table, there is one location which degrades from acceptable conditions to LOS E. This intersection, Campus Drive/Bristol Street North is located in the City of Newport Beach and worsens from LOS D to LOS E with the addition of project trips. As such, under this scenario, the proposed project would result in a significant impact at this intersection.

All intersection LOS results for all No Project scenarios are provided in Appendix G. All intersection LOS results for all With Project scenarios are provided in Appendix H.

TABLE 6-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS PROPOSED PROJECT CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.56	A	0.59	A	0.03
		PM	0.73	C	0.76	C	0.03
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.64	B	0.65	B	0.01
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.59	A	0.61	B	0.02
		PM	0.65	B	0.66	B	0.01
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.68	B	0.72	C	0.04
		PM	0.89	D	0.92	E	0.03
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.54	A	0.56	A	0.02
		PM	0.75	C	0.78	C	0.03
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.374	A	0.386	A	0.012
		PM	0.490	A	0.498	A	0.008
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.79	C	0.80	C	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.88	D	0.89	D	0.01
		PM	0.78	C	0.79	C	0.01
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.66	B	0.67	B	0.01
		PM	0.82	D	0.84	D	0.02
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.58	A	0.59	A	0.01
		PM	0.60	A	0.60	B	0.00
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.650	B	0.657	B	0.007
		PM	0.714	C	0.722	C	0.008
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.496	A	0.498	A	0.002
		PM	0.488	A	0.490	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.610	B	0.614	B	0.004
		PM	0.632	B	0.640	B	0.008
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.49	A	0.52	A	0.03
		PM	0.64	B	0.66	B	0.02
15. Campus Dr at Airport Way[2]	Signal	AM	0.338	A	0.461	A	0.123
		PM	0.660	B	0.772	C	0.112
16. Campus Dr at Quail St[2]	Signal	AM	0.484	A	0.521	A	0.037
		PM	0.463	A	0.521	A	0.058
17. Campus Dr at Bristol St North[2]	Signal	AM	0.596	A	0.620	B	0.024
		PM	0.885	D	**0.928**	**E**	0.043
18. Campus Dr at Bristol St South[2]	Signal	AM	0.689	B	0.715	C	0.026
		PM	0.439	A	0.454	A	0.015
19. Birch St at Bristol St North[2]	Signal	AM	0.581	A	0.589	A	0.008
		PM	0.581	A	0.590	A	0.009
20. Birch St at Bristol St South[2]	Signal	AM	0.400	A	0.406	A	0.006
		PM	0.434	A	0.444	A	0.010

TABLE 6-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS PROPOSED PROJECT CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project		
			V/C	LOS	V/C	LOS	Change
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.61	B	0.62	B	0.01
		PM	0.71	C	0.73	C	0.02
22. Red Hill Ave at Main St[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.70	C	0.71	C	0.01
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.50	A	0.51	A	0.01
		PM	0.47	A	0.48	A	0.01
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.50	A	0.52	A	0.02
		PM	0.53	A	0.55	A	0.02
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	18.7	C	21.8	C	N/A
		PM	19.4	C	23.5	C	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.369	A	0.378	A	0.009
		PM	0.573	A	0.588	A	0.015
27. Irvine Ave at University Dr[2]	Signal	AM	0.641	B	0.663	B	0.022
		PM	0.719	C	0.741	C	0.022
28. Irvine Ave at 22nd St[2]	Signal	AM	0.619	B	0.641	B	0.022
		PM	0.695	B	0.722	C	0.027
29. Irvine Ave at 20th St[2]	Signal	AM	0.485	A	0.512	A	0.027
		PM	0.624	B	0.653	B	0.029
30. Irvine Ave at 19th St[2]	Signal	AM	0.528	A	0.550	A	0.022
		PM	0.662	B	0.678	B	0.016
31. Irvine Ave at 17th St[2]	Signal	AM	0.540	A	0.553	A	0.013
		PM	0.709	C	0.722	C	0.013
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.22	A	0.23	A	0.01
		PM	0.56	A	0.57	A	0.01
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.44	A	0.46	A	0.02
		PM	0.36	A	0.38	A	0.02
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.32	A	0.33	A	0.01
		PM	0.43	A	0.44	A	0.01
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.82	D	0.84	D	0.02
		PM	0.50	A	0.52	A	0.02
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.531	A	0.547	A	0.016
		PM	0.681	B	0.694	B	0.013
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.576	A	0.588	A	0.012
		PM	0.543	A	0.554	A	0.011
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.397	A	0.400	A	0.003
		PM	0.413	A	0.417	A	0.004
39. Jamboree Rd at Birch St[2]	Signal	AM	0.488	A	0.505	A	0.017
		PM	0.494	A	0.502	A	0.008
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.441	A	0.447	A	0.006
		PM	0.522	A	0.531	A	0.009

TABLE 6-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS PROPOSED PROJECT CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project		
			V/C	LOS	V/C	LOS	Change
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.535	A	0.558	A	0.023
		PM	0.558	A	0.571	A	0.013
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.470	A	0.478	A	0.008
		PM	0.498	A	0.503	A	0.005
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.830	D	0.834	D	0.004
		PM	0.707	C	0.723	C	0.016
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.594	A	0.598	A	0.004
		PM	0.590	A	0.595	A	0.005
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.764	C	0.770	C	0.006
		PM	0.841	D	0.848	D	0.007
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.54	A	0.55	A	0.01
		PM	0.65	B	0.66	B	0.01
47. Red Hill Ave at Baker St[3]	Signal	AM	0.42	A	0.44	A	0.02
		PM	0.61	B	0.63	B	0.02
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.77	C	0.01
		PM	0.62	B	0.62	B	0.00
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.88	D	0.89	D	0.01
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.79	C	0.80	C	0.01
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.45	A	0.46	A	0.01
		PM	0.74	C	0.76	C	0.02
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.70	C	0.71	C	0.01
		PM	0.89	D	0.90	D	0.01
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.76	C	0.77	C	0.01
		PM	0.88	D	0.89	D	0.01
54. Von Karman Ave at Main St[1]	Signal	AM	0.60	B	0.62	B	0.02
		PM	0.78	C	0.79	C	0.01
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.89	D	0.90	E	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.81	D	0.82	D	0.01
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.64	B	0.65	B	0.01
		PM	0.65	B	0.67	B	0.02
58. Jamboree Rd at Main St[1]	Signal	AM	0.77	C	0.77	C	0.00
		PM	0.85	D	0.86	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.65	B	0.67	B	0.02
		PM	0.82	D	0.84	D	0.02

Notes: Signalized intersections evaluated using ICU methodology.
1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.

TABLE 6-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS PROPOSED PROJECT CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project		
			V/C	LOS	V/C	LOS	Change

3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

The LOS for each of the four intersections under the shared jurisdiction of Caltrans is provided in Table 6-2. As shown in the table below, the overall intersection delay will improve at the MacArthur Boulevard/I-405 SB ramps during the PM peak hour because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 6-2
CALTRANS INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS PROPOSED PROJECT CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.1	C	23.2	C
		PM	23.4	C	24.5	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	22.9	C	23.1	C
		PM	25.0	C	24.3	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	15.8	B	16.4	B
		PM	20.6	C	22.0	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**90.8**	**F**	**91.4**	**F**
		PM	30.7	C	30.9	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 6-3, 6-4, 6-5 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405 respectively. Tables 6-6, 6-7, 6-8 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, the project would result in an increase of over 2 percent at the on-ramp from I-405 NB to MacArthur Boulevard off-ramp, which is projected to operate at LOS F prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at this location.

All No Project freeway analysis results are provided in Appendix I. All With Project freeway analysis results for all scenarios are provided in Appendix J.

TABLE 6-3
FREEWAY MAINLINE AND RAMPS OPERATIONS:
SR-55 EXISTING PLUS PROPOSED PROJECT -AM

Location	Type	Existing		Existing Plus Proposed Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	28.8	D	28.9	D	20	0.3%
Baker St Off Ramp	Diverge	21.6	C	21.6	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**24.9**	**F**	**37.7**	**F**	**20**	**0.4%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.3%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**28.3**	**F**	**44.5**	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	29.6	D	-	**F**	**20**	**0.4%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	34.3	D	-	**F**	**20**	**0.4%**
On Ramp from I-405 SB	Basic	**-**	**F**	**-**	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**1.0%**

TABLE 6-3
FREEWAY MAINLINE AND RAMPS OPERATIONS:
SR-55 EXISTING PLUS PROPOSED PROJECT -AM

Location	Type	Existing		Existing Plus Proposed Project				
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase	
Southbound SR-55								
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.1	D	64	34.7	D	64	70	0.9%
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	**64**	-	**F**	**64**	**110**	**1.0%**
Off Ramp to I-405 NB	Diverge	29.1	D	65	28.7	D	65	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	23.2	C	65	22.8	C	65	0	0.0%
Paularino Ave Off Ramp	Diverge	28.3	D	65	28.0	D	65	0	0.0%
Lane Drop	Basic	28.3	D	65	27.6	D	65	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	**62**	-	**F**	**62**	**20**	**0.2%**
Baker St On Ramp	Basic	17.0	B	52	16.6	B	52	20	0.5%
On Ramp from SR-73 NB	Merge	20.9	C	52	20.8	C	52	50	1.0%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	20.0	C	52	19.7	C	52	50	1.0%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	30.0	D	52	29.7	D	52	50	0.8%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	16.5	B	65	20.4	C	65	40	1.0%
Newport Blvd S/Fair Dr On Ramp	Merge	17.7	B	65	20.9	C	65	40	0.9%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-4
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROJECT -AM

Location	Type	AM		AM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.3**	**E**	**40.5**	**E**	**20**	**0.3%**
MacArthur Blvd On Ramp	Basic	**36.6**	**E**	**36.8**	**E**	**30**	**0.4%**
Jamboree Rd On Ramp	Merge	34.8	D	35.0	D	40	0.5%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	23.7	C	**43.4**	**E**	**40**	**0.7%**
Bristol St N Off Ramp	Diverge	30.5	D	**-**	**F**	**40**	**0.6%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	32.1	D	**-**	**F**	**120**	**1.4%**
Off Ramp to SR-55 SB	Diverge	24.1	C	32.2	D	120	2.3%
On Ramp from SR-55 NB	Weave	33.1	D	**-**	**F**	**90**	**1.7%**
Bear St Off Ramp to Bear St On Ramp	Basic	13.8	B	22.0	C	90	2.7%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.7**	**E**	**39.1**	**E**	**40**	**0.6%**
On Ramp from SR-55 NB	Merge	29.9	D	30.6	D	50	0.9%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	26.2	D	31.6	D	50	1.1%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	29.4	D	22.5	C	60	0.9%
Jamboree Rd/Bristol St S Off Ramp	Diverge	31.1	D	27.9	C	60	0.7%
Jamboree Rd Off to Lane Add	Basic	26.3	D	20.5	C	20	0.4%

TABLE 6-4
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROJECT -AM

Location	Type	AM		AM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Dr Off Ramp	Basic	15.5	B	12.3	B	20	0.4%
University Off to Jamboree Rd On Ramp	Basic	15.6	B	15.2	B	20	0.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-5
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROJECT - AM

Location	Type	AM		AM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.7**	**E**	**43.2**	**E**	**50**	**0.5%**
Jamboree Rd Off Ramp	Diverge	28.7	D	28.9	D	50	0.4%
Jamboree Rd Loop On Ramp	Merge	27.3	C	27.2	C	40	0.4%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**40.8**	**E**	**37.6**	**E**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	31.6	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	34.8	D	32.2	D	0	0.0%
On Ramp from SR-55 SB	Basic	27.0	D	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	22.9	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**30.8**	**F**	**31.0**	**F**	**40**	**0.5%**
Fairview Rd On Ramp	Merge	**34.1**	**F**	**34.3**	**F**	**50**	**0.5%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**38.6**	**F**	**38.9**	**F**	**50**	**0.5%**
Bristol St Off Ramp	Diverge	**27.2**	**F**	**27.4**	**F**	**50**	**0.4%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.5%**
Lane Drop	Basic	**36.9**	**E**	**34.3**	**D**	**60**	**0.8%**
On Ramp from SR-55 NB	Basic	**37.0**	**E**	**34.9**	**D**	**70**	**0.7%**

TABLE 6-5
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROJECT - AM

Location	Type	AM		AM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.5%**
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.5%**
Jamboree Rd Loop On Ramp	Merge	18.6	B	19.3	B	60	1.0%
Jamboree Rd Direct On Ramp	Merge	17.2	B	17.3	B	70	1.1%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-6
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
EXISTING PLUS PROJECT -PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.4%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.7	A	10.8	A	30	1.2%
Baker St Off Ramp	Diverge	3.4	A	3.5	A	30	1.0%
Baker St Off Ramp to SR-73 On Ramp	Basic	14.3	B	12.1	B	30	1.2%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	32.8	D	28.8	D	30	0.6%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	16.0	B	13.7	B	20	0.7%
Paularino Ave On Ramp	Merge	**14.9**	**F**	**15.8**	**F**	**30**	**1.0%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**15.9**	**F**	**16.8**	**F**	**30**	**1.0%**
On Ramp from I-405 SB	Basic	**15.5**	**F**	**16.2**	**F**	**30**	**0.8%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**23.0**	**F**	**26.4**	**F**	**140**	**2.5%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.5**	**E**	**37.0**	**E**	**60**	**0.8%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**80**	**0.8%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.7	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.5	D	0	0.0%
Lane Drop	Basic	33.0	D	32.6	D	0	0.0%

TABLE 6-6
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
EXISTING PLUS PROJECT -PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.6	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.2	D	29.9	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	29.9	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	23.5	C	26.9	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	22.9	C	25.4	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-7
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROJECT PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.6	D	27.7	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.6	D	28.7	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.3	D	32.4	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	23.3	C	34.4	D	30	0.5%
Bristol St N Off Ramp	Diverge	27.9	C	**35.9**	**E**	**30**	**0.5%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	-	**F**	-	**F**	**100**	**1.1%**
Off Ramp to SR-55 SB	Diverge	**35.5**	**E**	-	**F**	**100**	**1.3%**
On Ramp from SR-55 NB	Weave	-	**F**	-	**F**	**90**	**1.3%**
Bear St Off Ramp to Bear St On Ramp	Basic	24.3	C	33.8	D	90	1.5%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.5	D	32.7	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.5	D	29.6	D	40	0.8%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	21.4	C	27.7	D	40	1.0%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	-	**F**	-	**F**	**40**	**0.6%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	20.6	C	24.9	C	40	0.8%
Jamboree Rd/Bristol St S Off Ramp	Diverge	21.4	C	25.0	C	40	0.7%
Jamboree Rd Off to Lane Add	Basic	31.2	D	28.9	D	10	0.2%
University Dr Off Ramp	Basic	17.7	B	16.7	B	10	0.2%

TABLE 6-7
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROJECT PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	23.6	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-8
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROJECT -PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.5**	**F**	**25.6**	**F**	**50**	**0.7%**
Jamboree Rd Off Ramp	Diverge	**18.2**	**F**	**18.4**	**F**	**50**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**24.2**	**F**	**23.7**	**F**	**50**	**0.7%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**41.6**	**F**	**40.4**	**F**	**60**	**0.6%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**43.2**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**33.9**	**F**	**26.2**	**F**	**10**	**0.1%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**36.1**	**F**	**30.9**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**27.2**	**F**	**22.4**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**23.9**	**F**	**21.3**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.8	C	50	0.8%
Fairview Rd On Ramp	Merge	25.6	C	25.7	C	60	0.9%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.4	C	60	0.9%
Bristol St Off Ramp	Diverge	18.0	B	18.2	B	60	0.7%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	29.4	D	30.6	D	70	0.9%
Lane Drop	Basic	25.3	C	26.5	D	70	1.2%
On Ramp from SR-55 NB	Basic	25.6	C	26.6	D	80	1.0%

TABLE 6-8
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROJECT -PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**43.6**	**E**	**-**	**F**	**80**	**0.8%**
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.8**	**E**	**45.1**	**E**	**70**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**21.3**	**F**	**22.1**	**F**	**70**	**1.1%**
Jamboree Rd Direct On Ramp	Merge	**21.4**	**F**	**22.9**	**F**	**90**	**1.3%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

6.1.3 IMPACTS

6.1.3.1 Threshold T-1

No impact.

6.1.3.2 Threshold T-2

No impact.

6.1.3.3 Threshold T-3

No impact.

6.1.3.4 Threshold T-4

No Impact.

6.1.3.5 Threshold T-5

The intersection of Campus Drive/Bristol Street North in the City of Newport Beach worsens from LOS D to LOS E with the addition of project trips. As this intersection is outside of the John Wayne Airport Area, this degradation of LOS is a significant impact.

6.1.3.6 **Threshold T-6**

No impact

6.1.3.7 **Threshold T-7**

No impact

6.1.3.8 **Threshold T-8**

No impact

6.1.3.9 **Threshold T-9**

No impacts

6.1.3.10 **Threshold T-10**

No impact

6.1.3.11 **Threshold T-11**

No impact

6.1.3.12 **Threshold T-12**

No impact

6.1.3.13 **Threshold T-13**

The project results in an increase of over 2 percent on the following segment of the Northbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic, and therefore, the project, would result in a significant cumulative impact at the following location:

- On Ramp from I-405 NB to MacArthur Blvd Off Ramp

6.1.3.14 **Threshold T-14**

No impact.

6.1.3.15 **Threshold T-15**

No impact.

6.2 2016 PLUS PROJECT SCENARIO

6.2.1 DESCRIPTION

This scenario evaluates the potential impacts associated with an increase in vehicle trips attributable to the proposed project under 2016 conditions, which anticipates a MAP level of 10.8. The anticipated increase in vehicle trips under this MAP scenario is shown in Table 4-8.

6.2.2 RESULTS

Table 6-9 provides the V/C and LOS results for the 59 study intersections using ICU methodology. As shown in the table, under this scenario the proposed project would result in significant impacts at Intersection 17, Campus Drive at Bristol Street North during the PM peak hour.

TABLE 6-9
INTERSECTION LEVEL OF SERVICE:
2016 PROPOSED PROJECT CONDITIONS

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.59	A	0.60	A	0.01
		PM	0.75	C	0.75	C	0.00
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.65	B	0.65	B	0.00
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.60	B	0.60	B	0.00
		PM	0.66	B	0.66	B	0.00
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.91	E	0.93	E	0.02
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.57	A	0.57	A	0.00
		PM	0.77	C	0.78	C	0.01
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.391	A	0.393	A	0.002
		PM	0.517	A	0.518	A	0.001
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.81	D	0.81	D	0.00
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.89	D	0.90	D	0.01
		PM	0.78	C	0.78	C	0.00
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.86	D	0.87	D	0.01
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.60	A	0.60	A	0.00
		PM	0.61	B	0.61	B	0.00
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.666	B	0.668	B	0.002
		PM	0.722	C	0.728	C	0.006

TABLE 6-9
INTERSECTION LEVEL OF SERVICE:
2016 PROPOSED PROJECT CONDITIONS

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.517	A	0.517	A	0.000
		PM	0.498	A	0.498	A	0.000
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.629	B	0.629	B	0.000
		PM	0.641	B	0.645	B	0.004
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.66	B	0.67	B	0.01
15. Campus Dr at Airport Way[2]	Signal	AM	0.346	A	0.407	A	0.061
		PM	0.682	B	0.734	C	0.052
16. Campus Dr at Quail St[2]	Signal	AM	0.506	A	0.519	A	0.013
		PM	0.498	A	0.515	A	0.017
17. Campus Dr at Bristol St North[2]	Signal	AM	0.614	B	0.626	B	0.012
		PM	**0.916**	**E**	**0.936**	**E**	0.020
18. Campus Dr at Bristol St South[2]	Signal	AM	0.710	C	0.716	C	0.006
		PM	0.448	A	0.453	A	0.005
19. Birch St at Bristol St North[2]	Signal	AM	0.596	A	0.598	A	0.002
		PM	0.604	B	0.606	B	0.002
20. Birch St at Bristol St South[2]	Signal	AM	0.416	A	0.416	A	0.000
		PM	0.445	A	0.447	A	0.002
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.63	B	0.63	B	0.00
		PM	0.73	C	0.74	C	0.01
22. Red Hill Ave at Main St[1]	Signal	AM	0.72	C	0.72	C	0.00
		PM	0.72	C	0.72	C	0.00
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.52	A	0.52	A	0.00
		PM	0.49	A	0.50	A	0.01
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.56	A	0.56	A	0.00
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	23.4	C	23.4	C	N/A
		PM	23.5	C	23.5	C	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.381	A	0.385	A	0.004
		PM	0.584	A	0.589	A	0.005
27. Irvine Ave at University Dr[2]	Signal	AM	0.669	B	0.678	B	0.009
		PM	0.737	C	0.741	C	0.004
28. Irvine Ave at 22nd St[2]	Signal	AM	0.647	B	0.650	B	0.003
		PM	0.722	C	0.722	C	0.000
29. Irvine Ave at 20th St[2]	Signal	AM	0.512	A	0.516	A	0.004
		PM	0.653	B	0.653	B	0.000
30. Irvine Ave at 19th St[2]	Signal	AM	0.550	A	0.550	A	0.000
		PM	0.678	B	0.678	B	0.000
31. Irvine Ave at 17th St[2]	Signal	AM	0.572	A	0.572	A	0.000
		PM	0.725	C	0.728	C	0.003
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.23	A	0.23	A	0.00

TABLE 6-9
INTERSECTION LEVEL OF SERVICE:
2016 PROPOSED PROJECT CONDITIONS

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.58	A	0.58	A	0.00
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.46	A	0.46	A	0.00
		PM	0.39	A	0.39	A	0.00
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.44	A	0.44	A	0.00
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.83	D	0.84	D	0.01
		PM	0.51	A	0.52	A	0.01
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.553	A	0.553	A	0.000
		PM	0.706	C	0.706	C	0.000
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.594	A	0.594	A	0.000
		PM	0.554	A	0.556	A	0.002
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.405	A	0.406	A	0.001
		PM	0.419	A	0.420	A	0.001
39. Jamboree Rd at Birch St[2]	Signal	AM	0.519	A	0.519	A	0.000
		PM	0.508	A	0.508	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.449	A	0.449	A	0.000
		PM	0.531	A	0.533	A	0.002
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.561	A	0.564	A	0.003
		PM	0.580	A	0.582	A	0.002
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.482	A	0.484	A	0.002
		PM	0.506	A	0.508	A	0.002
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.844	D	0.844	D	0.000
		PM	0.729	C	0.729	C	0.000
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.602	B	0.603	B	0.001
		PM	0.600	B	0.600	B	0.000
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.770	C	0.770	C	0.000
		PM	0.853	D	0.853	D	0.000
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.56	A	0.56	A	0.00
		PM	0.68	B	0.68	B	0.00
47. Red Hill Ave at Baker St[3]	Signal	AM	0.45	A	0.45	A	0.00
		PM	0.63	B	0.63	B	0.00
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.77	C	0.01
		PM	0.63	B	0.63	B	0.00
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.89	D	0.89	D	0.00
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.82	D	0.82	D	0.00
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.46	A	0.47	A	0.01
		PM	0.76	C	0.76	C	0.00
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.74	C	0.74	C	0.00

TABLE 6-9
INTERSECTION LEVEL OF SERVICE:
2016 PROPOSED PROJECT CONDITIONS

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.93	E	0.93	E	0.00
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.78	C	0.78	C	0.00
		PM	0.92	E	0.92	E	0.00
54. Von Karman Ave at Main St[1]	Signal	AM	0.63	B	0.63	B	0.00
		PM	0.81	D	0.81	D	0.00
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.76	C	0.76	C	0.00
		PM	0.91	E	0.91	E	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.80	D	0.80	D	0.00
		PM	0.83	D	0.84	D	0.01
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.66	B	0.66	B	0.00
		PM	0.68	B	0.68	B	0.00
58. Jamboree Rd at Main St[1]	Signal	AM	0.78	C	0.78	C	0.00
		PM	0.86	D	0.86	D	0.00
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.68	B	0.68	B	0.00
		PM	0.84	D	0.84	D	0.00

Notes: Signalized intersections evaluated using ICU methodology.
1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 6-10 provides the LOS results for the four intersections under the joint jurisdiction of Caltrans. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

**TABLE 6-10 CALTRANS INTERSECTION LEVEL OF SERVICE:
2016 PROPOSED PROJECT CONDITIONS**

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.4	C	22.4	C
		PM	24.0	C	24.0	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.0	C	23.0	C
		PM	25.2	C	25.2	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	16.4	B	16.4	B
		PM	24.2	C	24.2	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**94.7**	**F**	**94.7**	**F**
		PM	31.0	C	31.0	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 6-11, 6-12, 6-13 provide freeway mainline and ramp LOS results for the AM Peak Hour for the SR-55, SR-73, and I-405, respectively. Tables 6-14, 6-15, 6-16 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, because the addition of project trips would not result in a decrease in LOS from acceptable to unacceptable, and because the addition of project trips would not increase traffic by 2 percent or more, impacts would be less than significant.

TABLE 6-11
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PROPOSED PROJECT- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	28.9	D	29.0	D	20	0.3%
Baker St Off Ramp	Diverge	21.6	C	21.7	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**37.7**	**F**	**37.9**	**F**	**20**	**0.3%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**44.5**	**F**	**44.7**	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	**-**	**F**	**-**	**F**	**20**	**0.3%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**-**	**F**	**-**	**F**	**20**	**0.3%**
On Ramp from I-405 SB	Basic	**-**	**F**	**-**	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.5%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.2	D	34.5	D	40	0.5%
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**

TABLE 6-11
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PROPOSED PROJECT- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Off Ramp to I-405 NB	Diverge	28.8	D	28.8	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.9	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	28.1	D	0	0.0%
Lane Drop	Basic	27.7	D	27.6	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.7	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	20.8	C	40	0.8%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.8	C	40	0.8%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.7	D	40	0.6%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	20.4	C	30	0.6%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.9	C	30	0.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-12
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS PROPOSED PROJECT- AM

Location	Type	AM		AM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.4**	**E**	**40.5**	**E**	**10**	**0.2%**
MacArthur Blvd On Ramp	Basic	**36.7**	**E**	**36.8**	**E**	**20**	**0.3%**
Jamboree Rd On Ramp	Merge	34.9	D	**35.1**	**E**	**30**	**0.3%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.2**	**E**	**43.5**	**E**	**30**	**0.3%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**30**	**0.3%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.7%**
Off Ramp to SR-55 SB	Diverge	31.7	D	32.1	D	70	1.0%
On Ramp from SR-55 NB	Weave	-	**F**	-	**F**	**50**	**0.7%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.8	C	21.9	C	50	0.9%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.8**	**E**	**39.1**	**E**	**30**	**0.5%**
On Ramp from SR-55 NB	Merge	30.3	D	30.6	D	40	0.7%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.2	D	31.6	D	40	0.7%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.5	C	22.6	C	50	0.9%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	27.9	C	50	0.7%
Jamboree Rd Off to Lane Add	Basic	20.4	C	20.6	C	30	0.8%

TABLE 6-12
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS PROPOSED PROJECT- AM

Location	Type	AM		AM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Dr Off Ramp	Basic	12.3	B	12.4	B	30	0.6%
University Off to Jamboree Rd On Ramp	Basic	15.1	B	15.3	B	30	1.1%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-13
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS PROPOSED PROJECT- AM

Location	Type	AM		AM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.8**	**E**	**43.1**	**E**	**30**	**0.3%**
Jamboree Rd Off Ramp	Diverge	28.8	D	28.9	D	30	0.2%
Jamboree Rd Loop On Ramp	Merge	27.1	C	27.2	C	20	0.2%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.2%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.5**	**E**	**37.7**	**E**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.3	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.4	C	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**30.9**	**F**	**31.0**	**F**	**20**	**0.2%**
Fairview Rd On Ramp	Merge	**34.2**	**F**	**34.3**	**F**	**30**	**0.3%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**38.8**	**F**	**39.0**	**F**	**30**	**0.3%**
Bristol St Off Ramp	Diverge	**27.3**	**F**	**27.4**	**F**	**30**	**0.3%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.3%**
Lane Drop	Basic	34.2	D	34.5	D	40	0.5%
On Ramp from SR-55 NB	Basic	34.8	D	35.1	**E**	**50**	**0.5%**

TABLE 6-13
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS PROPOSED PROJECT- AM

Location	Type	AM		AM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
Jamboree Rd Loop On Ramp	Merge	19.2	B	19.4	B	50	0.8%
Jamboree Rd Direct On Ramp	Merge	17.3	B	17.5	B	60	0.9%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-14
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PLUS PROPOSED PROJECT- PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.3%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	10.8	A	20	0.8%
Baker St Off Ramp	Diverge	3.5	A	3.5	A	20	0.7%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.1	B	20	0.9%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	28.9	D	20	0.4%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.6	B	10	0.4%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**15.8**	**F**	**20**	**0.7%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**16.8**	**F**	**20**	**0.7%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.2**	**F**	**20**	**0.5%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**26.1**	**F**	**80**	**1.3%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.6**	**E**	**36.8**	**E**	**30**	**0.4%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.7	D	0	0.0%
Lane Drop	Basic	32.8	D	32.7	D	0	0.0%

TABLE 6-14
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PLUS PROPOSED PROJECT- PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.2	D	30.3	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.1	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.1	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.5	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-15
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS PROPOSED PROJECT- PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.7	D	27.7	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.7	D	28.8	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.4	D	32.5	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.4	D	34.6	D	30	0.4%
Bristol St N Off Ramp	Diverge	**35.9**	**E**	**36.1**	**E**	**30**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**60**	**0.6%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**50**	**0.6%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.2	D	33.6	D	50	0.7%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.4	D	29.6	D	30	0.6%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	27.7	D	30	0.6%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.4%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	24.9	C	30	0.5%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.0	C	30	0.4%
Jamboree Rd Off to Lane Add	Basic	28.8	D	28.9	D	10	0.2%

TABLE 6-15
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS PROPOSED PROJECT- PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Dr Off Ramp	Basic	16.7	B	16.7	B	10	0.2%
University Off to Jamboree Rd On Ramp	Basic	24.9	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-16
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS PROPOSED PROJECT- PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.6**	**F**	**25.7**	**F**	**30**	**0.4%**
Jamboree Rd Off Ramp	Diverge	**18.3**	**F**	**18.4**	**F**	**30**	**0.3%**
Jamboree Rd Loop On Ramp	Merge	**23.8**	**F**	**23.9**	**F**	**30**	**0.4%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.1**	**F**	**40.5**	**F**	**40**	**0.4%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.4**	**F**	**26.5**	**F**	**10**	**0.2%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.0**	**F**	**31.2**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**22.5**	**F**	**22.5**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.4**	**F**	**21.4**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.8	C	30	0.5%
Fairview Rd On Ramp	Merge	25.6	C	25.8	C	40	0.6%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.4	C	40	0.6%
Bristol St Off Ramp	Diverge	18.1	B	18.2	B	40	0.5%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.4	D	30.7	D	50	0.6%
Lane Drop	Basic	26.3	D	26.5	D	50	0.8%
On Ramp from SR-55 NB	Basic	26.4	D	26.7	D	60	0.8%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**44.2**	**E**	**60**	**0.6%**

TABLE 6-16
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS PROPOSED PROJECT- PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.2**	**E**	**45.4**	**E**	**60**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**22.4**	**F**	**22.2**	**F**	**60**	**0.9%**
Jamboree Rd Direct On Ramp	Merge	**22.6**	**F**	**23.0**	**F**	**70**	**0.9%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

6.2.3 IMPACTS

6.2.3.1 **Threshold T-1**

No impact

6.2.3.2 **Threshold T-2**

No impact

6.2.3.3 **Threshold T-3**

No impact

6.2.3.4 **Threshold T-4**

No impact

6.2.3.5 **Threshold T-5**

No impact

6.2.3.6 **Threshold T-6**

No impact

6.2.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection to increase by 0.020 at an intersection which is projected to operate at LOS E prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

6.2.3.8 **Threshold T-8**

No impact

6.2.3.9 **Threshold T-9**

No impact

6.2.3.10 **Threshold T-10**

No impact

6.2.3.11 **Threshold T-11**

No impact

6.2.3.12 **Threshold T-12**

No impact

6.2.3.13 **Threshold T-13**

No impact

6.2.3.14 **Threshold T-14**

No impact

6.2.3.15 **Threshold T-15**

No impact

6.3 2021 PLUS PROJECT SCENARIO

6.3.1 DESCRIPTION

This scenario analyzes the increase in vehicle trips attributable to a change in MAP from the existing 9.2 to 11.8 as shown in Table 4-9.

6.3.2 RESULTS

Table 6-17 provides intersection LOS results associated with the application of the ICU methodology to the 59 study area intersections. As shown in the table, under this scenario the proposed project would result in a significant impact at Intersection 17, Campus Drive at Bristol Street North, during the PM peak hour.

TABLE 6-17
INTERSECTION LEVEL OF SERVICE:
2021 PROPOSED PROJECT SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		Change
			V/C	LOS	V/C	LOS	
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.62	B	0.65	B	0.03
		PM	0.77	C	0.79	C	0.02
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.66	B	0.67	B	0.01
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.67	B	0.68	B	0.01
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.74	C	0.77	C	0.03
		PM	0.94	E	0.97	E	0.03
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.58	A	0.59	A	0.01
		PM	0.80	C	0.81	D	0.01
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.408	A	0.419	A	0.011
		PM	0.541	A	0.544	A	0.003
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.70	B	0.70	C	0.00
		PM	0.82	D	0.83	D	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.91	E	0.91	E	0.00
		PM	0.78	C	0.79	C	0.01
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.91	E	0.93	E	0.02
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.63	B	0.63	B	0.00
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.684	B	0.698	B	0.014
		PM	0.730	C	0.740	C	0.010

TABLE 6-17
INTERSECTION LEVEL OF SERVICE:
2021 PROPOSED PROJECT SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		Change
			V/C	LOS	V/C	LOS	
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.546	A	0.548	A	0.002
		PM	0.510	A	0.512	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.659	B	0.664	B	0.005
		PM	0.655	B	0.663	B	0.008
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.55	A	0.57	A	0.02
		PM	0.68	B	0.70	B	0.02
15. Campus Dr at Airport Way[2]	Signal	AM	0.354	A	0.458	A	0.104
		PM	0.703	C	0.797	C	0.094
16. Campus Dr at Quail St[2]	Signal	AM	0.525	A	0.544	A	0.019
		PM	0.517	A	0.546	A	0.029
17. Campus Dr at Bristol St North[2]	Signal	AM	0.641	B	0.659	B	0.018
		PM	**0.964**	**E**	**0.998**	**E**	0.034
18. Campus Dr at Bristol St South[2]	Signal	AM	0.734	C	0.751	C	0.017
		PM	0.456	A	0.468	A	0.012
19. Birch St at Bristol St North[2]	Signal	AM	0.612	B	0.619	B	0.007
		PM	0.632	B	0.636	B	0.004
20. Birch St at Bristol St South[2]	Signal	AM	0.431	A	0.434	A	0.003
		PM	0.458	A	0.463	A	0.005
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.65	B	0.66	B	0.01
		PM	0.75	C	0.76	C	0.01
22. Red Hill Ave at Main St[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.73	C	0.74	C	0.01
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.53	A	0.54	A	0.01
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.55	A	0.57	A	0.02
		PM	0.58	A	0.59	A	0.01
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	26.8	D	31.6	D	N/A
		PM	25.4	D	29.1	D	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.390	A	0.406	A	0.016
		PM	0.591	A	0.597	A	0.006
27. Irvine Ave at University Dr[2]	Signal	AM	0.697	B	0.716	C	0.019
		PM	0.750	C	0.762	C	0.012
28. Irvine Ave at 22nd St[2]	Signal	AM	0.666	B	0.678	B	0.012
		PM	0.725	C	0.731	C	0.006
29. Irvine Ave at 20th St[2]	Signal	AM	0.519	A	0.528	A	0.009
		PM	0.656	B	0.675	B	0.019
30. Irvine Ave at 19th St[2]	Signal	AM	0.556	A	0.572	A	0.016
		PM	0.688	B	0.697	B	0.009
31. Irvine Ave at 17th St[2]	Signal	AM	0.597	A	0.603	B	0.006
		PM	0.744	C	0.747	C	0.003
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.24	A	0.26	A	0.02

TABLE 6-17
INTERSECTION LEVEL OF SERVICE:
2021 PROPOSED PROJECT SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		Change
			V/C	LOS	V/C	LOS	
		PM	0.59	A	0.61	B	0.02
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.47	A	0.48	A	0.01
		PM	0.40	A	0.42	A	0.02
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.45	A	0.46	A	0.01
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.84	D	0.85	D	0.01
		PM	0.52	A	0.52	A	0.00
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.569	A	0.572	A	0.003
		PM	0.725	C	0.734	C	0.009
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.606	B	0.606	B	0.000
		PM	0.563	A	0.567	A	0.004
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.416	A	0.419	A	0.003
		PM	0.425	A	0.427	A	0.002
39. Jamboree Rd at Birch St[2]	Signal	AM	0.531	A	0.531	A	0.000
		PM	0.530	A	0.530	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.455	A	0.457	A	0.002
		PM	0.537	A	0.540	A	0.003
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.567	A	0.575	A	0.008
		PM	0.602	B	0.610	B	0.008
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.491	A	0.495	A	0.004
		PM	0.510	A	0.512	A	0.002
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.858	D	0.863	D	0.005
		PM	0.744	C	0.748	C	0.004
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.608	B	0.611	B	0.003
		PM	0.605	B	0.606	B	0.001
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.770	C	0.777	C	0.007
		PM	0.861	D	0.866	D	0.005
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.58	A	0.58	A	0.00
		PM	0.69	B	0.70	B	0.01
47. Red Hill Ave at Baker St[3]	Signal	AM	0.46	A	0.46	A	0.00
		PM	0.65	B	0.66	B	0.01
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.77	C	0.01
		PM	0.64	B	0.65	B	0.01
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.54	A	0.55	A	0.01
		PM	0.90	E	0.91	E	0.01
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.73	C	0.73	C	0.00
		PM	0.86	D	0.86	D	0.00
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.47	A	0.48	A	0.01
		PM	0.77	C	0.77	C	0.00
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.78	C	0.79	C	0.01

TABLE 6-17
INTERSECTION LEVEL OF SERVICE:
2021 PROPOSED PROJECT SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		Change
			V/C	LOS	V/C	LOS	
		PM	0.98	E	0.98	E	0.00
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.81	D	0.82	D	0.01
		PM	0.96	E	0.97	E	0.01
54. Von Karman Ave at Main St[1]	Signal	AM	0.65	B	0.65	B	0.00
		PM	0.83	D	0.83	D	0.00
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.92	E	0.93	E	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.84	D	0.84	D	0.00
		PM	0.86	D	0.86	D	0.00
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.70	C	0.71	C	0.01
58. Jamboree Rd at Main St[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.87	D	0.88	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.86	D	0.86	D	0.00

Notes: Signalized intersections evaluated using ICU methodology.
1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 6-18 provides the LOS results for the four Caltrans intersections. As shown in the table below, the overall intersection delay will improve at a few locations because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

**TABLE 6-18 CALTRANS INTERSECTION LEVEL OF SERVICE:
2021 PROPOSED PROJECT CONDITIONS**

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.7	C	24.0	C
		PM	24.9	C	26.2	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.3	C	23.5	C
		PM	25.4	C	24.6	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	16.8	B	17.8	B
		PM	30.3	C	31.7	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**99.7**	**F**	**99.5**	**F**
		PM	30.8	C	30.8	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 6-19, 6-20, 6-21 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405, respectively. Tables 6-22, 6-23, 6-24 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, the project would result in an increase of over 2 percent at the on-ramp from I-405 NB to MacArthur Boulevard off-ramp, which is projected to operate at LOS F prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at this location.

TABLE 6-19
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PROPOSED PROJECT- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	-	**F**	-	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	29.0	D	29.1	D	20	0.3%
Baker St Off Ramp	Diverge	21.7	C	21.8	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**37.9**	**F**	**38.1**	**F**	**20**	**0.3%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**44.8**	**F**	**45.0**	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	-	**F**	-	**F**	**20**	**0.3%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	-	**F**	-	**F**	**20**	**0.3%**
On Ramp from I-405 SB	Basic	-	**F**	-	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	-	**F**	-	**F**	**90**	**0.7%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.2	D	34.6	D	60	0.8%

TABLE 6-19
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PROPOSED PROJECT- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**90**	**0.8%**
Off Ramp to I-405 NB	Diverge	28.8	D	28.8	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	28.1	D	0	0.0%
Lane Drop	Basic	27.7	D	27.6	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.6	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	20.8	C	40	0.8%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.7	C	40	0.8%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.7	D	40	0.6%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	20.4	C	30	0.6%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.8	C	30	0.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-20
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 PLUS PROPOSED PROJECT- AM

Location	Type	AM		AM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.4**	**E**	**40.6**	**E**	**20**	**0.3%**
MacArthur Blvd On Ramp	Basic	**36.7**	**E**	**36.9**	**E**	**30**	**0.4%**
Jamboree Rd On Ramp	Merge	34.9	D	35.1	**E**	**40**	**0.5%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.2**	**E**	**43.6**	**E**	**40**	**0.5%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**40**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**1.0%**
Off Ramp to SR-55 SB	Diverge	31.7	D	32.2	D	100	1.4%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**80**	**1.1%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.7	C	22.0	C	80	1.5%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.9**	**E**	**39.3**	**E**	**40**	**0.6%**
On Ramp from SR-55 NB	Merge	30.4	D	30.7	D	50	0.9%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.3	D	31.7	D	50	0.9%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.6	C	22.7	C	60	1.1%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	28.0	C	60	0.8%
Jamboree Rd Off to Lane Add	Basic	20.5	C	20.7	C	30	0.8%
University Dr Off Ramp	Basic	12.3	B	12.4	B	30	0.6%

TABLE 6-20
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 PLUS PROPOSED PROJECT- AM

Location	Type	AM		AM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	15.2	B	15.4	B	30	1.1%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-21
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS PROPOSED PROJECT- AM

Location	Type	AM		AM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.9**	**E**	**43.3**	**E**	**40**	**0.4%**
Jamboree Rd Off Ramp	Diverge	28.8	D	29.0	D	40	0.3%
Jamboree Rd Loop On Ramp	Merge	27.1	C	27.2	C	30	0.3%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.3%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.6**	**E**	**37.7**	**E**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.3	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.4	C	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**31.0**	**F**	**31.2**	**F**	**30**	**0.3%**
Fairview Rd On Ramp	Merge	**34.3**	**F**	**34.5**	**F**	**40**	**0.4%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**39.0**	**F**	**39.3**	**F**	**40**	**0.4%**
Bristol St Off Ramp	Diverge	**27.4**	**F**	**27.5**	**F**	**40**	**0.4%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
Lane Drop	Basic	34.4	D	34.8	D	50	0.7%
On Ramp from SR-55 NB	Basic	**35.0**	**E**	**35.4**	**E**	**60**	**0.6%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.4%**

TABLE 6-21
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS PROPOSED PROJECT- AM

Location	Type	AM		AM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
Jamboree Rd Loop On Ramp	Merge	19.3	B	19.4	B	50	0.8%
Jamboree Rd Direct On Ramp	Merge	17.4	B	17.6	B	60	0.9%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-22
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PLUS PROPOSED PROJECT- PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	-	**F**	-	**F**	**30**	**0.4%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	10.9	A	30	1.1%
Baker St Off Ramp	Diverge	3.5	A	3.6	A	30	1.0%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.1	B	30	1.4%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	28.9	D	30	0.6%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.7	B	20	0.8%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**15.9**	**F**	**30**	**1.0%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**16.9**	**F**	**30**	**1.0%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.3**	**F**	**30**	**0.8%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**26.4**	**F**	**120**	**2.0%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.6**	**E**	**37.0**	**E**	**50**	**0.6%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**70**	**0.7%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.7	D	0	0.0%
Lane Drop	Basic	32.8	D	32.7	D	0	0.0%

TABLE 6-22
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PLUS PROPOSED PROJECT- PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.3	D	30.3	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.2	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.1	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.5	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-23
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 PLUS PROPOSED PROJECT- PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.7	D	27.8	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.7	D	28.9	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.4	D	32.6	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.4	D	34.7	D	30	0.4%
Bristol St N Off Ramp	Diverge	**35.9**	**E**	**36.1**	**E**	**30**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**80**	**0.7%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**80**	**0.9%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**70**	**0.8%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.3	D	33.8	D	70	0.9%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.4	D	29.7	D	40	0.8%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	27.8	D	40	0.8%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.5%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	24.9	C	40	0.7%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.0	C	40	0.6%
Jamboree Rd Off to Lane Add	Basic	28.8	D	28.9	D	10	0.2%

TABLE 6-23
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 PLUS PROPOSED PROJECT- PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Dr Off Ramp	Basic	16.7	B	16.7	B	10	0.2%
University Off to Jamboree Rd On Ramp	Basic	24.9	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-24
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS PROPOSED PROJECT- PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.6**	**F**	**25.8**	**F**	**40**	**0.5%**
Jamboree Rd Off Ramp	Diverge	**18.4**	**F**	**18.5**	**F**	**40**	**0.5%**
Jamboree Rd Loop On Ramp	Merge	**23.9**	**F**	**24.0**	**F**	**40**	**0.5%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.2**	**F**	**40.7**	**F**	**50**	**0.5%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.4**	**F**	**26.5**	**F**	**10**	**0.2%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.1**	**F**	**31.2**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**22.5**	**F**	**22.5**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.4**	**F**	**21.4**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.8	C	40	0.7%
Fairview Rd On Ramp	Merge	25.7	C	25.8	C	50	0.7%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.5	C	50	0.7%
Bristol St Off Ramp	Diverge	18.1	B	18.2	B	50	0.6%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.5	D	30.8	D	60	0.7%
Lane Drop	Basic	26.3	D	26.6	D	60	1.0%
On Ramp from SR-55 NB	Basic	26.5	D	26.8	D	70	0.9%

TABLE 6-24
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS PROPOSED PROJECT- PM

Location	Type	PM		PM Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	-	F	-	F	70	0.7%
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	44.3	E	45.4	E	60	0.6%
Jamboree Rd Loop On Ramp	Merge	22.4	F	22.2	F	60	0.9%
Jamboree Rd Direct On Ramp	Merge	22.7	F	23.2	F	70	0.9%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

6.3.3 IMPACTS

6.3.3.1 **Threshold T-1**

No impact

6.3.3.2 **Threshold T-2**

No impact

6.3.3.3 **Threshold T-3**

No impact

6.3.3.4 **Threshold T-4**

No impact

6.3.3.5 **Threshold T-5**

No impact

6.3.3.6 **Threshold T-6**

No impact

6.3.3.7 Threshold T-7

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection to increase by 0.034 at an intersection which is projected to operate at LOS E prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

6.3.3.8 Threshold T-8

No impact

6.3.3.9 Threshold T-9

No impact

6.3.3.10 Threshold T-10

No impact

6.3.3.11 Threshold T-11

No impact

6.3.3.12 Threshold T-12

No impact

6.3.3.13 Threshold T-13

The project results in an increase of over 2 percent on the following segment of the Northbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at the following location and, therefore, the project would result in a significant cumulative impact at the following location:

- On Ramp from I-405 NB to MacArthur Blvd Off Ramp

6.3.3.14 Threshold T-14

No impact

6.3.3.15 Threshold T-15

No impact

6.4 2026 PLUS PROJECT SCENARIO

6.4.1 DESCRIPTION

This scenario analyzes the traffic impacts associated with increasing the MAP and associated vehicle trips from existing levels to 12.5 MAP by year 2026. Trip generation associated with this alternative is shown in Table 4-10.

6.4.2 RESULTS

Table 6-25 provides the LOS results at the 59 intersections evaluated using ICU methodology. As shown in the table, under this scenario, the proposed project would result in significant impacts at Intersection 4 (MacArthur Blvd. at Michelson Drive), 17 (Campus Drive at Bristol Street North), and 53 (Von Karman Ave at Alton Pkwy), during the PM peak hour.

TABLE 6-25
INTERSECTION LEVEL OF SERVICE:
2026 PROPOSED PROJECT SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.66	B	0.69	B	0.03
		PM	0.80	C	0.83	D	0.03
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.69	B	0.70	B	0.01
		PM	0.67	B	0.68	B	0.01
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.63	B	0.63	B	0.00
		PM	0.68	B	0.69	B	0.01
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.77	C	0.81	D	0.04
		PM	**0.98**	**E**	**1.01**	**F**	0.03
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.60	A	0.61	B	0.01
		PM	0.82	D	0.84	D	0.02
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.425	A	0.434	A	0.009
		PM	0.565	A	0.568	A	0.003
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.71	C	0.71	C	0.00
		PM	0.84	D	0.85	D	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.93	E	0.93	E	0.00
		PM	0.78	C	0.79	C	0.01
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.97	E	0.98	E	0.01
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.63	B	0.64	B	0.01
		PM	0.64	B	0.65	B	0.01

TABLE 6-25
INTERSECTION LEVEL OF SERVICE:
2026 PROPOSED PROJECT SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.700	B	0.714	C	0.014
		PM	0.739	C	0.747	C	0.008
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.577	A	0.579	A	0.002
		PM	0.525	A	0.527	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.686	B	0.691	B	0.005
		PM	0.670	B	0.677	B	0.007
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.59	A	0.61	B	0.02
		PM	0.70	B	0.72	C	0.02
15. Campus Dr at Airport Way[2]	Signal	AM	0.362	A	0.488	A	0.126
		PM	0.723	C	0.838	D	0.115
16. Campus Dr at Quail St[2]	Signal	AM	0.542	A	0.567	A	0.025
		PM	0.535	A	0.571	A	0.036
17. Campus Dr at Bristol St North[2]	Signal	AM	0.666	B	0.692	B	0.026
		PM	**1.009**	**F**	**1.053**	**F**	0.044
18. Campus Dr at Bristol St South[2]	Signal	AM	0.758	C	0.778	C	0.020
		PM	0.467	A	0.483	A	0.016
19. Birch St at Bristol St North[2]	Signal	AM	0.633	B	0.640	B	0.007
		PM	0.658	B	0.662	B	0.004
20. Birch St at Bristol St South[2]	Signal	AM	0.448	A	0.452	A	0.004
		PM	0.469	A	0.475	A	0.006
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.77	C	0.78	C	0.01
22. Red Hill Ave at Main St[1]	Signal	AM	0.74	C	0.75	C	0.01
		PM	0.75	C	0.76	C	0.01
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.53	A	0.54	A	0.01
		PM	0.57	A	0.58	A	0.01
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.58	A	0.59	A	0.01
		PM	0.59	A	0.61	B	0.02
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	**36.3**	**E**	**45.2**	**E**	N/A
		PM	28.1	D	33.8	D	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.425	A	0.431	A	0.006
		PM	0.597	A	0.605	B	0.008
27. Irvine Ave at University Dr[2]	Signal	AM	0.725	C	0.744	C	0.019
		PM	0.762	C	0.772	C	0.010
28. Irvine Ave at 22nd St[2]	Signal	AM	0.687	B	0.703	C	0.016
		PM	0.741	C	0.747	C	0.006
29. Irvine Ave at 20th St[2]	Signal	AM	0.525	A	0.534	A	0.009
		PM	0.662	B	0.678	B	0.016
30. Irvine Ave at 19th St[2]	Signal	AM	0.559	A	0.578	A	0.019
		PM	0.691	B	0.703	C	0.012
31. Irvine Ave at 17th St[2]	Signal	AM	0.622	B	0.631	B	0.009

TABLE 6-25
INTERSECTION LEVEL OF SERVICE:
2026 PROPOSED PROJECT SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.769	C	0.778	C	0.009
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.28	A	0.29	A	0.01
		PM	0.61	B	0.62	B	0.01
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.49	A	0.50	A	0.01
		PM	0.42	A	0.43	A	0.01
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.46	A	0.47	A	0.01
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.85	D	0.86	D	0.01
		PM	0.52	A	0.53	A	0.01
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.578	A	0.584	A	0.006
		PM	0.744	C	0.756	C	0.012
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.619	B	0.619	B	0.000
		PM	0.569	A	0.573	A	0.004
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.428	A	0.430	A	0.002
		PM	0.430	A	0.433	A	0.003
39. Jamboree Rd at Birch St[2]	Signal	AM	0.550	A	0.550	A	0.000
		PM	0.546	A	0.546	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.461	A	0.464	A	0.003
		PM	0.544	A	0.546	A	0.002
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.579	A	0.587	A	0.008
		PM	0.619	B	0.627	B	0.008
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.499	A	0.501	A	0.002
		PM	0.512	A	0.515	A	0.003
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.872	D	0.874	D	0.002
		PM	0.763	C	0.765	C	0.002
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.614	B	0.617	B	0.003
		PM	0.609	B	0.611	B	0.002
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.775	C	0.781	C	0.006
		PM	0.867	D	0.873	D	0.006
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.60	B	0.60	B	0.00
		PM	0.71	C	0.72	C	0.01
47. Red Hill Ave at Baker St[3]	Signal	AM	0.47	A	0.47	A	0.00
		PM	0.66	B	0.67	B	0.01
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.78	C	0.02
		PM	0.66	B	0.66	B	0.00
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.55	A	0.57	A	0.02
		PM	0.92	E	0.92	E	0.00
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.87	D	0.88	D	0.01
		PM	0.90	D	0.90	E	0.00
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.48	A	0.49	A	0.01

TABLE 6-25
INTERSECTION LEVEL OF SERVICE:
2026 PROPOSED PROJECT SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.77	C	0.77	C	0.00
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.83	D	0.84	D	0.01
		PM	**1.06**	**F**	**1.07**	**F**	0.01
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.83	D	0.84	D	0.01
		PM	0.99	E	**1.01**	**F**	0.02
54. Von Karman Ave at Main St[1]	Signal	AM	0.68	B	0.68	B	0.00
		PM	0.85	D	0.86	D	0.01
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.81	D	0.82	D	0.01
		PM	0.94	E	0.94	E	0.00
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.86	D	0.87	D	0.01
		PM	0.89	D	0.89	D	0.00
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.73	C	0.73	C	0.00
58. Jamboree Rd at Main St[1]	Signal	AM	0.80	C	0.80	C	0.00
		PM	0.89	D	0.90	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.87	D	0.87	D	0.00

Notes: Signalized intersections evaluated using ICU methodology.

1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 6-26 provides the LOS results at the four intersections under the joint jurisdiction of Caltrans. As shown in the table below, the overall intersection delay will improve at a few locations because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 6-26
CALTRANS INTERSECTION LEVEL OF SERVICE:
2026 PROJECT CONDITIONS

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	23.1	C	25.7	C
		PM	26.4	C	28.7	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.4	C	23.7	C
		PM	25.5	C	24.5	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	17.3	B	18.3	B
		PM	35.6	D	37.0	D
Jamboree Rd at I-405 SB Ramps	Signal	**AM**	**106.3**	**F**	**106.2**	**F**
		PM	30.7	C	30.7	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 6-27, 6-28, 6-29 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405, respectively. Tables 6-30, 6-31, 6-32 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in bold. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, the project would result in an increase of over 2 percent at the on-ramp from I-405 NB to MacArthur Boulevard off-ramp, which is projected to operate at LOS F prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at this location.

TABLE 6-27
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PROPOSED PROJECT- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	29.0	D	29.1	D	20	0.3%
Baker St Off Ramp	Diverge	21.7	C	21.8	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**38.0**	**F**	**38.3**	**F**	**20**	**0.3%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**45.0**	**F**	**-**	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	**-**	**F**	**-**	**F**	**20**	**0.3%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**-**	**F**	**-**	**F**	**20**	**0.3%**
On Ramp from I-405 SB	Basic	**-**	**F**	**-**	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**0.8%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.2	D	34.7	D	70	0.9%

TABLE 6-27
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PROPOSED PROJECT- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**110**	**1.0%**
Off Ramp to I-405 NB	Diverge	28.8	D	28.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	28.1	D	0	0.0%
Lane Drop	Basic	27.7	D	27.5	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.6	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	20.8	C	50	1.0%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.7	C	50	1.0%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.7	D	50	0.8%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	20.4	C	40	0.8%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.8	C	40	0.8%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-28
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS PROPOSED PROJECT- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.5**	**E**	**40.7**	**E**	**20**	**0.3%**
MacArthur Blvd On Ramp	Basic	**36.8**	**E**	**37.0**	**E**	**30**	**0.4%**
Jamboree Rd On Ramp	Merge	**35.0**	**D**	**35.1**	**E**	**40**	**0.5%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.3**	**E**	**43.7**	**E**	**40**	**0.5%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**40**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**120**	**1.2%**
Off Ramp to SR-55 SB	Diverge	31.7	D	32.3	D	120	1.7%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**90**	**1.2%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.7	C	22.0	C	90	1.7%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**39.0**	**E**	**39.3**	**E**	**40**	**0.6%**
On Ramp from SR-55 NB	Merge	30.4	D	30.7	D	50	0.9%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.4	D	31.8	D	50	0.9%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.6	C	22.7	C	60	1.1%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	28.0	C	60	0.8%
Jamboree Rd Off to Lane Add	Basic	20.5	C	20.6	C	20	0.5%
University Dr Off Ramp	Basic	12.3	B	12.4	B	20	0.4%

TABLE 6-28
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS PROPOSED PROJECT- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	15.2	B	15.3	B	20	0.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-29
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS PROPOSED PROJECT- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**43.0**	**E**	**43.4**	**E**	**50**	**0.5%**
Jamboree Rd Off Ramp	Diverge	28.8	D	29.0	D	50	0.4%
Jamboree Rd Loop On Ramp	Merge	27.2	C	27.3	C	40	0.4%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.6**	**E**	**37.7**	**E**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.8	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.3	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.5	C	24.5	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**31.1**	**F**	**31.3**	**F**	**40**	**0.4%**
Fairview Rd On Ramp	Merge	**34.4**	**F**	**34.6**	**F**	**50**	**0.5%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**39.0**	**F**	**39.4**	**F**	**50**	**0.5%**
Bristol St Off Ramp	Diverge	**27.4**	**F**	**27.6**	**F**	**50**	**0.4%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.5%**
Lane Drop	Basic	34.5	D	34.9	D	60	0.8%
On Ramp from SR-55 NB	Basic	**35.2**	**E**	**35.6**	**E**	**70**	**0.7%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.5%**

TABLE 6-29
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS PROPOSED PROJECT- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.5%**
Jamboree Rd Loop On Ramp	Merge	19.4	B	18.9	B	60	1.0%
Jamboree Rd Direct On Ramp	Merge	17.5	B	17.7	B	70	1.0%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-30
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PLUS PROPOSED PROJECT- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	-	**F**	-	**F**	**30**	**0.4%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	10.9	A	30	1.1%
Baker St Off Ramp	Diverge	3.5	A	3.6	A	30	1.0%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.1	B	30	1.4%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	28.9	D	30	0.6%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.7	B	20	0.8%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**15.9**	**F**	**30**	**1.0%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**16.9**	**F**	**30**	**1.0%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.3**	**F**	**30**	**0.8%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**26.5**	**F**	**140**	**2.3%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.7**	**E**	**37.2**	**E**	**60**	**0.8%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**80**	**0.8%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.7	D	30.7	D	0	0.0%
Lane Drop	Basic	32.9	D	32.8	D	0	0.0%

TABLE 6-30
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PLUS PROPOSED PROJECT- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.3	D	30.3	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.2	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.1	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.5	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-31
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS PROPOSED PROJECT- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.8	D	27.9	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.8	D	28.9	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.5	D	32.7	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.6	D	34.8	D	30	0.4%
Bristol St N Off Ramp	Diverge	**36.0**	**E**	**36.2**	**E**	**30**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**0.9%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**100**	**1.1%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**90**	**1.0%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.5	D	34.2	D	90	1.2%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.4	D	29.7	D	40	0.8%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	27.8	D	40	0.8%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.5%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	25.0	C	40	0.7%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.1	C	40	0.6%
Jamboree Rd Off to Lane Add	Basic	28.9	D	29.0	D	10	0.2%
University Dr Off Ramp	Basic	16.7	B	16.7	B	10	0.2%

TABLE 6-31
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS PROPOSED PROJECT- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	25.0	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 6-32
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS PROPOSED PROJECT- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.8**	**F**	**26.0**	**F**	**50**	**0.7%**
Jamboree Rd Off Ramp	Diverge	**18.5**	**F**	**18.6**	**F**	**50**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**24.0**	**F**	**24.2**	**F**	**50**	**0.7%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.5**	**F**	**41.1**	**F**	**60**	**0.7%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.5**	**F**	**26.6**	**F**	**10**	**0.2%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.1**	**F**	**31.3**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**22.6**	**F**	**22.6**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.5**	**F**	**21.5**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.9	C	50	0.8%
Fairview Rd On Ramp	Merge	25.7	C	25.9	C	60	0.8%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.4	C	23.6	C	60	0.8%
Bristol St Off Ramp	Diverge	18.1	B	18.3	B	60	0.7%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.5	D	30.9	D	70	0.9%
Lane Drop	Basic	26.4	D	26.7	D	70	1.1%
On Ramp from SR-55 NB	Basic	26.5	D	26.9	D	80	1.0%

TABLE 6-32
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS PROPOSED PROJECT- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	-	F	-	F	80	0.8%
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	44.4	E	45.5	E	70	0.7%
Jamboree Rd Loop On Ramp	Merge	22.5	F	22.3	F	70	1.1%
Jamboree Rd Direct On Ramp	Merge	22.8	F	23.4	F	90	1.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

6.4.3 IMPACTS

6.4.3.1 Threshold T-1

No impact

6.4.3.2 Threshold T-2

Operations at the intersection of Macarthur Boulevard/Michelson Drive in the City of Irvine will decrease from LOS E to LOS F with the addition of project traffic, with an increase in V/C ratio of 0.03. Since the increase in ICU is greater than 0.01 concurrent with this degradation in LOS, a significant impact occurs.

Operations at the intersection of Von Karman Avenue/Alton Parkway in the City of Irvine will decrease from LOS E to LOS F with the addition of project traffic, with an increase in V/C ratio of 0.02. Since the increase in ICU is greater than 0.01 concurrent with this degradation in LOS, a significant impact occurs.

6.4.3.3 Threshold T-3

No impact

6.4.3.4 Threshold T-4

No impact

6.4.3.5 **Threshold T-5**

No impact

6.4.3.6 **Threshold T-6**

No impact

6.4.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection in the City of Newport Beach to increase by 0.044 at an intersection which is projected to operate at LOS F prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

6.4.3.8 **Threshold T-8**

No impact

6.4.3.9 **Threshold T-9**

No impact

6.4.3.10 **Threshold T-10**

No impact

6.4.3.11 **Threshold T-11**

No impact

6.4.3.12 **Threshold T-12**

No impact

6.4.3.13 **Threshold T-13**

The project results in an increase of over 2 percent on the following segment of the Northbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at this location:

- On Ramp from I-405 NB to MacArthur Blvd Off Ramp

6.4.3.14 **Threshold T-14**

No impact

6.4.3.15 **Threshold T-15**

No impact

7.0 Alternative A

7.1 EXISTING PLUS ALTERNATIVE A SCENARIO

7.1.1 DESCRIPTION

For Alternative A, the addition of project traffic reflects the incremental MAP between the Proposed Project at 12.8 MAP and the existing MAP of 9.2. The trip generation associated with this increase in MAP is provided in Table 4-13.

7.1.2 RESULTS

As explained in Section 6.1.1, the Existing Plus Project analysis often results in either overstating or understating impacts, or both. Specific to Alternative A, the Existing Plus Project analysis understates impacts. As shown below, under the analysis, Alternative A would result in significant impacts at one intersection and one Caltrans on-ramp. However, under the 2026 analysis, which also takes into account cumulative traffic growth, Alternative A would result in significant impacts at three intersections and one Caltrans on-ramp. Thus, if used to measure significance, the existing plus project scenario would understate project impacts. Therefore, it would be misleading to the public and decision makers to rely on this scenario for purposes of identifying project impacts and mitigation. As a result, this scenario is provided for disclosure, information, and comparison purposes only. Significant traffic impacts and recommended mitigation are assessed under the Year 2016, 2021, and 2026 cumulative conditions scenario because those scenarios accurately account for the long-range projected development of the proposed project within the context of an ever-changing traffic network and associated land uses.

Table 6-1 illustrates the intersection V/C ratio and corresponding incremental change, as well as LOS for each of the 59 study intersections under the existing plus Alternative A project scenario. As shown in this table, there is one location which degrades from acceptable conditions to LOS E. This intersection, Campus Drive/Bristol Street North is located in the City of Newport Beach and worsens from LOS D to LOS E with the addition of project trips.

TABLE 7-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS ALTERNATIVE A CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.56	A	0.59	A	0.03
		PM	0.73	C	0.76	C	0.03
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.64	B	0.65	B	0.01
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.59	A	0.61	B	0.02
		PM	0.65	B	0.66	B	0.01
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.68	B	0.72	C	0.04
		PM	0.89	D	0.92	E	0.03
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.54	A	0.56	A	0.02
		PM	0.75	C	0.78	C	0.03
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.374	A	0.386	A	0.012
		PM	0.490	A	0.498	A	0.008
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.79	C	0.80	C	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.88	D	0.89	D	0.01
		PM	0.78	C	0.79	C	0.01
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.66	B	0.67	B	0.01
		PM	0.82	D	0.84	D	0.02
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.58	A	0.59	A	0.01
		PM	0.60	A	0.60	B	0.00
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.650	B	0.657	B	0.007
		PM	0.714	C	0.722	C	0.008
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.496	A	0.498	A	0.002
		PM	0.488	A	0.490	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.610	B	0.614	B	0.004
		PM	0.632	B	0.640	B	0.008
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.49	A	0.52	A	0.03
		PM	0.64	B	0.66	B	0.02
15. Campus Dr at Airport Way[2]	Signal	AM	0.338	A	0.476	A	0.138
		PM	0.660	B	0.781	C	0.121
16. Campus Dr at Quail St[2]	Signal	AM	0.484	A	0.521	A	0.037
		PM	0.463	A	0.523	A	0.060
17. Campus Dr at Bristol St North[2]	Signal	AM	0.596	A	0.624	B	0.028
		PM	0.885	D	**0.931**	**E**	0.046
18. Campus Dr at Bristol St South[2]	Signal	AM	0.689	B	0.718	C	0.029
		PM	0.439	A	0.454	A	0.015
19. Birch St at Bristol St North[2]	Signal	AM	0.581	A	0.589	A	0.008
		PM	0.581	A	0.592	A	0.011
20. Birch St at Bristol St South[2]	Signal	AM	0.400	A	0.406	A	0.006
		PM	0.434	A	0.444	A	0.010

TABLE 7-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS ALTERNATIVE A CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project		
			V/C	LOS	V/C	LOS	Change
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.61	B	0.62	B	0.01
		PM	0.71	C	0.73	C	0.02
22. Red Hill Ave at Main St[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.70	C	0.71	C	0.01
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.50	A	0.51	A	0.01
		PM	0.47	A	0.48	A	0.01
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.50	A	0.52	A	0.02
		PM	0.53	A	0.55	A	0.02
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	18.7	C	21.8	C	N/A
		PM	19.4	C	23.5	C	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.369	A	0.380	A	0.011
		PM	0.573	A	0.588	A	0.015
27. Irvine Ave at University Dr[2]	Signal	AM	0.641	B	0.663	B	0.022
		PM	0.719	C	0.741	C	0.022
28. Irvine Ave at 22nd St[2]	Signal	AM	0.619	B	0.641	B	0.022
		PM	0.695	B	0.722	C	0.027
29. Irvine Ave at 20th St[2]	Signal	AM	0.485	A	0.512	A	0.027
		PM	0.624	B	0.653	B	0.029
30. Irvine Ave at 19th St[2]	Signal	AM	0.528	A	0.550	A	0.022
		PM	0.662	B	0.678	B	0.016
31. Irvine Ave at 17th St[2]	Signal	AM	0.540	A	0.553	A	0.013
		PM	0.709	C	0.722	C	0.013
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.22	A	0.23	A	0.01
		PM	0.56	A	0.57	A	0.01
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.44	A	0.46	A	0.02
		PM	0.36	A	0.38	A	0.02
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.32	A	0.33	A	0.01
		PM	0.43	A	0.44	A	0.01
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.82	D	0.84	D	0.02
		PM	0.50	A	0.52	A	0.02
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.531	A	0.547	A	0.016
		PM	0.681	B	0.694	B	0.013
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.576	A	0.588	A	0.012
		PM	0.543	A	0.554	A	0.011
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.397	A	0.400	A	0.003
		PM	0.413	A	0.417	A	0.004
39. Jamboree Rd at Birch St[2]	Signal	AM	0.488	A	0.505	A	0.017
		PM	0.494	A	0.502	A	0.008
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.441	A	0.447	A	0.006
		PM	0.522	A	0.531	A	0.009

TABLE 7-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS ALTERNATIVE A CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project		
			V/C	LOS	V/C	LOS	Change
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.535	A	0.560	A	0.025
		PM	0.558	A	0.571	A	0.013
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.470	A	0.480	A	0.010
		PM	0.498	A	0.503	A	0.005
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.830	D	0.834	D	0.004
		PM	0.707	C	0.723	C	0.016
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.594	A	0.598	A	0.004
		PM	0.590	A	0.595	A	0.005
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.764	C	0.770	C	0.006
		PM	0.841	D	0.848	D	0.007
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.54	A	0.55	A	0.01
		PM	0.65	B	0.66	B	0.01
47. Red Hill Ave at Baker St[3]	Signal	AM	0.42	A	0.44	A	0.02
		PM	0.61	B	0.63	B	0.02
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.77	C	0.01
		PM	0.62	B	0.62	B	0.00
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.88	D	0.89	D	0.01
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.79	C	0.80	C	0.01
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.45	A	0.46	A	0.01
		PM	0.74	C	0.76	C	0.02
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.70	C	0.71	C	0.01
		PM	0.89	D	0.90	D	0.01
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.76	C	0.77	C	0.01
		PM	0.880	D	0.89	D	0.01
54. Von Karman Ave at Main St[1]	Signal	AM	0.60	B	0.62	B	0.02
		PM	0.78	C	0.79	C	0.01
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.89	D	0.90	E	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.81	D	0.82	D	0.01
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.64	B	0.65	B	0.01
		PM	0.65	B	0.67	B	0.02
58. Jamboree Rd at Main St[1]	Signal	AM	0.77	C	0.77	C	0.00
		PM	0.85	D	0.86	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.65	B	0.67	B	0.02
		PM	0.82	D	0.84	D	0.02

Notes: Signalized intersections evaluated using ICU methodology.
1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.

TABLE 7-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS ALTERNATIVE A CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project		
			V/C	LOS	V/C	LOS	Change

3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

The LOS for each of the four intersections under the shared jurisdiction of Caltrans is provided in Table 6-2. As shown in the table below, the overall intersection delay will improve at the MacArthur Boulevard/I-405 SB Ramps during the PM peak hour because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 7-2
CALTRANS INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS PROPOSED ALTERNATIVE A CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.1	C	23.3	C
		PM	23.4	C	24.6	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	22.9	C	23.1	C
		PM	25.0	C	24.2	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	15.8	B	16.4	B
		PM	20.6	C	22.0	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**90.8**	**F**	**91.4**	**F**
		PM	30.7	C	30.9	C

Notes:
2. Intersections operating below acceptable standards are noted in **bold.**

Tables 7-3, 7-4, 7-5 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405 respectively. Tables 7-6, 7-7, 7-8 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, the project would result in an increase of over 2 percent at the on-ramp from I-405 NB to MacArthur Boulevard off-ramp, which is projected to operate at LOS F prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at this location.

TABLE 7-3
FREEWAY MAINLINE AND RAMPS OPERATIONS:
SR-55 EXISTING PLUS PROPOSED ALTERNATIVE A -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	28.8	D	28.9	D	20	0.3%
Baker St Off Ramp	Diverge	21.6	C	21.6	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**24.9**	**F**	**37.7**	**F**	**20**	**0.4%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.3%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**28.3**	**F**	**44.5**	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	29.6	D	-	**F**	**20**	**0.4%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	34.3	D	-	**F**	**20**	**0.4%**
On Ramp from I-405 SB	Basic	**-**	**F**	**-**	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**110**	**1.1%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.1	D	34.7	D	80	1.0%

TABLE 7-3
FREEWAY MAINLINE AND RAMPS OPERATIONS:
SR-55 EXISTING PLUS PROPOSED ALTERNATIVE A -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**110**	**1.0%**
Off Ramp to I-405 NB	Diverge	29.1	D	28.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	23.2	C	22.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.3	D	28.0	D	0	0.0%
Lane Drop	Basic	28.3	D	27.6	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	17.0	B	16.6	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.9	C	20.8	C	50	1.0%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	20.0	C	19.7	C	50	1.0%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	30.0	D	29.7	D	50	0.8%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	16.5	B	20.4	C	40	1.0%
Newport Blvd S/Fair Dr On Ramp	Merge	17.7	B	20.9	C	40	0.9%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-4
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROPOSED ALTERNATIVE A -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	**Basic**	**40.3**	**E**	**40.5**	**E**	**20**	**0.3%**
MacArthur Blvd On Ramp	**Basic**	**36.6**	**E**	**36.8**	**E**	**30**	**0.4%**
Jamboree Rd On Ramp	Merge	34.8	D	35.0	D	40	0.5%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	23.7	C	**43.4**	**E**	**40**	**0.7%**
Bristol St N Off Ramp	Diverge	30.5	D	**-**	**F**	**40**	**0.6%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	32.1	D	**-**	**F**	**130**	**1.5%**
Off Ramp to SR-55 SB	Diverge	24.1	C	32.2	D	130	2.5%
On Ramp from SR-55 NB	Weave	33.1	D	**-**	**F**	**100**	**1.9%**
Bear St Off Ramp to Bear St On Ramp	Basic	13.8	B	22.1	C	100	3.0%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.7**	**E**	**39.1**	**E**	**40**	**0.6%**
On Ramp from SR-55 NB	Merge	29.9	D	30.6	D	50	0.9%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	26.2	D	31.6	D	50	1.1%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	29.4	D	22.5	C	60	0.9%
Jamboree Rd/Bristol St S Off Ramp	Diverge	31.1	D	27.9	C	60	0.7%
Jamboree Rd Off to Lane Add	Basic	26.3	D	20.4	C	20	0.4%
University Dr Off Ramp	Basic	15.5	B	12.3	B	20	0.4%

TABLE 7-4
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROPOSED ALTERNATIVE A -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	15.6	B	15.2	B	20	0.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-5
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROPOSED ALTERNATIVE A - AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.7**	**E**	**43.3**	**E**	**60**	**0.6%**
Jamboree Rd Off Ramp	Diverge	28.7	D	29.0	D	60	0.5%
Jamboree Rd Loop On Ramp	Merge	27.3	C	27.2	C	40	0.4%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**40.8**	**E**	**37.6**	**E**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	31.6	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	34.8	D	32.2	D	0	0.0%
On Ramp from SR-55 SB	Basic	27.0	D	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	22.9	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**30.8**	**F**	**31.0**	**F**	**50**	**0.6%**
Fairview Rd On Ramp	Merge	**34.1**	**F**	**34.3**	**F**	**60**	**0.6%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**38.6**	**F**	**38.9**	**F**	**60**	**0.6%**
Bristol St Off Ramp	Diverge	**27.2**	**F**	**27.4**	**F**	**60**	**0.5%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	-	**F**	-	**F**	**70**	**0.5%**
Lane Drop	Basic	**36.9**	**E**	34.3	D	70	0.9%
On Ramp from SR-55 NB	Basic	**37.0**	**E**	34.9	D	80	0.8%

TABLE 7-5
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROPOSED ALTERNATIVE A - AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	-	**F**	-	**F**	**80**	**0.5%**
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	-	**F**	-	**F**	**70**	**0.5%**
Jamboree Rd Loop On Ramp	Merge	18.6	B	19.3	B	70	1.2%
Jamboree Rd Direct On Ramp	Merge	17.2	B	17.3	B	80	1.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-6
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
EXISTING PLUS PROPOSED ALTERNATIVE A -PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.4%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.7	A	10.8	A	30	1.2%
Baker St Off Ramp	Diverge	3.4	A	3.5	A	30	1.0%
Baker St Off Ramp to SR-73 On Ramp	Basic	14.3	B	12.1	B	30	1.2%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	32.8	D	28.8	D	30	0.6%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	16.0	B	13.7	B	20	0.7%
Paularino Ave On Ramp	Merge	**14.9**	**F**	**15.8**	**F**	**30**	**1.0%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**15.9**	**F**	**16.8**	**F**	**30**	**1.0%**
On Ramp from I-405 SB	Basic	**15.5**	**F**	**16.2**	**F**	**30**	**0.8%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**23.0**	**F**	**26.5**	**F**	**150**	**2.7%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	36.5	E	37.1	E	70	0.9%
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	F	-	F	90	0.9%
Off Ramp to I-405 NB	Diverge	33.7	D	33.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.7	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.5	D	0	0.0%
Lane Drop	Basic	33.0	D	32.6	D	0	0.0%

TABLE 7-6
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
EXISTING PLUS PROPOSED ALTERNATIVE A -PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.6	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.2	D	30.1	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	29.9	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	23.5	C	26.9	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	22.9	C	25.4	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-7
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROPOSED ALTERNATIVE A PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.6	D	27.7	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.6	D	28.7	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.3	D	32.4	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	23.3	C	34.4	D	30	0.5%
Bristol St N Off Ramp	Diverge	27.9	C	**36.0**	**E**	**30**	**0.5%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**90**	**0.9%**
Off Ramp to SR-55 SB	Diverge	**35.5**	**E**	**-**	**F**	**90**	**1.1%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**80**	**1.1%**
Bear St Off Ramp to Bear St On Ramp	Basic	24.3	C	33.7	D	80	1.4%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.5	D	32.7	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.5	D	29.6	D	40	0.8%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	21.4	C	27.7	D	40	1.0%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.6%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	20.6	C	24.9	C	40	0.8%
Jamboree Rd/Bristol St S Off Ramp	Diverge	21.4	C	25.0	C	40	0.7%
Jamboree Rd Off to Lane Add	Basic	31.2	D	28.8	D	10	0.2%
University Dr Off Ramp	Basic	17.7	B	16.7	B	10	0.2%

TABLE 7-7
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROPOSED ALTERNATIVE A PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	23.6	C	24.9	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-8
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROPOSED ALTERNATIVE A -PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.5**	**F**	**25.7**	**F**	**50**	**0.7%**
Jamboree Rd Off Ramp	Diverge	**18.2**	**F**	**18.4**	**F**	**50**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**24.2**	**F**	**23.8**	**F**	**50**	**0.7%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**41.6**	**F**	**40.5**	**F**	**60**	**0.6%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**43.3**	**F**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**33.9**	**F**	**26.3**	**F**	**0**	**0.0%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**36.1**	**F**	**30.9**	**F**	**0**	**0.0%**
On Ramp from SR-55 SB	Basic	**27.2**	**F**	**22.4**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**23.9**	**F**	**21.3**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.8	C	50	0.8%
Fairview Rd On Ramp	Merge	25.6	C	25.8	C	60	0.9%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.5	C	60	0.9%
Bristol St Off Ramp	Diverge	18.0	B	18.2	B	60	0.7%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	29.4	D	30.7	D	70	0.9%
Lane Drop	Basic	25.3	C	26.5	D	70	1.2%
On Ramp from SR-55 NB	Basic	25.6	C	26.7	D	80	1.0%

TABLE 7-8
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROPOSED ALTERNATIVE A -PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**43.6**	**E**	**-**	**F**	**80**	**0.8%**
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.8**	**E**	**45.2**	**E**	**60**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**21.3**	**F**	**22.2**	**F**	**60**	**1.0%**
Jamboree Rd Direct On Ramp	Merge	**21.4**	**F**	**23.0**	**F**	**80**	**1.1%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

7.1.3 IMPACTS

7.1.3.1 **Threshold T-1**

No impact

7.1.3.2 **Threshold T-2**

No impact

7.1.3.3 **Threshold T-3**

No impact

7.1.3.4 **Threshold T-4**

No Impact

7.1.3.5 **Threshold T-5**

The intersection of Campus Drive/Bristol Street North in the City of Newport Beach worsens from LOS D to LOS E with the addition of project trips. As this intersection is outside of the John Wayne Airport Area, this degradation of LOS is a significant impact.

7.1.3.6 Threshold T-6

No impact

7.1.3.7 Threshold T-7

No impact

7.1.3.8 Threshold T-8

No impact

7.1.3.9 Threshold T-9

No impact

7.1.3.10 Threshold T-10

No impact

7.1.3.11 Threshold T-11

No impact.

7.1.3.12 Threshold T-12

No impact

7.1.3.13 Threshold T-13

The project results in an increase of over 2 percent on the following segment of the Northbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at this location:

- On Ramp from I-405 NB to MacArthur Blvd Off Ramp

7.1.3.14 Threshold T-14

No impact

7.1.3.15 Threshold T-15

No impact

7.2 2016 PLUS ALTERNATIVE A SCENARIO

7.2.1 DESCRIPTION

This scenario evaluates the 2016 traffic impacts associated with Alternative A, which anticipates a MAP level of 10.8 in 2016. The trip generation associated with this change in MAP is shown in Table 4-11.

7.2.2 RESULTS

Table 7-9 provides the LOS results for the 59 intersections evaluated using the ICU methodology. As shown in the table, under this scenario, Alternative A would result in significant impacts at Intersection 17, Campus Drive at Bristol Street North, during the PM peak hour.

TABLE 7-9
INTERSECTION LEVEL OF SERVICE:
2016 ALTERNATIVE A

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.59	A	0.60	A	0.01
		PM	0.75	C	0.75	C	0.00
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.65	B	0.65	B	0.00
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.60	B	0.60	B	0.00
		PM	0.66	B	0.66	B	0.00
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.91	E	0.93	E	0.02
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.57	A	0.57	A	0.00
		PM	0.77	C	0.78	C	0.01
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.391	A	0.393	A	0.002
		PM	0.517	A	0.518	A	0.001
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.81	D	0.81	D	0.00
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.89	D	0.90	D	0.01
		PM	0.78	C	0.78	C	0.00
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.86	D	0.87	D	0.01
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.60	A	0.60	A	0.00
		PM	0.61	B	0.61	B	0.00
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.666	B	0.668	B	0.002
		PM	0.722	C	0.728	C	0.006
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.517	A	0.517	A	0.000
		PM	0.498	A	0.498	A	0.000

TABLE 7-9
INTERSECTION LEVEL OF SERVICE:
2016 ALTERNATIVE A

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.629	B	0.629	B	0.000
		PM	0.641	B	0.645	B	0.004
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.66	B	0.67	B	0.01
15. Campus Dr at Airport Way[2]	Signal	AM	0.346	A	0.407	A	0.061
		PM	0.682	B	0.734	C	0.052
16. Campus Dr at Quail St[2]	Signal	AM	0.506	A	0.519	A	0.013
		PM	0.498	A	0.515	A	0.017
17. Campus Dr at Bristol St North[2]	Signal	AM	0.614	B	0.626	B	0.012
		PM	**0.916**	**E**	**0.936**	**E**	0.020
18. Campus Dr at Bristol St South[2]	Signal	AM	0.710	C	0.716	C	0.006
		PM	0.448	A	0.453	A	0.005
19. Birch St at Bristol St North[2]	Signal	AM	0.596	A	0.598	A	0.002
		PM	0.604	B	0.606	B	0.002
20. Birch St at Bristol St South[2]	Signal	AM	0.416	A	0.416	A	0.000
		PM	0.445	A	0.447	A	0.002
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.63	B	0.63	B	0.00
		PM	0.73	C	0.74	C	0.01
22. Red Hill Ave at Main St[1]	Signal	AM	0.72	C	0.72	C	0.00
		PM	0.72	C	0.72	C	0.00
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.52	A	0.52	A	0.00
		PM	0.49	A	0.50	A	0.01
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.56	A	0.56	A	0.00
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	23.4	C	23.4	C	N/A
		PM	23.5	C	23.5	C	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.381	A	0.385	A	0.004
		PM	0.584	A	0.589	A	0.005
27. Irvine Ave at University Dr[2]	Signal	AM	0.669	B	0.678	B	0.009
		PM	0.737	C	0.741	C	0.004
28. Irvine Ave at 22nd St[2]	Signal	AM	0.647	B	0.650	B	0.003
		PM	0.722	C	0.722	C	0.000
29. Irvine Ave at 20th St[2]	Signal	AM	0.512	A	0.516	A	0.004
		PM	0.653	B	0.653	B	0.000
30. Irvine Ave at 19th St[2]	Signal	AM	0.550	A	0.550	A	0.000
		PM	0.678	B	0.678	B	0.000
31. Irvine Ave at 17th St[2]	Signal	AM	0.572	A	0.572	A	0.000
		PM	0.725	C	0.728	C	0.003
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.23	A	0.23	A	0.00
		PM	0.58	A	0.58	A	0.00
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.46	A	0.46	A	0.00

TABLE 7-9
INTERSECTION LEVEL OF SERVICE:
2016 ALTERNATIVE A

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.39	A	0.39	A	0.00
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.44	A	0.44	A	0.00
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.83	D	0.84	D	0.01
		PM	0.51	A	0.52	A	0.01
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.553	A	0.553	A	0.000
		PM	0.706	C	0.706	C	0.000
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.594	A	0.594	A	0.000
		PM	0.554	A	0.556	A	0.002
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.405	A	0.406	A	0.001
		PM	0.419	A	0.420	A	0.001
39. Jamboree Rd at Birch St[2]	Signal	AM	0.519	A	0.519	A	0.000
		PM	0.508	A	0.508	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.449	A	0.449	A	0.000
		PM	0.531	A	0.533	A	0.002
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.561	A	0.564	A	0.003
		PM	0.580	A	0.582	A	0.002
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.482	A	0.484	A	0.002
		PM	0.506	A	0.508	A	0.002
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.844	D	0.844	D	0.000
		PM	0.729	C	0.729	C	0.000
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.602	B	0.603	B	0.001
		PM	0.600	B	0.600	B	0.000
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.770	C	0.770	C	0.000
		PM	0.853	D	0.853	D	0.000
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.56	A	0.56	A	0.00
		PM	0.68	B	0.68	B	0.00
47. Red Hill Ave at Baker St[3]	Signal	AM	0.45	A	0.45	A	0.00
		PM	0.63	B	0.63	B	0.00
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.77	C	0.01
		PM	0.63	B	0.63	B	0.00
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.89	D	0.89	D	0.00
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.82	D	0.82	D	0.00
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.46	A	0.47	A	0.01
		PM	0.76	C	0.76	C	0.00
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.74	C	0.74	C	0.00
		PM	0.93	E	0.93	E	0.00
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.78	C	0.78	C	0.00
		PM	0.92	E	0.92	E	0.00

TABLE 7-9
INTERSECTION LEVEL OF SERVICE:
2016 ALTERNATIVE A

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
54. Von Karman Ave at Main St[1]	Signal	AM	0.63	B	0.63	B	0.00
		PM	0.81	D	0.81	D	0.00
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.76	C	0.76	C	0.00
		PM	0.91	E	0.91	E	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.80	D	0.80	D	0.00
		PM	0.83	D	0.84	D	0.01
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.66	B	0.66	B	0.00
		PM	0.68	B	0.68	B	0.00
58. Jamboree Rd at Main St[1]	Signal	AM	0.78	C	0.78	C	0.00
		PM	0.86	D	0.86	D	0.00
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.68	B	0.68	B	0.00
		PM	0.84	D	0.84	D	0.00

Notes: Signalized intersections evaluated using ICU methodology.
1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 7-10 provides the LOS results for the four intersections under the joint jurisdiction of Caltrans. As shown in the table, under this scenario one intersection (Jamboree Road/I-405 SB Ramp) would operate at LOS F prior to the addition of project traffic. However, the overall intersection delay will improve at this location because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 7-10
CALTRANS INTERSECTION LEVEL OF SERVICE:
2016 ALTERNATIVE A

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.4	C	22.9	C
		PM	24.0	C	24.4	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.0	C	23.1	C
		PM	25.2	C	24.8	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	16.4	B	16.4	B
		PM	24.2	C	24.8	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**94.7**	**F**	**94.5**	**F**
		PM	31.0	C	31.0	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 7-11, 7-12, 7-13 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405, respectively. Tables 7-14, 7-15, 7-16 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, because the addition of project trips would not result in a decrease in LOS from acceptable to unacceptable, and because the addition of project trips would not increase traffic by 2 percent or more, impacts would be less than significant.

TABLE 7-11
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	28.9	D	29.0	D	20	0.3%
Baker St Off Ramp	Diverge	21.6	C	21.7	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**37.7**	**F**	**37.9**	**F**	**20**	**0.3%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**44.5**	**F**	**44.7**	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	**-**	**F**	**-**	**F**	**20**	**0.3%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**-**	**F**	**-**	**F**	**20**	**0.3%**
On Ramp from I-405 SB	Basic	**-**	**F**	**-**	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.5%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.2	D	34.5	D	40	0.5%

TABLE 7-11
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**60**	**0.6%**
Off Ramp to I-405 NB	Diverge	28.8	D	28.8	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.9	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	28.1	D	0	0.0%
Lane Drop	Basic	27.7	D	27.6	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.7	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	20.8	C	40	0.8%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.8	C	40	0.8%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.7	D	40	0.6%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On	Basic	20.4	C	20.4	C	30	0.6%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.9	C	30	0.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-12 FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS ALTERNATIVE A- AM

Location	Type	Without		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.4**	**E**	**40.5**	**E**	**10**	**0.2%**
MacArthur Blvd On Ramp	Basic	**36.7**	**E**	**36.8**	**E**	**20**	**0.3%**
Jamboree Rd On Ramp	Merge	34.9	D	**35.1**	**E**	**30**	**0.3%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.2**	**E**	**43.5**	**E**	**30**	**0.3%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**30**	**0.3%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.7%**
Off Ramp to SR-55 SB	Diverge	31.7	D	32.1	D	70	1.0%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**50**	**0.7%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.8	C	21.9	C	50	0.9%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.8**	**E**	**39.1**	**E**	**30**	**0.5%**
On Ramp from SR-55 NB	Merge	30.3	D	30.6	D	40	0.7%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.2	D	31.6	D	40	0.7%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.5	C	22.6	C	50	0.9%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	27.9	C	50	0.7%
Jamboree Rd Off to Lane Add	Basic	20.4	C	20.6	C	30	0.8%
University Dr Off Ramp	Basic	12.3	B	12.4	B	30	0.6%

TABLE 7-12 FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS ALTERNATIVE A- AM

Location	Type	Without		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	15.1	B	15.3	B	30	1.1%

Notes:

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

Source: Fehr & Peers 2014

TABLE 7-13
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS ALTERNATIVE A- AM

Location	Type	Without		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.8**	**E**	**43.1**	**E**	**30**	**0.3%**
Jamboree Rd Off Ramp	Diverge	28.8	D	28.9	D	30	0.2%
Jamboree Rd Loop On Ramp	Merge	27.1	C	27.2	C	20	0.2%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.2%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.5**	**E**	**37.7**	**E**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.3	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.4	C	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**30.9**	**F**	**31.0**	**F**	**20**	**0.2%**
Fairview Rd On Ramp	Merge	**34.2**	**F**	**34.3**	**F**	**30**	**0.3%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**38.8**	**F**	**39.0**	**F**	**30**	**0.3%**
Bristol St Off Ramp	Diverge	**27.3**	**F**	**27.4**	**F**	**30**	**0.3%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.3%**
Lane Drop	Basic	34.2	D	34.5	D	40	0.5%
On Ramp from SR-55 NB	Basic	34.8	D	35.1	**E**	**50**	**0.5%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	-	F	-	F	50	0.4%

TABLE 7-13
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS ALTERNATIVE A- AM

Location	Type	Without		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	-	F	-	F	50	0.4%
Jamboree Rd Loop On Ramp	Merge	19.2	B	19.4	B	50	0.8%
Jamboree Rd Direct On Ramp	Merge	17.3	B	17.5	B	60	0.9%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-14
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PLUS ALTERNATIVE A- PM

Location	Type	Without		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.3%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	10.8	A	20	0.8%
Baker St Off Ramp	Diverge	3.5	A	3.5	A	20	0.7%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.1	B	20	0.9%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	28.9	D	20	0.4%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.6	B	10	0.4%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**15.8**	**F**	**20**	**0.7%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**16.8**	**F**	**20**	**0.7%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.2**	**F**	**20**	**0.5%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**26.1**	**F**	**80**	**1.3%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.6**	**E**	**36.8**	**E**	**30**	**0.4%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.7	D	0	0.0%
Lane Drop	Basic	32.8	D	32.7	D	0	0.0%

TABLE 7-14
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PLUS ALTERNATIVE A- PM

Location	Type	Without		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.2	D	30.3	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.1	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.1	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.5	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-15
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS ALTERNATIVE A- PM

Location	Type	Without		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.7	D	27.7	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.7	D	28.8	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.4	D	32.5	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.4	D	34.6	D	30	0.4%
Bristol St N Off Ramp	Diverge	**35.9**	**E**	**36.1**	**E**	**30**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**60**	**0.6%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**50**	**0.6%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.2	D	33.6	D	50	0.7%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.4	D	29.6	D	30	0.6%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	27.7	D	30	0.6%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.4%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	24.9	C	30	0.5%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.0	C	30	0.4%
Jamboree Rd Off to Lane Add	Basic	28.8	D	28.9	D	10	0.2%
University Dr Off Ramp	Basic	16.7	B	16.7	B	10	0.2%

TABLE 7-15
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS ALTERNATIVE A- PM

Location	Type	Without		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	24.9	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-16
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS ALTERNATIVE A- PM

Location	Type	Without		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.6**	**F**	**25.7**	**F**	**30**	**0.4%**
Jamboree Rd Off Ramp	Diverge	**18.3**	**F**	**18.4**	**F**	**30**	**0.3%**
Jamboree Rd Loop On Ramp	Merge	**23.8**	**F**	**23.9**	**F**	**30**	**0.4%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.1**	**F**	**40.5**	**F**	**40**	**0.4%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.4**	**F**	**26.5**	**F**	**10**	**0.2%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.0**	**F**	**31.2**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**22.5**	**F**	**22.5**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.4**	**F**	**21.4**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.8	C	30	0.5%
Fairview Rd On Ramp	Merge	25.6	C	25.8	C	40	0.6%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.4	C	40	0.6%
Bristol St Off Ramp	Diverge	18.1	B	18.2	B	40	0.5%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.4	D	30.7	D	50	0.6%
Lane Drop	Basic	26.3	D	26.5	D	50	0.8%
On Ramp from SR-55 NB	Basic	26.4	D	26.7	D	60	0.8%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**44.2**	**E**	**60**	**0.6%**

TABLE 7-16
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS ALTERNATIVE A- PM

Location	Type	Without		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.2**	**E**	**45.4**	**E**	**60**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**22.4**	**F**	**22.2**	**F**	**60**	**0.9%**
Jamboree Rd Direct On Ramp	Merge	**22.6**	**F**	**23.0**	**F**	**70**	**0.9%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

7.2.3 IMPACTS

7.2.3.1 **Threshold T-1**

No impact

7.2.3.2 **Threshold T-2**

No impact

7.2.3.3 **Threshold T-3**

No impact

7.2.3.4 **Threshold T-4**

No impact

7.2.3.5 **Threshold T-5**

No impact

7.2.3.6 **Threshold T-6**

No impact

7.2.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection to increase by 0.020 at an intersection which is projected to operate at LOS E prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

7.2.3.8 **Threshold T-8**

No impact

7.2.3.9 **Threshold T-9**

No impact

7.2.3.10 **Threshold T-10**

No impact

7.2.3.11 **Threshold T-11**

No impact

7.2.3.12 **Threshold T-12**

No impact

7.2.3.13 **Threshold T-13**

No impact

7.2.3.14 **Threshold T-14**

No impact

7.2.3.15 **Threshold T-15**

No impact

7.3 2021 PLUS ALTERNATIVE A SCENARIO

7.3.1 DESCRIPTION

This scenario analyzes the traffic impacts under Alternative A associated with the change in MAP from the existing 9.2 level to 11.4 in 2021. Trip generation associated with this alternative is provided in Table 4-12.

7.3.2 RESULTS

Table 7-17 provides the ICU results for the 59 study intersections evaluated using the ICU methodology. As shown in the table, under this scenario, Alternative A would result in significant impacts at Intersection 17, Campus Drive at Bristol Street North, during the PM peak hour.

TABLE 7-17
INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE A SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		Change
			V/C	LOS	V/C	LOS	
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.62	B	0.64	B	0.02
		PM	0.77	C	0.79	C	0.02
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.66	B	0.66	B	0.00
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.67	B	0.68	B	0.01
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.74	C	0.76	C	0.02
		PM	0.94	E	0.97	E	0.03
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.58	A	0.59	A	0.01
		PM	0.80	C	0.81	D	0.01
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.408	A	0.419	A	0.011
		PM	0.541	A	0.544	A	0.003
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.70	B	0.70	C	0.00
		PM	0.82	D	0.83	D	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.91	E	0.91	E	0.00
		PM	0.78	C	0.79	C	0.01
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.91	E	0.93	E	0.02
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.63	B	0.63	B	0.00
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.684	B	0.698	B	0.014

TABLE 7-17
INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE A SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		Change
			V/C	LOS	V/C	LOS	
		PM	0.730	C	0.740	C	0.010
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.546	A	0.548	A	0.002
		PM	0.510	A	0.512	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.659	B	0.664	B	0.005
		PM	0.655	B	0.663	B	0.008
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.55	A	0.57	A	0.02
		PM	0.68	B	0.69	B	0.01
15. Campus Dr at Airport Way[2]	Signal	AM	0.354	A	0.440	A	0.086
		PM	0.703	C	0.779	C	0.076
16. Campus Dr at Quail St[2]	Signal	AM	0.525	A	0.540	A	0.015
		PM	0.517	A	0.540	A	0.023
17. Campus Dr at Bristol St North[2]	Signal	AM	0.641	B	0.657	B	0.016
		PM	**0.964**	**E**	**0.992**	**E**	0.028
18. Campus Dr at Bristol St South[2]	Signal	AM	0.734	C	0.751	C	0.017
		PM	0.456	A	0.467	A	0.011
19. Birch St at Bristol St North[2]	Signal	AM	0.612	B	0.619	B	0.007
		PM	0.632	B	0.636	B	0.004
20. Birch St at Bristol St South[2]	Signal	AM	0.431	A	0.434	A	0.003
		PM	0.458	A	0.463	A	0.005
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.65	B	0.66	B	0.01
		PM	0.75	C	0.76	C	0.01
22. Red Hill Ave at Main St[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.73	C	0.74	C	0.01
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.53	A	0.54	A	0.01
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.55	A	0.57	A	0.02
		PM	0.58	A	0.59	A	0.01
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	26.8	D	31.6	D	N/A
		PM	25.4	D	29.1	D	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.390	A	0.406	A	0.016
		PM	0.591	A	0.597	A	0.006
27. Irvine Ave at University Dr[2]	Signal	AM	0.697	B	0.716	C	0.019
		PM	0.750	C	0.762	C	0.012
28. Irvine Ave at 22nd St[2]	Signal	AM	0.666	B	0.678	B	0.012
		PM	0.725	C	0.731	C	0.006
29. Irvine Ave at 20th St[2]	Signal	AM	0.519	A	0.528	A	0.009

TABLE 7-17
INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE A SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		Change
			V/C	LOS	V/C	LOS	
		PM	0.656	B	0.675	B	0.019
30. Irvine Ave at 19th St[2]	Signal	AM	0.556	A	0.572	A	0.016
		PM	0.688	B	0.697	B	0.009
31. Irvine Ave at 17th St[2]	Signal	AM	0.597	A	0.603	B	0.006
		PM	0.744	C	0.747	C	0.003
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.24	A	0.26	A	0.02
		PM	0.59	A	0.61	B	0.02
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.47	A	0.48	A	0.01
		PM	0.40	A	0.42	A	0.02
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.45	A	0.46	A	0.01
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.84	D	0.85	D	0.01
		PM	0.52	A	0.52	A	0.00
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.569	A	0.572	A	0.003
		PM	0.725	C	0.734	C	0.009
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.606	B	0.606	B	0.000
		PM	0.563	A	0.567	A	0.004
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.416	A	0.419	A	0.003
		PM	0.425	A	0.427	A	0.002
39. Jamboree Rd at Birch St[2]	Signal	AM	0.531	A	0.531	A	0.000
		PM	0.530	A	0.530	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.455	A	0.457	A	0.002
		PM	0.537	A	0.540	A	0.003
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.567	A	0.575	A	0.008
		PM	0.602	B	0.610	B	0.008
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.491	A	0.495	A	0.004
		PM	0.510	A	0.512	A	0.002
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.858	D	0.863	D	0.005
		PM	0.744	C	0.748	C	0.004
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.608	B	0.611	B	0.003
		PM	0.605	B	0.606	B	0.001
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.770	C	0.777	C	0.007
		PM	0.861	D	0.866	D	0.005
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.58	A	0.58	A	0.00
		PM	0.69	B	0.70	B	0.01
47. Red Hill Ave at Baker St[3]	Signal	AM	0.46	A	0.46	A	0.00

TABLE 7-17
INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE A SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		Change
			V/C	LOS	V/C	LOS	
		PM	0.65	B	0.66	B	0.01
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.77	C	0.01
		PM	0.64	B	0.65	B	0.01
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.54	A	0.55	A	0.01
		PM	0.90	E	0.91	E	0.01
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.73	C	0.73	C	0.00
		PM	0.86	D	0.86	D	0.00
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.47	A	0.48	A	0.01
		PM	0.77	C	0.77	C	0.00
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.98	E	0.98	E	0.00
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.81	D	0.82	D	0.01
		PM	0.96	E	0.97	E	0.01
54. Von Karman Ave at Main St[1]	Signal	AM	0.65	B	0.65	B	0.00
		PM	0.83	D	0.83	D	0.00
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.92	E	0.93	E	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.84	D	0.84	D	0.00
		PM	0.86	D	0.86	D	0.00
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.70	C	0.71	C	0.01
58. Jamboree Rd at Main St[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.87	D	0.88	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.86	D	0.86	D	0.00

Notes: Signalized intersections evaluated using ICU methodology.

1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 7-18 illustrates the LOS results for the four intersections under the joint jurisdiction of Caltrans. As shown in the table, under this scenario the intersection of Jamboree Road/I-405 SB Ramps would operate at LOS F. However, the overall intersection delay will improve at this location because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may

operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 7-18
CALTRANS INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE A

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.7	C	23.6	C
		PM	24.9	C	25.9	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.3	C	23.4	C
		PM	25.4	C	24.8	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	16.8	B	17.8	B
		PM	30.3	C	31.7	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**99.7**	**F**	**99.5**	**F**
		PM	30.8	C	30.8	C

Notes:
Intersections operating below acceptable standards are noted in **bold.**

Tables 7-19, 7-20, 7-21 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405 respectively. Tables 7-22, 7-23, 7-24 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, because the addition of project trips would not result in a decrease in LOS from acceptable to unacceptable, and because the addition of project trips would not increase traffic by 2 percent or more, impacts would be less than significant.

TABLE 7-19
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	29.0	D	29.1	D	20	0.3%
Baker St Off Ramp	Diverge	21.7	C	21.8	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**37.9**	**F**	**38.1**	**F**	**20**	**0.3%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**44.8**	**F**	**45.0**	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	**-**	**F**	**-**	**F**	**20**	**0.3%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**-**	**F**	**-**	**F**	**20**	**0.3%**
On Ramp from I-405 SB	Basic	**-**	**F**	**-**	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**80**	**0.6%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.2	D	34.5	D	50	0.7%

TABLE 7-19
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**80**	**0.7%**
Off Ramp to I-405 NB	Diverge	28.8	D	28.8	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	28.1	D	0	0.0%
Lane Drop	Basic	27.7	D	27.6	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.6	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	20.8	C	40	0.8%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.7	C	40	0.8%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.7	D	40	0.6%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	20.4	C	30	0.6%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.8	C	30	0.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-20 FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.4**	**E**	**40.6**	**E**	**20**	**0.3%**
MacArthur Blvd On Ramp	Basic	**36.7**	**E**	**36.9**	**E**	**30**	**0.4%**
Jamboree Rd On Ramp	Merge	34.9	D	**35.1**	**E**	**40**	**0.5%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.2**	**E**	**43.6**	**E**	**40**	**0.5%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**40**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**90**	**0.9%**
Off Ramp to SR-55 SB	Diverge	31.7	D	32.1	D	90	1.3%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**70**	**1.0%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.7	C	22.0	C	70	1.3%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.9**	**E**	**39.2**	**E**	**30**	**0.5%**
On Ramp from SR-55 NB	Merge	30.4	D	30.6	D	40	0.7%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.3	D	31.7	D	40	0.7%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.6	C	22.7	C	50	0.9%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	28.0	C	50	0.7%
Jamboree Rd Off to Lane Add	Basic	20.5	C	20.6	C	20	0.5%
University Dr Off Ramp	Basic	12.3	B	12.4	B	20	0.4%

TABLE 7-20 FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	15.2	B	15.3	B	20	0.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-21 FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.9**	**E**	**43.3**	**E**	**40**	**0.4%**
Jamboree Rd Off Ramp	Diverge	28.8	D	29.0	D	40	0.3%
Jamboree Rd Loop On Ramp	Merge	27.1	C	27.2	C	30	0.3%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.3%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.6**	**E**	**37.7**	**E**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.3	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.4	C	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**31.0**	**F**	**31.2**	**F**	**30**	**0.3%**
Fairview Rd On Ramp	Merge	**34.3**	**F**	**34.5**	**F**	**40**	**0.4%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**39.0**	**F**	**39.3**	**F**	**40**	**0.4%**
Bristol St Off Ramp	Diverge	**27.4**	**F**	**27.5**	**F**	**40**	**0.4%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
Lane Drop	Basic	34.4	D	34.8	D	50	0.7%
On Ramp from SR-55 NB	Basic	**35.0**	**E**	**35.4**	**E**	**60**	**0.6%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.4%**

TABLE 7-21 FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
Jamboree Rd Loop On Ramp	Merge	19.3	B	19.4	B	50	0.8%
Jamboree Rd Direct On Ramp	Merge	17.4	B	17.6	B	60	0.9%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-22
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PLUS ALTERNATIVE A- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	-	**F**	-	**F**	**30**	**0.4%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	10.9	A	30	1.1%
Baker St Off Ramp	Diverge	3.5	A	3.6	A	30	1.0%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.1	B	30	1.4%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	28.9	D	30	0.6%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.7	B	20	0.8%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**15.9**	**F**	**30**	**1.0%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**16.9**	**F**	**30**	**1.0%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.3**	**F**	**30**	**0.8%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**26.3**	**F**	**110**	**1.8%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	36.6	E	36.9	E	40	0.5%
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	F	-	F	60	0.6%
Off Ramp to I-405 NB	Diverge	33.7	D	33.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.7	D	0	0.0%
Lane Drop	Basic	32.8	D	32.7	D	0	0.0%

TABLE 7-22
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PLUS ALTERNATIVE A- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	F	-	F	10	0.1%
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.3	D	30.3	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.2	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	-	F	-	F	20	0.2%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.1	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.5	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-23 FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 PLUS ALTERNATIVE A- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.7	D	27.8	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.7	D	28.9	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.4	D	32.6	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.4	D	34.7	D	30	0.4%
Bristol St N Off Ramp	Diverge	**35.9**	**E**	**36.1**	**E**	**30**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.6%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**70**	**0.8%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**60**	**0.7%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.3	D	33.7	D	60	0.8%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.4	D	29.7	D	40	0.8%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	27.8	D	40	0.8%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.5%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	25.0	C	40	0.7%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.1	C	40	0.6%
Jamboree Rd Off to Lane Add	Basic	28.8	D	29.0	D	20	0.4%

TABLE 7-23 FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 PLUS ALTERNATIVE A- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Dr Off Ramp	Basic	16.7	B	16.7	B	20	0.4%
University Off to Jamboree Rd On Ramp	Basic	24.9	C	25.0	C	20	0.4%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-24 FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS ALTERNATIVE A- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.6**	**F**	**25.8**	**F**	**30**	**0.4%**
Jamboree Rd Off Ramp	Diverge	**18.4**	**F**	**18.5**	**F**	**30**	**0.3%**
Jamboree Rd Loop On Ramp	Merge	**23.9**	**F**	**24.0**	**F**	**30**	**0.4%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.2**	**F**	**40.7**	**F**	**40**	**0.4%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.4**	**F**	**26.5**	**F**	**0**	**0.0%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.1**	**F**	**31.2**	**F**	**0**	**0.0%**
On Ramp from SR-55 SB	Basic	**22.5**	**F**	**22.5**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.4**	**F**	**21.4**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.8	C	40	0.7%
Fairview Rd On Ramp	Merge	25.7	C	25.8	C	50	0.7%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.5	C	50	0.7%
Bristol St Off Ramp	Diverge	18.1	B	18.2	B	50	0.6%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.5	D	30.8	D	60	0.7%
Lane Drop	Basic	26.3	D	26.6	D	60	1.0%
On Ramp from SR-55 NB	Basic	26.5	D	26.8	D	70	0.9%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.7%**

TABLE 7-24 FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS ALTERNATIVE A- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.3**	**E**	**45.4**	**E**	**60**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**22.4**	**F**	**22.2**	**F**	**60**	**0.9%**
Jamboree Rd Direct On Ramp	Merge	**22.7**	**F**	**23.2**	**F**	**70**	**0.9%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

7.3.3 IMPACTS

7.3.3.1 **Threshold T-1**

No impact

7.3.3.2 **Threshold T-2**

No impact

7.3.3.3 **Threshold T-3**

No impact

7.3.3.4 **Threshold T-4**

No impact

7.3.3.5 **Threshold T-5**

No impact

7.3.3.6 **Threshold T-6**

No impact

7.3.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection to increase by 0.028 at an intersection which is projected to operate at LOS F prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

7.3.3.8 **Threshold T-8**

No impact

7.3.3.9 **Threshold T-9**

No impact

7.3.3.10 **Threshold T-10**

No impact

7.3.3.11 **Threshold T-11**

No impact

7.3.3.12 **Threshold T-12**

No impact

7.3.3.13 **Threshold T-13**

No impact

7.3.3.14 **Threshold T-14**

No impact

7.3.3.15 **Threshold T-15**

No impact

7.4 2026 PLUS ALTERNATIVE A SCENARIO

7.4.1 DESCRIPTION

This scenario analyzes the traffic impacts associated with Alternative A under the 2026 scenario in which the existing MAP would increase to 12.8 MAP with corresponding increases in trip generation. Trip generation associated with this alternative is provided in Table 4-13.

7.4.2 RESULTS

Table 7-25 provides the LOS results for the 59 intersections evaluated using the ICU methodology. As shown in the table, under this scenario Alternative A would result in significant impacts at Intersections 4 (MacArthur Blvd. at Michelson Drive), 17 (Campus Drive at Bristol Street North), and 53 (Von Karman Ave at Alton Pkwy), during the PM peak hour.

TABLE 7-25
INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE A SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		Change
			V/C	LOS	V/C	LOS	
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.66	B	0.69	B	0.03
		PM	0.80	C	0.83	D	0.03
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.69	B	0.70	C	0.01
		PM	0.67	B	0.68	B	0.01
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.63	B	0.63	B	0.00
		PM	0.68	B	0.69	B	0.01
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.77	C	0.81	D	0.04
		PM	**0.98**	**E**	**1.02**	**F**	**0.04**
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.60	A	0.61	B	0.01
		PM	0.82	D	0.84	D	0.02
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.425	A	0.434	A	0.009
		PM	0.565	A	0.568	A	0.003
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.84	D	0.85	D	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.93	E	0.93	E	0.00
		PM	0.78	C	0.79	C	0.01
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.97	E	0.98	E	0.01
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.63	B	0.64	B	0.01

TABLE 7-25
INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE A SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		Change
			V/C	LOS	V/C	LOS	
		PM	0.64	B	0.65	B	0.01
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.700	B	0.714	C	0.014
		PM	0.739	C	0.747	C	0.008
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.577	A	0.580	A	0.003
		PM	0.525	A	0.527	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.686	B	0.690	B	0.004
		PM	0.670	B	0.677	B	0.007
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.59	A	0.61	B	0.02
		PM	0.70	B	0.72	C	0.02
15. Campus Dr at Airport Way[2]	Signal	AM	0.362	A	0.500	A	0.138
		PM	0.723	C	0.849	D	0.126
16. Campus Dr at Quail St[2]	Signal	AM	0.542	A	0.569	A	0.027
		PM	0.535	A	0.573	A	0.038
17. Campus Dr at Bristol St North[2]	Signal	AM	0.666	B	0.694	B	0.028
		PM	**1.009**	**F**	**1.055**	**F**	0.046
18. Campus Dr at Bristol St South[2]	Signal	AM	0.758	C	0.778	C	0.020
		PM	0.467	A	0.483	A	0.016
19. Birch St at Bristol St North[2]	Signal	AM	0.633	B	0.640	B	0.007
		PM	0.658	B	0.664	B	0.006
20. Birch St at Bristol St South[2]	Signal	AM	0.448	A	0.452	A	0.004
		PM	0.469	A	0.475	A	0.006
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.77	C	0.78	C	0.01
22. Red Hill Ave at Main St[1]	Signal	AM	0.74	C	0.76	C	0.02
		PM	0.75	C	0.76	C	0.01
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.53	A	0.54	A	0.01
		PM	0.57	A	0.58	A	0.01
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.58	A	0.59	A	0.01
		PM	0.59	A	0.61	B	0.02
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	**36.3**	**E**	**45.2**	**E**	N/A
		PM	28.1	D	33.8	D	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.425	A	0.431	A	0.006
		PM	0.597	A	0.605	B	0.008
27. Irvine Ave at University Dr[2]	Signal	AM	0.725	C	0.744	C	0.019
		PM	0.762	C	0.772	C	0.010
28. Irvine Ave at 22nd St[2]	Signal	AM	0.687	B	0.703	C	0.016
		PM	0.741	C	0.747	C	0.006
29. Irvine Ave at 20th St[2]	Signal	AM	0.525	A	0.534	A	0.009
		PM	0.662	B	0.678	B	0.016
30. Irvine Ave at 19th St[2]	Signal	AM	0.559	A	0.578	A	0.019

TABLE 7-25
INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE A SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		Change
			V/C	LOS	V/C	LOS	
		PM	0.691	B	0.703	C	0.012
31. Irvine Ave at 17th St[2]	Signal	AM	0.622	B	0.631	B	0.009
		PM	0.769	C	0.778	C	0.009
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.28	A	0.29	A	0.01
		PM	0.61	B	0.62	B	0.01
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.49	A	0.50	A	0.01
		PM	0.42	A	0.43	A	0.01
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.46	A	0.47	A	0.01
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.85	D	0.86	D	0.01
		PM	0.52	A	0.53	A	0.01
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.578	A	0.584	A	0.006
		PM	0.744	C	0.756	C	0.012
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.619	B	0.619	B	0.000
		PM	0.569	A	0.573	A	0.004
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.428	A	0.430	A	0.002
		PM	0.430	A	0.433	A	0.003
39. Jamboree Rd at Birch St[2]	Signal	AM	0.550	A	0.550	A	0.000
		PM	0.546	A	0.546	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.461	A	0.464	A	0.003
		PM	0.544	A	0.546	A	0.002
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.579	A	0.587	A	0.008
		PM	0.619	B	0.627	B	0.008
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.499	A	0.501	A	0.002
		PM	0.512	A	0.515	A	0.003
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.872	D	0.874	D	0.002
		PM	0.763	C	0.765	C	0.002
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.614	B	0.617	B	0.003
		PM	0.609	B	0.611	B	0.002
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.775	C	0.781	C	0.006
		PM	0.867	D	0.873	D	0.006
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.60	B	0.60	B	0.00
		PM	0.71	C	0.72	C	0.01
47. Red Hill Ave at Baker St[3]	Signal	AM	0.47	A	0.47	A	0.00
		PM	0.66	B	0.67	B	0.01
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.78	C	0.02
		PM	0.66	B	0.66	B	0.00
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.55	A	0.57	A	0.02

TABLE 7-25
INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE A SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		Change
			V/C	LOS	V/C	LOS	
		PM	0.92	E	0.92	E	0.00
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.87	D	0.88	D	0.01
		PM	0.90	D	0.90	E	0.00
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.48	A	0.49	A	0.01
		PM	0.77	C	0.77	C	0.00
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.83	D	0.84	D	0.01
		PM	**1.06**	**F**	**1.07**	**F**	0.01
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.83	D	0.84	D	0.01
		PM	0.99	E	**1.01**	**F**	0.02
54. Von Karman Ave at Main St[1]	Signal	AM	0.68	B	0.68	B	0.00
		PM	0.85	D	0.86	D	0.01
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.81	D	0.82	D	0.01
		PM	0.94	E	0.94	E	0.00
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.86	D	0.87	D	0.01
		PM	0.89	D	0.89	D	0.00
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.73	C	0.73	C	0.00
58. Jamboree Rd at Main St[1]	Signal	AM	0.80	C	0.80	C	0.00
		PM	0.89	D	0.90	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.87	D	0.87	D	0.00

Notes: Signalized intersections evaluated using ICU methodology.

1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 7-26 provides the LOS for the four intersections under the joint jurisdiction of Caltrans. As shown in this table, the intersection of Jamboree Road/I-405 SB Ramps would operate at LOS F prior to the addition of project traffic. However; the overall intersection delay will improve at this location because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction

of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 7-26
CALTRANS INTERSECTION LEVEL OF SERVICE:
2026 PLUS ALTERNATIVE A

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.723.1	C	26.0	C
		PM	26.4	C	29.1	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.4	C	23.8	C
		PM	25.4	C	24.5	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	17.3	B	18.3	B
		PM	35.6	D	37.0	D
Jamboree Rd at I-405 SB Ramps	Signal	**AM**	**106.3**	**F**	**106.1**	**F**
		PM	30.7	C	30.7	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 7-27, 7-28, and 7-29 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405, respectively. Tables 7-30, 7-31, 7-32 provide freeway and ramp LOS results for the PM Peak Hour for this alternative for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, the project would result in an increase of over 2 percent at the on-ramp from I-405 NB to MacArthur Boulevard off-ramp, which is projected to operate at LOS F prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at this location.

TABLE 7-27
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	29.0	D	29.1	D	20	0.3%
Baker St Off Ramp	Diverge	21.7	C	21.8	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**38.0**	**F**	**38.3**	**F**	**20**	**0.3%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**45.0**	**F**	**-**	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	**-**	**F**	**-**	**F**	**20**	**0.3%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**-**	**F**	**-**	**F**	**20**	**0.3%**
On Ramp from I-405 SB	Basic	**-**	**F**	**-**	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**110**	**0.9%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.2	D	34.7	D	80	1.0%

TABLE 7-27
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**110**	**1.0%**
Off Ramp to I-405 NB	Diverge	28.8	D	28.8	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	28.1	D	0	0.0%
Lane Drop	Basic	27.7	D	27.6	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.6	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	20.9	C	50	1.0%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.8	C	50	1.0%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.7	D	50	0.8%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	20.4	C	40	0.8%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.9	C	40	0.8%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-28 FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.5**	**E**	**40.7**	**E**	**20**	**0.3%**
MacArthur Blvd On Ramp	Basic	**36.8**	**E**	**37.0**	**E**	**30**	**0.4%**
Jamboree Rd On Ramp	Merge	**35.0**	**D**	**35.1**	**E**	**40**	**0.5%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.3**	**E**	**43.7**	**E**	**40**	**0.5%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**40**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**130**	**1.3%**
Off Ramp to SR-55 SB	Diverge	31.7	D	32.4	D	130	1.8%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**100**	**1.4%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.7	C	22.1	C	100	1.9%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**39.0**	**E**	**39.3**	**E**	**40**	**0.6%**
On Ramp from SR-55 NB	Merge	30.4	D	30.7	D	50	0.9%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.4	D	31.8	D	50	0.9%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.6	C	22.7	C	60	1.1%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	28.0	C	60	0.8%
Jamboree Rd Off to Lane Add	Basic	20.5	C	20.6	C	20	0.5%

TABLE 7-28 FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Dr Off Ramp	Basic	12.3	B	12.4	B	20	0.4%
University Off to Jamboree Rd On Ramp	Basic	15.2	B	15.3	B	20	0.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-29FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**43.0**	**E**	**43.5**	**E**	**60**	**0.6%**
Jamboree Rd Off Ramp	Diverge	28.8	D	29.1	D	60	0.5%
Jamboree Rd Loop On Ramp	Merge	27.2	C	27.3	C	40	0.4%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.6**	**E**	**37.7**	**E**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.8	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.3	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.5	C	24.5	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**31.1**	**F**	**31.3**	**F**	**50**	**0.6%**
Fairview Rd On Ramp	Merge	**34.4**	**F**	**34.6**	**F**	**60**	**0.6%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**39.0**	**F**	**39.5**	**F**	**60**	**0.6%**
Bristol St Off Ramp	Diverge	**27.4**	**F**	**27.6**	**F**	**60**	**0.5%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.5%**
Lane Drop	Basic	34.5	D	35.0	D	70	0.9%
On Ramp from SR-55 NB	Basic	**35.2**	**E**	**35.7**	**E**	**80**	**0.8%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**80**	**0.6%**

TABLE 7-29FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS ALTERNATIVE A- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	19.4	B	18.9	B	70	1.1%
Jamboree Rd Direct On Ramp	Merge	17.5	B	17.8	B	80	1.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-30
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PLUS ALTERNATIVE A- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	-	**F**	-	**F**	**30**	**0.4%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	10.9	A	30	1.1%
Baker St Off Ramp	Diverge	3.5	A	3.6	A	30	1.0%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.1	B	30	1.4%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	28.9	D	30	0.6%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.7	B	20	0.8%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**15.9**	**F**	**30**	**1.0%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**16.9**	**F**	**30**	**1.0%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.3**	**F**	**30**	**0.8%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**26.6**	**F**	**150**	**2.5%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.7**	**E**	**37.2**	**E**	**70**	**0.9%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**90**	**0.9%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.7	D	30.7	D	0	0.0%

TABLE 7-30
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PLUS ALTERNATIVE A- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Lane Drop	Basic	32.9	D	32.8	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.3	D	30.3	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.2	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.1	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.5	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-31
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS ALTERNATIVE A- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.8	D	27.9	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.8	D	28.9	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.5	D	32.7	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.6	D	34.8	D	30	0.4%
Bristol St N Off Ramp	Diverge	**36.0**	**E**	**36.2**	**E**	**30**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**90**	**0.8%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**90**	**1.0%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**80**	**0.9%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.5	D	34.1	D	80	1.1%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.4	D	29.7	D	40	0.8%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	27.8	D	40	0.8%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.5%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	25.0	C	40	0.7%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.1	C	40	0.6%
Jamboree Rd Off to Lane Add	Basic	28.9	D	29.0	D	10	0.2%
University Dr Off Ramp	Basic	16.7	B	16.7	B	10	0.2%

TABLE 7-31
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS ALTERNATIVE A- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	25.0	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 7-32
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS ALTERNATIVE A- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.8**	**F**	**26.0**	**F**	**50**	**0.7%**
Jamboree Rd Off Ramp	Diverge	**18.5**	**F**	**18.6**	**F**	**50**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**24.0**	**F**	**24.2**	**F**	**50**	**0.7%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.5**	**F**	**41.1**	**F**	**60**	**0.7%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.5**	**F**	**26.6**	**F**	**0**	**0.0%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.1**	**F**	**31.2**	**F**	**0**	**0.0%**
On Ramp from SR-55 SB	Basic	**22.6**	**F**	**22.6**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.5**	**F**	**21.5**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.9	C	50	0.8%
Fairview Rd On Ramp	Merge	25.7	C	25.9	C	60	0.8%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.4	C	23.6	C	60	0.8%
Bristol St Off Ramp	Diverge	18.1	B	18.3	B	60	0.7%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.5	D	30.9	D	70	0.9%
Lane Drop	Basic	26.4	D	26.7	D	70	1.1%
On Ramp from SR-55 NB	Basic	26.5	D	26.9	D	80	1.0%

TABLE 7-32
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS ALTERNATIVE A- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	-	F	-	F	80	0.8%
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	44.4	E	45.5	E	60	0.6%
Jamboree Rd Loop On Ramp	Merge	22.5	F	22.2	F	60	0.9%
Jamboree Rd Direct On Ramp	Merge	22.8	F	23.4	F	80	1.1%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

7.4.3 IMPACTS

7.4.3.1 Threshold T-1

No impact

7.4.3.2 Threshold T-2

The intersection of Macarthur Boulevard/Michelson Drive in the City of Irvine will operate at LOS F, with an increase in V/C ratio of 0.04. Since the increase in ICU is greater than 0.01 concurrent with this degradation in LOS, a significant impact occurs.

The intersection of Von Karman Avenue/Alton Parkway in the City of Irvine will operate at LOS F, with an increase in V/C ratio of 0.02. Since the increase in ICU is greater than 0.01 concurrent with this degradation in LOS, a significant impact occurs.

7.4.3.3 Threshold T-3

No impact

7.4.3.4 Threshold T-4

No impact

7.4.3.5 **Threshold T-5**

No impact

7.4.3.6 **Threshold T-6**

No impact

7.4.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection to increase by 0.046 at an intersection which is projected to operate at LOS F prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

7.4.3.8 **Threshold T-8**

No impact

7.4.3.9 **Threshold T-9**

No impact

7.4.3.10 **Threshold T-10**

No impact

7.4.3.11 **Threshold T-11**

No impact

7.4.3.12 **Threshold T-12**

No impact

7.4.3.13 **Threshold T-13**

The project results in an increase of over 2 percent on the following segment of the Northbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at this location:

- On Ramp from I-405 NB to MacArthur Blvd Off Ramp

7.4.3.14 **Threshold T-14**

No impact

7.4.3.15 **Threshold T-15**

No impact

8.0 Alternative B

8.1 EXISTING PLUS ALTERNATIVE B SCENARIO

8.1.1 DESCRIPTION

For Alternative B, the addition of project traffic reflects the incremental MAP between the Proposed Project at 15 MAP and the existing MAP of 9.2. The trip generation associated with this increase in MAP is provided in Table 4-16.

8.1.2 RESULTS

As explained in Section 6.1.1, the Existing Plus Project analysis often results in either overstating or understating impacts, or both. Specific to Alternative B, the Existing Plus Project analysis both understates and overstates impacts. As shown below, under the analysis, Alternative B would result in significant impacts at one intersection and three Caltrans facilities. However, under the 2026 analysis, which also takes into account cumulative traffic growth and future road improvements, Alternative B would result in significant impacts at four intersections and two Caltrans on-ramps. Thus, if used to measure significance, the existing plus project scenario would both understate and overstate project impacts. Therefore, it would be misleading to the public and decision makers to rely on this scenario for purposes of identifying project impacts and mitigation. As a result, this scenario is provided for disclosure, information, and comparison purposes only. Significant traffic impacts and recommended mitigation are assessed under the Year 2016, 2021, and 2026 cumulative conditions scenario because those scenarios accurately account for the long-range projected development of the proposed project within the context of an ever-changing traffic network and associated land uses.

Table 8-1 illustrates the intersection V/C ratio and corresponding incremental change, as well as LOS for each of the 59 study intersections under the existing plus Alternative B project scenario. As shown in this table, there is one location which degrades from acceptable conditions to LOS E. This intersection, Campus Drive/Bristol Street North is located in the City of Newport Beach and worsens from LOS D to LOS E with the addition of project trips.

TABLE 8-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS ALTERNATIVE B CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.56	A	0.60	B	0.04
		PM	0.73	C	0.78	C	0.05
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.64	B	0.66	B	0.02
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.59	A	0.61	B	0.02
		PM	0.65	B	0.67	B	0.02
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.68	B	0.74	C	0.06
		PM	0.89	D	0.94	E	0.05
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.54	A	0.56	A	0.02
		PM	0.75	C	0.78	C	0.03
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.374	A	0.388	A	0.014
		PM	0.490	A	0.500	A	0.010
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.79	C	0.80	D	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.88	D	0.89	D	0.01
		PM	0.78	C	0.79	C	0.01
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.66	B	0.68	B	0.02
		PM	0.82	D	0.85	D	0.03
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.58	A	0.59	A	0.01
		PM	0.60	A	0.61	B	0.01
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.650	B	0.659	B	0.009
		PM	0.714	C	0.722	C	0.008
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.496	A	0.498	A	0.002
		PM	0.488	A	0.490	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.610	B	0.614	B	0.004
		PM	0.632	B	0.643	B	0.011
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.49	A	0.53	A	0.04
		PM	0.64	B	0.67	B	0.03
15. Campus Dr at Airport Way[2]	Signal	AM	0.338	A	0.550	A	0.212
		PM	0.660	B	0.851	D	0.191
16. Campus Dr at Quail St[2]	Signal	AM	0.484	A	0.538	A	0.054
		PM	0.463	A	0.548	A	0.085
17. Campus Dr at Bristol St North[2]	Signal	AM	0.596	A	0.638	B	0.042
		PM	0.885	D	0.958	E	0.073
18. Campus Dr at Bristol St South[2]	Signal	AM	0.689	B	0.732	C	0.043
		PM	0.439	A	0.463	A	0.024
19. Birch St at Bristol St North[2]	Signal	AM	0.581	A	0.593	A	0.012
		PM	0.581	A	0.594	A	0.013
20. Birch St at Bristol St South[2]	Signal	AM	0.400	A	0.408	A	0.008
		PM	0.434	A	0.448	A	0.014
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.61	B	0.63	B	0.02
		PM	0.71	C	0.73	C	0.02

TABLE 8-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS ALTERNATIVE B CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project		
			V/C	LOS	V/C	LOS	Change
22. Red Hill Ave at Main St[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.70	C	0.72	C	0.02
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.50	A	0.51	A	0.01
		PM	0.47	A	0.49	A	0.02
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.50	A	0.52	A	0.02
		PM	0.53	A	0.56	A	0.03
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	18.7	C	21.8	C	N/A
		PM	19.4	C	23.5	C	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.369	A	0.382	A	0.013
		PM	0.573	A	0.590	A	0.017
27. Irvine Ave at University Dr[2]	Signal	AM	0.641	B	0.666	B	0.025
		PM	0.719	C	0.744	C	0.025
28. Irvine Ave at 22nd St[2]	Signal	AM	0.619	B	0.641	B	0.022
		PM	0.695	B	0.725	C	0.030
29. Irvine Ave at 20th St[2]	Signal	AM	0.485	A	0.512	A	0.027
		PM	0.624	B	0.656	B	0.032
30. Irvine Ave at 19th St[2]	Signal	AM	0.528	A	0.550	A	0.022
		PM	0.662	B	0.678	B	0.016
31. Irvine Ave at 17th St[2]	Signal	AM	0.540	A	0.556	A	0.016
		PM	0.709	C	0.722	C	0.013
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.22	A	0.23	A	0.01
		PM	0.56	A	0.58	A	0.02
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.44	A	0.46	A	0.02
		PM	0.36	A	0.39	A	0.03
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.32	A	0.33	A	0.01
		PM	0.43	A	0.44	A	0.01
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.82	D	0.84	D	0.02
		PM	0.50	A	0.52	A	0.02
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.531	A	0.550	A	0.019
		PM	0.681	B	0.697	B	0.016
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.576	A	0.588	A	0.012
		PM	0.543	A	0.556	A	0.013
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.397	A	0.402	A	0.005
		PM	0.413	A	0.419	A	0.006
39. Jamboree Rd at Birch St[2]	Signal	AM	0.488	A	0.505	A	0.017
		PM	0.494	A	0.502	A	0.008
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.441	A	0.447	A	0.006
		PM	0.522	A	0.531	A	0.009
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.535	A	0.560	A	0.025
		PM	0.558	A	0.571	A	0.013

TABLE 8-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS ALTERNATIVE B CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project		
			V/C	LOS	V/C	LOS	Change
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.470	A	0.480	A	0.010
		PM	0.498	A	0.503	A	0.005
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.830	D	0.834	D	0.004
		PM	0.707	C	0.723	C	0.016
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.594	A	0.600	A	0.006
		PM	0.590	A	0.595	A	0.005
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.764	C	0.772	C	0.008
		PM	0.841	D	0.852	D	0.011
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.54	A	0.55	A	0.01
		PM	0.65	B	0.66	B	0.01
47. Red Hill Ave at Baker St[3]	Signal	AM	0.42	A	0.44	A	0.02
		PM	0.61	B	0.63	B	0.02
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.78	C	0.02
		PM	0.62	B	0.63	B	0.01
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.88	D	0.89	D	0.01
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.79	C	0.80	C	0.01
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.45	A	0.46	A	0.01
		PM	0.74	C	0.76	C	0.02
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.70	C	0.71	C	0.01
		PM	0.89	D	0.90	D	0.01
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.76	C	0.78	C	0.02
		PM	0.880	D	0.89	D	0.01
54. Von Karman Ave at Main St[1]	Signal	AM	0.60	B	0.62	B	0.02
		PM	0.78	C	0.79	C	0.01
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.89	D	0.90	E	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.81	D	0.82	D	0.01
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.64	B	0.65	B	0.01
		PM	0.65	B	0.67	B	0.02
58. Jamboree Rd at Main St[1]	Signal	AM	0.77	C	0.77	C	0.00
		PM	0.85	D	0.86	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.65	B	0.67	B	0.02

TABLE 8-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS ALTERNATIVE B CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.82	D	0.84	D	0.02

Notes: Signalized intersections evaluated using ICU methodology.

1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

The LOS for each of the four intersections under the shared jurisdiction of Caltrans is provided in Table 8-2. As shown in the table, the proposed Alternative B would worsen the delay at the intersection of Jamboree Road/I-405 SB Ramps. But, the increase in delay would be less than the allowable 2 second threshold and no impact would occur. The overall intersection delay will improve at the MacArthur Boulevard/I-405 SB Ramps intersection during the PM peak hour because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay.

TABLE 8-2
CALTRANS INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS PROPOSED ALTERNATIVE B CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.1	C	24.5	C
		PM	23.4	C	25.3	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	22.9	C	23.4	C
		PM	25.0	C	24.0	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	15.8	B	16.9	B
		PM	20.6	C	22.6	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**90.8**	**F**	**91.3**	**F**
		PM	30.7	C	30.9	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 8-3, 8-4, 8-5 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405 respectively. Tables 8-6, 8-7, 8-8 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, the project would result in an increase of over 2 percent at the on-ramp from I-405 NB to MacArthur Boulevard off-ramp, and two northbound SR-73 segments (Bristol Street North On-Ramp to SR-55 North Off-Ramp and On-Ramp from northbound SR-55), therefore, the project would result in a significant cumulative impact at these locations.

TABLE 8-3
FREEWAY MAINLINE AND RAMPS OPERATIONS:
SR-55 EXISTING PLUS PROPOSED ALTERNATIVE B -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.3%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	28.8	D	28.9	D	30	0.4%
Baker St Off Ramp	Diverge	21.6	C	21.7	C	30	0.4%
Baker St Off Ramp to SR-73 On Ramp	Basic	**24.9**	**F**	**37.8**	**F**	**30**	**0.7%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**30**	**0.4%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**28.3**	**F**	**44.7**	**F**	**20**	**0.4%**
Paularino Ave On Ramp	Merge	29.6	D	**-**	**F**	**30**	**0.6%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	34.3	D	**-**	**F**	**30**	**0.6%**
On Ramp from I-405 SB	Basic	**-**	**F**	**-**	**F**	**30**	**0.4%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**170**	**1.6%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.1	D	**35.0**	**E**	**120**	**1.6%**

TABLE 8-3
FREEWAY MAINLINE AND RAMPS OPERATIONS:
SR-55 EXISTING PLUS PROPOSED ALTERNATIVE B -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**180**	**1.7%**
Off Ramp to I-405 NB	Diverge	29.1	D	28.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	23.2	C	22.7	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.3	D	28.0	C	0	0.0%
Lane Drop	Basic	28.3	D	27.5	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	17.0	B	16.6	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.9	C	20.9	C	60	1.2%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	20.0	C	19.8	C	60	1.2%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	30.0	D	29.7	D	60	0.9%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	16.5	B	20.4	C	50	1.2%
Newport Blvd S/Fair Dr On Ramp	Merge	17.7	B	20.9	C	50	1.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-4
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROPOSED ALTERNATIVE B -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.3**	**E**	**40.7**	**E**	**30**	**0.5%**
MacArthur Blvd On Ramp	Basic	**36.6**	**E**	**37.0**	**E**	**40**	**0.5%**
Jamboree Rd On Ramp	Merge	34.8	D	**35.1**	**E**	**50**	**0.6%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	23.7	C	**43.6**	**E**	**50**	**0.9%**
Bristol St N Off Ramp	Diverge	30.5	D	**-**	**F**	**50**	**0.7%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	32.1	D	**-**	**F**	**190**	**2.3%**
Off Ramp to SR-55 SB	Diverge	24.1	C	32.6	D	190	3.7%
On Ramp from SR-55 NB	Weave	33.1	D	**-**	**F**	**150**	**2.8%**
Bear St Off Ramp to Bear St On Ramp	Basic	13.8	B	22.3	C	150	4.5%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.7**	**E**	**39.2**	**E**	**60**	**0.9%**
On Ramp from SR-55 NB	Merge	29.9	D	30.7	D	80	1.5%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	26.2	D	31.7	D	80	1.7%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**90**	**1.0%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	29.4	D	22.5	C	90	1.3%
Jamboree Rd/Bristol St S Off Ramp	Diverge	31.1	D	27.9	C	90	1.0%

TABLE 8-4
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROPOSED ALTERNATIVE B -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Jamboree Rd Off to Lane Add	Basic	26.3	D	20.4	C	20	0.4%
University Dr Off Ramp	Basic	15.5	B	12.3	B	20	0.4%
University Off to Jamboree Rd On Ramp	Basic	15.6	B	15.2	B	20	0.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-5
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROPOSED ALTERNATIVE B - AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.7**	**E**	**43.5**	**E**	**90**	**0.8%**
Jamboree Rd Off Ramp	Diverge	28.7	D	29.1	D	90	0.7%
Jamboree Rd Loop On Ramp	Merge	27.3	C	27.3	C	70	0.8%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**80**	**0.6%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**40.8**	**E**	**37.6**	**E**	**0**	**0.0%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	31.6	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	34.8	D	32.2	D	0	0.0%
On Ramp from SR-55 SB	Basic	27.0	D	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	22.9	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**30.8**	**F**	**31.2**	**F**	**70**	**0.8%**
Fairview Rd On Ramp	Merge	**34.1**	**F**	**34.4**	**F**	**80**	**0.8%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**38.6**	**F**	**39.1**	**F**	**80**	**0.8%**
Bristol St Off Ramp	Diverge	**27.2**	**F**	**27.5**	**F**	**80**	**0.7%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**90**	**0.7%**
Lane Drop	Basic	**36.9**	**E**	34.5	D	90	1.1%
On Ramp from SR-55 NB	Basic	**37.0**	**E**	**35.1**	**E**	**100**	**1.0%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**0.7%**

TABLE 8-5
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROPOSED ALTERNATIVE B - AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**90**	**0.7%**
Jamboree Rd Loop On Ramp	Merge	18.6	B	19.3	B	90	1.5%
Jamboree Rd Direct On Ramp	Merge	17.2	B	17.4	B	100	1.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-6
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
EXISTING PLUS PROPOSED ALTERNATIVE B -PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	-	F	-	F	50	0.7%
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.7	A	10.9	A	50	1.9%
Baker St Off Ramp	Diverge	3.4	A	3.6	A	50	1.7%
Baker St Off Ramp to SR-73 On Ramp	Basic	14.3	B	12.1	B	50	1.9%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	32.8	D	28.9	D	50	1.0%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	16.0	B	13.7	B	40	1.4%
Paularino Ave On Ramp	Merge	**14.9**	**F**	**15.9**	**F**	**50**	**1.7%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**15.9**	**F**	**16.9**	**F**	**50**	**1.7%**
On Ramp from I-405 SB	Basic	**15.5**	**F**	**16.3**	**F**	**50**	**1.3%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**23.0**	**F**	**27.2**	**F**	**250**	**4.4%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.5**	**E**	**37.4**	**E**	**100**	**1.3%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	F	-	F	**140**	**1.3%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.7	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.6	D	0	0.0%
Lane Drop	Basic	33.0	D	32.7	D	0	0.0%

TABLE 8-6
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
EXISTING PLUS PROPOSED ALTERNATIVE B -PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.6	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.2	D	30.2	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.0	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	23.5	C	27.0	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	22.9	C	25.4	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-7
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROPOSED ALTERNATIVE B PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.6	D	27.7	D	20	0.4%
MacArthur Blvd On Ramp	Basic	28.6	D	28.7	D	30	0.4%
Jamboree Rd On Ramp	Merge	32.3	D	32.4	D	40	0.5%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	23.3	C	34.4	D	40	0.7%
Bristol St N Off Ramp	Diverge	27.9	C	**36.0**	**E**	**40**	**0.6%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	-	**F**	-	**F**	**150**	**1.6%**
Off Ramp to SR-55 SB	Diverge	**35.5**	**E**	-	**F**	**150**	**1.9%**
On Ramp from SR-55 NB	Weave	-	**F**	-	**F**	**140**	**2.0%**
Bear St Off Ramp to Bear St On Ramp	Basic	24.3	C	34.0	D	140	2.4%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.5	D	32.7	D	30	0.5%
On Ramp from SR-55 NB	Merge	29.5	D	29.7	D	70	1.4%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	21.4	C	27.9	D	70	1.8%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	-	**F**	-	**F**	**70**	**1.0%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	20.6	C	24.9	C	70	1.4%
Jamboree Rd/Bristol St S Off Ramp	Diverge	21.4	C	25.0	C	70	1.2%
Jamboree Rd Off to Lane Add	Basic	31.2	D	28.9	D	20	0.4%
University Dr Off Ramp	Basic	17.7	B	16.7	B	20	0.3%

TABLE 8-7
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROPOSED ALTERNATIVE B PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	23.6	C	25.0	C	20	0.5%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-8
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROPOSED ALTERNATIVE B -PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.5**	**F**	**25.8**	**F**	**80**	**1.1%**
Jamboree Rd Off Ramp	Diverge	**18.2**	**F**	**18.5**	**F**	**80**	**0.9%**
Jamboree Rd Loop On Ramp	Merge	**24.2**	**F**	**23.8**	**F**	**80**	**1.1%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**41.6**	**F**	**40.8**	**F**	**90**	**1.0%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**43.3**	**F**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**33.9**	**F**	**26.3**	**F**	**0**	**0.0%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**36.1**	**F**	**31.0**	**F**	**0**	**0.0%**
On Ramp from SR-55 SB	Basic	**27.2**	**F**	**22.4**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**23.9**	**F**	**21.3**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.9	C	80	1.3%
Fairview Rd On Ramp	Merge	25.6	C	25.8	C	90	1.3%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.6	C	90	1.3%
Bristol St Off Ramp	Diverge	18.0	B	18.3	B	90	1.1%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	29.4	D	30.8	D	100	1.3%
Lane Drop	Basic	25.3	C	26.7	D	100	1.6%
On Ramp from SR-55 NB	Basic	25.6	C	26.8	D	110	1.4%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**43.6**	**E**	**-**	**F**	**110**	**1.1%**

TABLE 8-8
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROPOSED ALTERNATIVE B -PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.8**	**E**	**45.3**	**E**	**90**	**0.8%**
Jamboree Rd Loop On Ramp	Merge	**21.3**	**F**	**22.2**	**F**	**90**	**1.5%**
Jamboree Rd Direct On Ramp	Merge	**21.4**	**F**	**23.0**	**F**	**120**	**1.7%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

8.1.3 IMPACTS

8.1.3.1 **Threshold T-1**

No impact

8.1.3.2 **Threshold T-2**

No impact

8.1.3.3 **Threshold T-3**

No impact

8.1.3.4 **Threshold T-4**

No Impact

8.1.3.5 **Threshold T-5**

The intersection of Campus Drive/Bristol Street North in the City of Newport Beach worsens from LOS D to LOS E with the addition of project trips. As this intersection is outside of the John Wayne Airport Area, this degradation of LOS is a significant impact.

8.1.3.6 **Threshold T-6**

No impact

8.1.3.7 **Threshold T-7**

No impact

8.1.3.8 **Threshold T-8**

No impact

8.1.3.9 **Threshold T-9**

No impacts

8.1.3.10 **Threshold T-10**

No impact

8.1.3.11 **Threshold T-11**

No impact

8.1.3.12 **Threshold T-12**

The addition of project traffic causes the two following roadway segments on the Northbound SR-73 to degrade from LOS D to LOS F:

- Bristol St N On Ramp to SR-55 N Off Ramp (AM)
- On Ramp from SR 55 NB (AM)

In both instances, the Project's contribution to the increase is traffic is greater than two percent; therefore the project would result in a significant impact at these locations.

8.1.3.13 **Threshold T-13**

The project results in an increase of over 2 percent on the following segment of the Northbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic:

- On Ramp from I-405 NB to MacArthur Blvd Off Ramp (PM)

The project results in an increase of over 2 percent on the following segment of the Northbound SR-73, which is projected to operate at LOS F prior to the addition of project traffic:

- On Ramp from SR-55 NB (PM)

In both of the above instances, the project would result in a significant cumulative impact at the location.

8.1.3.14 **Threshold T-14**

No impact

8.1.3.15 **Threshold T-15**

No impact

8.2 2016 PLUS ALTERNATIVE B SCENARIO

8.2.1 DESCRIPTION

This scenario evaluates the traffic impacts associated with Alternative B, which anticipates a MAP level of 10.8 in 2016. The anticipated increase in vehicle trips associated with the increase in MAP from the existing MAP is shown in Table 4-14.

8.2.2 RESULTS

Table 8-1 provides the LOS results for the 59 intersections evaluated using the ICU methodology. As shown in the table, under this scenario Alternative B would result in significant impacts at Intersection 17, Campus Drive at Bristol Street North, during the PM peak hour.

TABLE 8-9
INTERSECTION LEVEL OF SERVICE:
2016 ALTERNATIVE B

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.59	A	0.60	A	0.01
		PM	0.75	C	0.75	C	0.00
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.65	B	0.65	B	0.00
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.60	B	0.60	B	0.00
		PM	0.66	B	0.66	B	0.00
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.91	E	0.93	E	0.02
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.57	A	0.57	A	0.00
		PM	0.77	C	0.78	C	0.01
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.391	A	0.393	A	0.002
		PM	0.517	A	0.518	A	0.001
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.81	D	0.81	D	0.00
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.89	D	0.90	D	0.01
		PM	0.78	C	0.78	C	0.00
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.86	D	0.87	D	0.01
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.60	A	0.60	A	0.00
		PM	0.61	B	0.61	B	0.00
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.666	B	0.668	B	0.002
		PM	0.722	C	0.728	C	0.006

TABLE 8-9
INTERSECTION LEVEL OF SERVICE:
2016 ALTERNATIVE B

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.517	A	0.517	A	0.000
		PM	0.498	A	0.498	A	0.000
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.629	B	0.629	B	0.000
		PM	0.641	B	0.645	B	0.004
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.66	B	0.67	B	0.01
15. Campus Dr at Airport Way[2]	Signal	AM	0.346	A	0.407	A	0.061
		PM	0.682	B	0.734	C	0.052
16. Campus Dr at Quail St[2]	Signal	AM	0.506	A	0.519	A	0.013
		PM	0.498	A	0.515	A	0.017
17. Campus Dr at Bristol St North[2]	Signal	AM	0.614	B	0.626	B	0.012
		PM	**0.916**	**E**	**0.936**	**E**	0.020
18. Campus Dr at Bristol St South[2]	Signal	AM	0.710	C	0.716	C	0.006
		PM	0.448	A	0.453	A	0.005
19. Birch St at Bristol St North[2]	Signal	AM	0.596	A	0.598	A	0.002
		PM	0.604	B	0.606	B	0.002
20. Birch St at Bristol St South[2]	Signal	AM	0.416	A	0.416	A	0.000
		PM	0.445	A	0.447	A	0.002
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.63	B	0.63	B	0.00
		PM	0.73	C	0.74	C	0.01
22. Red Hill Ave at Main St[1]	Signal	AM	0.72	C	0.72	C	0.00
		PM	0.72	C	0.72	C	0.00
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.52	A	0.52	A	0.00
		PM	0.49	A	0.50	A	0.01
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.56	A	0.56	A	0.00
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	23.4	C	23.4	C	N/A
		PM	23.5	C	23.5	C	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.381	A	0.385	A	0.004
		PM	0.584	A	0.589	A	0.005
27. Irvine Ave at University Dr[2]	Signal	AM	0.669	B	0.678	B	0.009
		PM	0.737	C	0.741	C	0.004
28. Irvine Ave at 22nd St[2]	Signal	AM	0.647	B	0.650	B	0.003
		PM	0.722	C	0.722	C	0.000
29. Irvine Ave at 20th St[2]	Signal	AM	0.512	A	0.516	A	0.004
		PM	0.653	B	0.653	B	0.000
30. Irvine Ave at 19th St[2]	Signal	AM	0.550	A	0.550	A	0.000
		PM	0.678	B	0.678	B	0.000
31. Irvine Ave at 17th St[2]	Signal	AM	0.572	A	0.572	A	0.000
		PM	0.725	C	0.728	C	0.003
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.23	A	0.23	A	0.00

TABLE 8-9
INTERSECTION LEVEL OF SERVICE:
2016 ALTERNATIVE B

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.58	A	0.58	A	0.00
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.46	A	0.46	A	0.00
		PM	0.39	A	0.39	A	0.00
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.44	A	0.44	A	0.00
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.83	D	0.84	D	0.01
		PM	0.51	A	0.52	A	0.01
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.553	A	0.553	A	0.000
		PM	0.706	C	0.706	C	0.000
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.594	A	0.594	A	0.000
		PM	0.554	A	0.556	A	0.002
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.405	A	0.406	A	0.001
		PM	0.419	A	0.420	A	0.001
39. Jamboree Rd at Birch St[2]	Signal	AM	0.519	A	0.519	A	0.000
		PM	0.508	A	0.508	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.449	A	0.449	A	0.000
		PM	0.531	A	0.533	A	0.002
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.561	A	0.564	A	0.003
		PM	0.580	A	0.582	A	0.002
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.482	A	0.484	A	0.002
		PM	0.506	A	0.508	A	0.002
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.844	D	0.844	D	0.000
		PM	0.729	C	0.729	C	0.000
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.602	B	0.603	B	0.001
		PM	0.600	B	0.600	B	0.000
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.770	C	0.770	C	0.000
		PM	0.853	D	0.853	D	0.000
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.56	A	0.56	A	0.00
		PM	0.68	B	0.68	B	0.00
47. Red Hill Ave at Baker St[3]	Signal	AM	0.45	A	0.45	A	0.00
		PM	0.63	B	0.63	B	0.00
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.77	C	0.01
		PM	0.63	B	0.63	B	0.00
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.89	D	0.89	D	0.00
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.82	D	0.82	D	0.00
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.46	A	0.47	A	0.01
		PM	0.76	C	0.76	C	0.00

TABLE 8-9
INTERSECTION LEVEL OF SERVICE:
2016 ALTERNATIVE B

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.74	C	0.74	C	0.00
		PM	0.93	E	0.93	E	0.00
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.78	C	0.78	C	0.00
		PM	0.92	E	0.92	E	0.00
54. Von Karman Ave at Main St[1]	Signal	AM	0.63	B	0.63	B	0.00
		PM	0.81	D	0.81	D	0.00
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.76	C	0.76	C	0.00
		PM	0.91	E	0.91	E	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.80	D	0.80	D	0.00
		PM	0.83	D	0.84	D	0.01
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.66	B	0.66	B	0.00
		PM	0.68	B	0.68	B	0.00
58. Jamboree Rd at Main St[1]	Signal	AM	0.78	C	0.78	C	0.00
		PM	0.86	D	0.86	D	0.00
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.68	B	0.68	B	0.00
		PM	0.84	D	0.84	D	0.00

Notes: Signalized intersections evaluated using ICU methodology.

1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 8-10 provides the LOS results for the four intersections under the joint jurisdiction of Caltrans. As shown in the table below, the overall intersection delay will improve at a few locations because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 8-10
CALTRANS INTERSECTION LEVEL OF SERVICE:
2016 ALTERNATIVE B

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.4	C	22.9	C
		PM	24.0	C	24.4	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.0	C	23.1	C
		PM	25.2	C	24.8	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	16.4	B	16.4	B
		PM	24.2	C	24.8	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**94.7**	**F**	**94.5**	**F**
		PM	31.0	C	31.0	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 8-11, 8-12, 8-13 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405, respectively. Tables 8-14, 8-15, 8-16 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, because the addition of project trips would not result in a decrease in LOS from acceptable to unacceptable, and because the addition of project trips would not increase traffic by 2 percent or more, impacts would be less than significant.

TABLE 8-11
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	28.9	D	29.0	D	20	0.3%
Baker St Off Ramp	Diverge	21.6	C	21.7	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**37.7**	**F**	**37.9**	**F**	**20**	**0.3%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**44.5**	**F**	**44.7**	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	**-**	**F**	**-**	**F**	**20**	**0.3%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**-**	**F**	**-**	**F**	**20**	**0.3%**
On Ramp from I-405 SB	Basic	**-**	**F**	**-**	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.5%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.2	D	34.5	D	40	0.5%

TABLE 8-11
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**
Off Ramp to I-405 NB	Diverge	28.8	D	28.8	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.9	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	28.1	D	0	0.0%
Lane Drop	Basic	27.7	D	27.6	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.7	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	20.8	C	40	0.8%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.8	C	40	0.8%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.7	D	40	0.6%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	20.4	C	30	0.6%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.9	C	30	0.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-12 FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.4**	**E**	**40.5**	**E**	**10**	**0.2%**
MacArthur Blvd On Ramp	Basic	**36.7**	**E**	**36.8**	**E**	**20**	**0.3%**
Jamboree Rd On Ramp	Merge	34.9	D	**35.1**	**E**	**30**	**0.3%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.2**	**E**	**43.5**	**E**	**30**	**0.3%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**30**	**0.3%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.7%**
Off Ramp to SR-55 SB	Diverge	31.7	D	32.1	D	70	1.0%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**50**	**0.7%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.8	C	21.9	C	50	0.9%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.8**	**E**	**39.1**	**E**	**30**	**0.5%**
On Ramp from SR-55 NB	Merge	30.3	D	30.6	D	40	0.7%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.2	D	31.6	D	40	0.7%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.5	C	22.6	C	50	0.9%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	27.9	C	50	0.7%
Jamboree Rd Off to Lane Add	Basic	20.4	C	20.6	C	30	0.8%

TABLE 8-12 FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Dr Off Ramp	Basic	12.3	B	12.4	B	30	0.6%
University Off to Jamboree Rd On Ramp	Basic	15.1	B	15.3	B	30	1.1%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-13
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.8**	**E**	**43.1**	**E**	**30**	**0.3%**
Jamboree Rd Off Ramp	Diverge	28.8	D	28.9	D	30	0.2%
Jamboree Rd Loop On Ramp	Merge	27.1	C	27.2	C	20	0.2%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.2%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.5**	**E**	**37.7**	**E**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.3	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.4	C	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**30.9**	**F**	**31.0**	**F**	**20**	**0.2%**
Fairview Rd On Ramp	Merge	**34.2**	**F**	**34.3**	**F**	**30**	**0.3%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**38.8**	**F**	**39.0**	**F**	**30**	**0.3%**
Bristol St Off Ramp	Diverge	**27.3**	**F**	**27.4**	**F**	**30**	**0.3%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.3%**
Lane Drop	Basic	34.2	D	34.5	D	40	0.5%
On Ramp from SR-55 NB	Basic	34.8	D	**35.1**	**E**	**50**	**0.5%**

TABLE 8-13
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
Jamboree Rd Loop On Ramp	Merge	19.2	B	19.4	B	50	0.8%
Jamboree Rd Direct On Ramp	Merge	17.3	B	17.5	B	60	0.9%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-14
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.3%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	10.8	A	20	0.8%
Baker St Off Ramp	Diverge	3.5	A	3.5	A	20	0.7%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.1	B	20	0.9%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	28.9	D	20	0.4%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.6	B	10	0.4%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**15.8**	**F**	**20**	**0.7%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**16.8**	**F**	**20**	**0.7%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.2**	**F**	**20**	**0.5%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**26.1**	**F**	**80**	**1.3%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.6**	**E**	**36.8**	**E**	**30**	**0.4%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.7	D	0	0.0%
Lane Drop	Basic	32.8	D	32.7	D	0	0.0%

TABLE 8-14
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.2	D	30.3	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.1	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.1	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.5	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-15
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.7	D	27.7	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.7	D	28.8	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.4	D	32.5	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.4	D	34.6	D	30	0.4%
Bristol St N Off Ramp	Diverge	**35.9**	**E**	**36.1**	**E**	**30**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**60**	**0.6%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**50**	**0.6%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.2	D	33.6	D	50	0.7%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.4	D	29.6	D	30	0.6%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	27.7	D	30	0.6%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.4%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	24.9	C	30	0.5%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.0	C	30	0.4%
Jamboree Rd Off to Lane Add	Basic	28.8	D	28.9	D	10	0.2%
University Dr Off Ramp	Basic	16.7	B	16.7	B	10	0.2%

TABLE 8-15
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	24.9	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-16FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.6**	**F**	**25.7**	**F**	**30**	**0.4%**
Jamboree Rd Off Ramp	Diverge	**18.3**	**F**	**18.4**	**F**	**30**	**0.3%**
Jamboree Rd Loop On Ramp	Merge	**23.8**	**F**	**23.9**	**F**	**30**	**0.4%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.1**	**F**	**40.5**	**F**	**40**	**0.4%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.4**	**F**	**26.5**	**F**	**10**	**0.2%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.0**	**F**	**31.2**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**22.5**	**F**	**22.5**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.4**	**F**	**21.4**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.8	C	30	0.5%
Fairview Rd On Ramp	Merge	25.6	C	25.8	C	40	0.6%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.4	C	40	0.6%
Bristol St Off Ramp	Diverge	18.1	B	18.2	B	40	0.5%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.4	D	30.7	D	50	0.6%
Lane Drop	Basic	26.3	D	26.5	D	50	0.8%
On Ramp from SR-55 NB	Basic	26.4	D	26.7	D	60	0.8%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**44.2**	**E**	**60**	**0.6%**

**TABLE 8-16FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS ALTERNATIVE B- PM**

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.2**	**E**	**45.4**	**E**	**60**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**22.4**	**F**	**22.2**	**F**	**60**	**0.9%**
Jamboree Rd Direct On Ramp	Merge	**22.6**	**F**	**23.0**	**F**	**70**	**0.9%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

8.2.3 IMPACTS

8.2.3.1 **Threshold T-1**

No impact

8.2.3.2 **Threshold T-2**

No impact

8.2.3.3 **Threshold T-3**

No impact

8.2.3.4 **Threshold T-4**

No impact

8.2.3.5 **Threshold T-5**

No impact

8.2.3.6 **Threshold T-6**

No impact

8.2.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection to increase by 0.020 at an intersection which is projected to operate at LOS E prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

8.2.3.8 **Threshold T-8**

No impact

8.2.3.9 **Threshold T-9**

No impact

8.2.3.10 **Threshold T-10**

No impact

8.2.3.11 **Threshold T-11**

No impact

8.2.3.12 **Threshold T-12**

No impact

8.2.3.13 **Threshold T-13**

No impact

8.2.3.14 **Threshold T-14**

No impact

8.2.3.15 **Threshold T-15**

No impact

8.3 2021 PLUS ALTERNATIVE B SCENARIO

8.3.1 DESCRIPTION

This scenario evaluates the traffic impacts of Alternative B attributable to an increase in MAP from existing levels to 13.0 in 2021. Trip generation for this alternative is shown in Table 4-15.

8.3.2 RESULTS

Table 8-17 provides the LOS results associated with this alternative for the 59 intersections evaluated using the ICU methodology. As shown in the table, under this scenario Alternative B would result in significant impacts at Intersection 17, Campus Drive at Bristol Street North, during the PM peak hour.

TABLE 8-17
INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE B SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.62	B	0.66	B	0.04
		PM	0.77	C	0.81	D	0.04
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.69	B	0.70	B	0.01
		PM	0.66	B	0.67	B	0.01
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.67	B	0.68	B	0.01
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.74	C	0.77	C	0.03
		PM	0.94	E	0.98	E	0.04
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.58	A	0.59	A	0.01
		PM	0.80	C	0.82	D	0.02
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.408	A	0.419	A	0.011
		PM	0.541	A	0.546	A	0.005
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.70	B	0.71	C	0.01
		PM	0.82	D	0.83	D	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.91	E	0.91	E	0.00
		PM	0.78	C	0.79	C	0.01
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.73	C	0.75	C	0.02
		PM	0.91	E	0.93	E	0.02
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.63	B	0.63	B	0.00
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.684	B	0.698	B	0.014

TABLE 8-17
INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE B SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.730	C	0.740	C	0.010
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.546	A	0.548	A	0.002
		PM	0.510	A	0.512	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.659	B	0.664	B	0.005
		PM	0.655	B	0.663	B	0.008
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.55	A	0.57	A	0.02
		PM	0.68	B	0.70	C	0.02
15. Campus Dr at Airport Way[2]	Signal	AM	0.354	A	0.498	A	0.144
		PM	0.703	C	0.830	D	0.127
16. Campus Dr at Quail St[2]	Signal	AM	0.525	A	0.552	A	0.027
		PM	0.517	A	0.558	A	0.041
17. Campus Dr at Bristol St North[2]	Signal	AM	0.641	B	0.667	B	0.026
		PM	**0.964**	**E**	**1.012**	**F**	0.048
18. Campus Dr at Bristol St South[2]	Signal	AM	0.734	C	0.755	C	0.021
		PM	0.456	A	0.472	A	0.016
19. Birch St at Bristol St North[2]	Signal	AM	0.612	B	0.621	B	0.009
		PM	0.632	B	0.638	B	0.006
20. Birch St at Bristol St South[2]	Signal	AM	0.431	A	0.434	A	0.003
		PM	0.458	A	0.465	A	0.007
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.65	B	0.66	B	0.01
		PM	0.75	C	0.76	C	0.01
22. Red Hill Ave at Main St[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.73	C	0.74	C	0.01
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.53	A	0.55	A	0.02
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.55	A	0.57	A	0.02
		PM	0.58	A	0.59	A	0.01
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	26.8	D	31.6	D	N/A
		PM	25.4	D	29.1	D	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.390	A	0.408	A	0.018
		PM	0.591	A	0.599	A	0.008
27. Irvine Ave at University Dr[2]	Signal	AM	0.697	B	0.716	C	0.019
		PM	0.750	C	0.762	C	0.012
28. Irvine Ave at 22nd St[2]	Signal	AM	0.666	B	0.678	B	0.012
		PM	0.725	C	0.731	C	0.006
29. Irvine Ave at 20th St[2]	Signal	AM	0.519	A	0.528	A	0.009
		PM	0.656	B	0.675	B	0.019
30. Irvine Ave at 19th St[2]	Signal	AM	0.556	A	0.572	A	0.016
		PM	0.688	B	0.697	B	0.009
31. Irvine Ave at 17th St[2]	Signal	AM	0.597	A	0.603	B	0.006
		PM	0.744	C	0.747	C	0.003

TABLE 8-17
INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE B SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.24	A	0.26	A	0.02
		PM	0.59	A	0.61	B	0.02
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.47	A	0.48	A	0.01
		PM	0.40	A	0.42	A	0.02
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.45	A	0.46	A	0.01
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.84	D	0.85	D	0.01
		PM	0.52	A	0.52	A	0.00
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.569	A	0.572	A	0.003
		PM	0.725	C	0.734	C	0.009
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.606	B	0.606	B	0.000
		PM	0.563	A	0.567	A	0.004
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.416	A	0.419	A	0.003
		PM	0.425	A	0.428	A	0.003
39. Jamboree Rd at Birch St[2]	Signal	AM	0.531	A	0.531	A	0.000
		PM	0.530	A	0.530	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.455	A	0.457	A	0.002
		PM	0.537	A	0.540	A	0.003
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.567	A	0.575	A	0.008
		PM	0.602	B	0.610	B	0.008
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.491	A	0.495	A	0.004
		PM	0.510	A	0.512	A	0.002
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.858	D	0.863	D	0.005
		PM	0.744	C	0.748	C	0.004
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.608	B	0.611	B	0.003
		PM	0.605	B	0.606	B	0.001
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.770	C	0.777	C	0.007
		PM	0.861	D	0.866	D	0.005
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.58	A	0.58	A	0.00
		PM	0.69	B	0.70	B	0.01
47. Red Hill Ave at Baker St[3]	Signal	AM	0.46	A	0.46	A	0.00
		PM	0.65	B	0.66	B	0.01
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.78	C	0.02
		PM	0.64	B	0.65	B	0.01
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.54	A	0.55	A	0.01
		PM	0.90	E	0.91	E	0.01
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.73	C	0.73	C	0.00
		PM	0.86	D	0.86	D	0.00
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.47	A	0.48	A	0.01
		PM	0.77	C	0.77	C	0.00

TABLE 8-17
INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE B SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.98	E	0.98	E	0.00
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.81	D	0.82	D	0.01
		PM	0.96	E	0.97	E	0.01
54. Von Karman Ave at Main St[1]	Signal	AM	0.65	B	0.65	B	0.00
		PM	0.83	D	0.83	D	0.00
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.92	E	0.93	E	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.84	D	0.84	D	0.00
		PM	0.86	D	0.86	D	0.00
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.70	C	0.71	C	0.01
58. Jamboree Rd at Main St[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.87	D	0.88	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.86	D	0.86	D	0.00

Notes: Signalized intersections evaluated using ICU methodology.

1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 8-18 provides the LOS results for the four intersections under the joint jurisdiction of Caltrans for this alternative. As shown in the table below, the overall intersection delay will improve at a few locations because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 8-18
CALTRANS INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE B

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.7	C	23.6	C
		PM	24.9	C	25.9	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.3	C	23.4	C
		PM	25.4	C	24.8	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	16.8	B	17.8	B
		PM	30.3	C	31.7	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**99.7**	**F**	**99.5**	**F**
		PM	30.8	C	30.8	C

Notes:

1. Intersections operating below acceptable standards are noted in **bold.**

Tables 8-19, 8-20, 8-21 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405, respectively. Tables 8-22, 8-23, 8-24 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, the project would result in an increase of over 2 percent at the on-ramp from I-405 NB to MacArthur Boulevard off-ramp, which is projected to operate at LOS F prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at this location.

TABLE 8-19
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	29.0	D	29.1	D	20	0.3%
Baker St Off Ramp	Diverge	21.7	C	21.8	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**37.9**	**F**	**38.1**	**F**	**20**	**0.3%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**44.8**	**F**	**45.0**	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	**-**	**F**	**-**	**F**	**20**	**0.3%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**-**	**F**	**-**	**F**	**20**	**0.3%**
On Ramp from I-405 SB	Basic	**-**	**F**	**-**	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**120**	**0.9%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.2	D	34.7	D	80	1.0%

TABLE 8-19
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**120**	**1.1%**
Off Ramp to I-405 NB	Diverge	28.8	D	28.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	28.1	D	0	0.0%
Lane Drop	Basic	27.7	D	27.5	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.6	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	20.8	C	50	1.0%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.7	C	50	1.0%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.7	D	50	0.8%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	20.4	C	40	0.8%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.8	C	40	0.8%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-20 FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.4**	**E**	**40.6**	**E**	**20**	**0.3%**
MacArthur Blvd On Ramp	Basic	**36.7**	**E**	**36.9**	**E**	**30**	**0.4%**
Jamboree Rd On Ramp	Merge	**34.9**	**D**	**35.1**	**E**	**40**	**0.5%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.2**	**E**	**43.6**	**E**	**40**	**0.5%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**40**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**130**	**1.3%**
Off Ramp to SR-55 SB	Diverge	31.7	D	32.3	D	130	1.8%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**100**	**1.4%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.7	C	22.1	C	100	1.9%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.9**	**E**	**39.3**	**E**	**50**	**0.8%**
On Ramp from SR-55 NB	Merge	30.4	D	30.7	D	60	1.1%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.3	D	31.8	D	60	1.1%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.7%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.6	C	22.7	C	70	1.3%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	28.0	C	70	1.0%
Jamboree Rd Off to Lane Add	Basic	20.5	C	20.7	C	30	0.8%

TABLE 8-20 FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Dr Off Ramp	Basic	12.3	B	12.4	B	30	0.6%
University Off to Jamboree Rd On Ramp	Basic	15.2	B	15.4	B	30	1.1%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-21FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.9**	**E**	**43.4**	**E**	**60**	**0.6%**
Jamboree Rd Off Ramp	Diverge	28.8	D	29.1	D	60	0.5%
Jamboree Rd Loop On Ramp	Merge	27.1	C	27.3	C	40	0.4%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.6**	**E**	**37.6**	**E**	**0**	**0.0%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.2	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.4	C	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**31.0**	**F**	**31.3**	**F**	**50**	**0.6%**
Fairview Rd On Ramp	Merge	**34.3**	**F**	**34.6**	**F**	**60**	**0.6%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**39.0**	**F**	**39.4**	**F**	**60**	**0.6%**
Bristol St Off Ramp	Diverge	**27.4**	**F**	**27.6**	**F**	**60**	**0.5%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.5%**
Lane Drop	Basic	34.4	D	34.9	D	70	0.9%
On Ramp from SR-55 NB	Basic	**35.0**	**E**	**35.5**	**E**	**80**	**0.8%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**80**	**0.6%**

TABLE 8-21FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	19.3	B	18.9	B	70	1.1%
Jamboree Rd Direct On Ramp	Merge	17.4	B	17.6	B	80	1.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-22
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.5%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	10.9	A	40	1.5%
Baker St Off Ramp	Diverge	3.5	A	3.6	A	40	1.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.2	B	40	1.8%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	29.0	D	40	0.8%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.7	B	30	1.2%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**15.9**	**F**	**40**	**1.3%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**16.9**	**F**	**40**	**1.3%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.3**	**F**	**40**	**1.0%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**26.7**	**F**	**170**	**2.8%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.6**	**E**	**37.2**	**E**	**70**	**0.9%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**90**	**0.9%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.7	D	0	0.0%

TABLE 8-22
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Lane Drop	Basic	32.8	D	32.7	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.3	D	30.2	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.2	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.1	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.5	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-23
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.7	D	27.8	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.7	D	28.9	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.4	D	32.6	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.4	D	34.7	D	30	0.4%
Bristol St N Off Ramp	Diverge	**35.9**	**E**	**36.2**	**E**	**30**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**0.9%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**100**	**1.1%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**90**	**1.0%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.3	D	33.9	D	90	1.2%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.4	D	29.7	D	50	1.0%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	27.9	D	50	1.0%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.6%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	25.0	C	50	0.8%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.1	C	50	0.7%
Jamboree Rd Off to Lane Add	Basic	28.8	D	29.0	D	20	0.4%
University Dr Off Ramp	Basic	16.7	B	16.7	B	20	0.4%

TABLE 8-23
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	24.9	C	25.0	C	20	0.4%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-24
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.6**	**F**	**25.8**	**F**	**50**	**0.7%**
Jamboree Rd Off Ramp	Diverge	**18.4**	**F**	**18.5**	**F**	**50**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**23.9**	**F**	**24.1**	**F**	**50**	**0.7%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.2**	**F**	**40.9**	**F**	**60**	**0.7%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.4**	**F**	**26.5**	**F**	**0**	**0.0%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.1**	**F**	**31.2**	**F**	**0**	**0.0%**
On Ramp from SR-55 SB	Basic	**22.5**	**F**	**22.5**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.4**	**F**	**21.4**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.9	C	60	1.0%
Fairview Rd On Ramp	Merge	25.7	C	25.9	C	70	1.0%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.6	C	70	1.0%
Bristol St Off Ramp	Diverge	18.1	B	18.3	B	70	0.9%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.5	D	30.9	D	80	1.0%
Lane Drop	Basic	26.3	D	26.7	D	80	1.3%
On Ramp from SR-55 NB	Basic	26.5	D	26.9	D	90	1.1%

TABLE 8-24
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**90**	**0.8%**
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.3**	**E**	**45.5**	**E**	**80**	**0.7%**
Jamboree Rd Loop On Ramp	Merge	**22.4**	**F**	**22.3**	**F**	**80**	**1.2%**
Jamboree Rd Direct On Ramp	Merge	**22.7**	**F**	**23.3**	**F**	**100**	**1.3%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

8.3.3 IMPACTS

8.3.3.1 **Threshold T-1**

No impact

8.3.3.2 **Threshold T-2**

No impact

8.3.3.3 **Threshold T-3**

No impact

8.3.3.4 **Threshold T-4**

No Impact

8.3.3.5 **Threshold T-5**

No impact

8.3.3.6 **Threshold T-6**

No impact

8.3.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection to increase by 0.048 at an intersection which is projected to operate at LOS E prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

8.3.3.8 **Threshold T-8**

No impact

8.3.3.9 **Threshold T-9**

No impacts

8.3.3.10 **Threshold T-10**

No impact.

8.3.3.11 **Threshold T-11**

No impact.

8.3.3.12 **Threshold T-12**

No impact

8.3.3.13 **Threshold T-13**

The project results in an increase of over 2 percent on the following segment of the Northbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at this location:

- On Ramp from I-405 NB to MacArthur Blvd Off Ramp (PM)

8.3.3.14 **Threshold T-14**

No impact

8.3.3.15 **Threshold T-15**

No impact

8.4 2026 PLUS ALTERNATIVE B SCENARIO

8.4.1 DESCRIPTION

This scenario evaluates the traffic impacts associated with Alternative B based on an increase in MAP, and corresponding vehicle trips, from the existing MAP level to 15.0. Trip generation associated with this scenario is provided in Table 4-16.

8.4.2 RESULTS

Table 8-25 provides the LOS results for the application of the ICU methodology. As shown in the table, under this scenario Alternative B would result in significant impacts at Intersections 4 (MacArthur Blvd. at Michelson Drive), 15 (Campus Drive at Airport Way), 17 (Campus Drive at Bristol Street North, and 53 (Von Karman Avenue at Alton Parkway), during the PM peak hour.

TABLE 8-25
INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE B SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.66	B	0.70	C	0.04
		PM	0.80	C	0.85	D	0.05
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.69	B	0.71	C	0.02
		PM	0.67	B	0.69	B	0.02
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.63	B	0.63	B	0.00
		PM	0.68	B	0.70	B	0.02
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.77	C	0.83	D	0.06
		PM	0.98	E	**1.04**	**F**	0.06
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.60	A	0.61	B	0.01
		PM	0.82	D	0.85	D	0.03
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.425	A	0.436	A	0.011
		PM	0.565	A	0.571	A	0.006
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.84	D	0.85	D	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.93	E	0.93	E	0.00
		PM	0.78	C	0.79	C	0.01
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.97	E	0.99	E	0.02
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.63	B	0.64	B	0.01
		PM	0.64	B	0.65	B	0.01

TABLE 8-25
INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE B SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.700	B	0.716	C	0.016
		PM	0.739	C	0.749	C	0.010
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.577	A	0.579	A	0.002
		PM	0.525	A	0.527	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.686	B	0.691	B	0.005
		PM	0.670	B	0.679	B	0.009
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.59	A	0.62	B	0.03
		PM	0.70	B	0.74	C	0.04
15. Campus Dr at Airport Way[2]	Signal	AM	0.362	A	0.580	A	0.218
		PM	0.723	C	**0.922**	**E**	0.199
16. Campus Dr at Quail St[2]	Signal	AM	0.542	A	0.585	A	0.043
		PM	0.535	A	0.598	A	0.063
17. Campus Dr at Bristol St North[2]	Signal	AM	0.666	B	0.709	C	0.043
		PM	**1.009**	**F**	**1.081**	**F**	0.072
18. Campus Dr at Bristol St South[2]	Signal	AM	0.758	C	0.793	C	0.035
		PM	0.467	A	0.492	A	0.025
19. Birch St at Bristol St North[2]	Signal	AM	0.633	B	0.644	B	0.011
		PM	0.658	B	0.666	B	0.008
20. Birch St at Bristol St South[2]	Signal	AM	0.448	A	0.453	A	0.005
		PM	0.469	A	0.477	A	0.008
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.77	C	0.79	C	0.02
22. Red Hill Ave at Main St[1]	Signal	AM	0.74	C	0.76	C	0.02
		PM	0.75	C	0.76	C	0.01
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.53	A	0.54	A	0.01
		PM	0.57	A	0.58	A	0.01
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.58	A	0.59	A	0.01
		PM	0.59	A	0.61	B	0.02
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	**36.3**	**E**	**45.2**	**E**	N/A
		PM	28.1	D	33.8	D	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.425	A	0.431	A	0.006
		PM	0.597	A	0.607	B	0.010
27. Irvine Ave at University Dr[2]	Signal	AM	0.725	C	0.747	C	0.022
		PM	0.762	C	0.775	C	0.013
28. Irvine Ave at 22nd St[2]	Signal	AM	0.687	B	0.706	C	0.019
		PM	0.741	C	0.750	C	0.009
29. Irvine Ave at 20th St[2]	Signal	AM	0.525	A	0.534	A	0.009
		PM	0.662	B	0.681	B	0.019
30. Irvine Ave at 19th St[2]	Signal	AM	0.559	A	0.578	A	0.019
		PM	0.691	B	0.706	C	0.015
31. Irvine Ave at 17th St[2]	Signal	AM	0.622	B	0.631	B	0.009

TABLE 8-25
INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE B SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.769	C	0.778	C	0.009
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.28	A	0.29	A	0.01
		PM	0.61	B	0.62	B	0.01
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.49	A	0.50	A	0.01
		PM	0.42	A	0.43	A	0.01
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.46	A	0.48	A	0.02
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.85	D	0.86	D	0.01
		PM	0.52	A	0.53	A	0.01
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.578	A	0.584	A	0.006
		PM	0.744	C	0.759	C	0.015
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.619	B	0.619	B	0.000
		PM	0.569	A	0.575	A	0.006
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.428	A	0.431	A	0.003
		PM	0.430	A	0.434	A	0.004
39. Jamboree Rd at Birch St[2]	Signal	AM	0.550	A	0.550	A	0.000
		PM	0.546	A	0.546	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.461	A	0.464	A	0.003
		PM	0.544	A	0.546	A	0.002
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.579	A	0.587	A	0.008
		PM	0.619	B	0.627	B	0.008
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.499	A	0.501	A	0.002
		PM	0.512	A	0.515	A	0.003
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.872	D	0.874	D	0.002
		PM	0.763	C	0.765	C	0.002
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.614	B	0.619	B	0.005
		PM	0.609	B	0.613	B	0.004
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.775	C	0.781	C	0.006
		PM	0.867	D	0.873	D	0.006
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.60	B	0.60	B	0.00
		PM	0.71	C	0.72	C	0.01
47. Red Hill Ave at Baker St[3]	Signal	AM	0.47	A	0.47	A	0.00
		PM	0.66	B	0.67	B	0.01
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.78	C	0.02
		PM	0.66	B	0.67	B	0.01
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.55	A	0.57	A	0.02
		PM	0.92	E	0.92	E	0.00
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.87	D	0.88	D	0.01
		PM	0.90	D	0.91	E	0.01
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.48	A	0.49	A	0.01
		PM	0.77	C	0.78	C	0.01

TABLE 8-25
INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE B SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.83	D	0.84	D	0.01
		PM	**1.06**	**F**	**1.07**	**F**	0.01
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.83	D	0.84	D	0.01
		PM	0.99	E	**1.01**	**F**	0.02
54. Von Karman Ave at Main St[1]	Signal	AM	0.68	B	0.68	B	0.00
		PM	0.85	D	0.86	D	0.01
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.81	D	0.82	D	0.01
		PM	0.94	E	0.94	E	0.00
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.86	D	0.87	D	0.01
		PM	0.89	D	0.90	D	0.01
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.73	C	0.73	C	0.00
58. Jamboree Rd at Main St[1]	Signal	AM	0.80	C	0.80	D	0.00
		PM	0.89	D	0.90	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.87	D	0.88	D	0.01

Notes: Signalized intersections evaluated using ICU methodology.
1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 8-26 provides LOS results for the four intersections under the joint jurisdiction of Caltrans in this scenario. As shown in the table below, the overall intersection delay will improve at a few locations because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 8-26
CALTRANS INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE B

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	23.1	C	28.8	C
		PM	26.4	C	31.1	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.4	C	24.0	C
		PM	25.5	C	24.1	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	17.3	B	18.8	B
		PM	35.6	D	37.7	D
Jamboree Rd at I-405 SB Ramps	Signal	AM	**106.3**	**F**	**106.1**	**F**
		PM	30.7	C	30.7	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 8-27, 8-28, 8-29 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73 and I-405, respectively. Tables 8-30, 8-31, 8-32 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, the project would result in an increase of over 2 percent at the on-ramp from I-405 NB to MacArthur Boulevard off-ramp, and NB SR-73 on-ramp from NB SR-55, which are projected to operate at LOS F prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at these location.

TABLE 8-27
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.3%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	29.0	D	29.2	D	30	0.4%
Baker St Off Ramp	Diverge	21.7	C	21.9	C	30	0.4%
Baker St Off Ramp to SR-73 On Ramp	Basic	**38.0**	**F**	**38.4**	**F**	**30**	**0.5%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**30**	**0.3%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**45.0**	**F**	**-**	**F**	**20**	**0.3%**
Paularino Ave On Ramp	Merge	**-**	**F**	**-**	**F**	**30**	**0.4%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**-**	**F**	**-**	**F**	**30**	**0.4%**
On Ramp from I-405 SB	Basic	**-**	**F**	**-**	**F**	**30**	**0.3%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**170**	**1.3%**
Southbound SR-55							

TABLE 8-27
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**34.2**	**D**	**35.0**	**E**	**120**	**1.6%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**180**	**1.7%**
Off Ramp to I-405 NB	Diverge	28.8	D	28.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.7	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	28.0	C	0	0.0%
Lane Drop	Basic	27.7	D	27.4	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.5	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	20.9	C	60	1.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.7	C	60	1.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.6	D	60	0.9%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	20.4	C	50	1.0%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.8	C	50	1.0%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-28
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.5**	**E**	**40.9**	**E**	**30**	**0.5%**
MacArthur Blvd On Ramp	Basic	**36.8**	**E**	**37.1**	**E**	**40**	**0.5%**
Jamboree Rd On Ramp	Merge	35.0	D	**35.2**	**E**	**50**	**0.6%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.3**	**E**	**43.8**	**E**	**50**	**0.6%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**50**	**0.5%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**190**	**1.8%**
Off Ramp to SR-55 SB	Diverge	31.7	D	32.7	D	190	2.7%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**150**	**2.1%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.7	C	22.3	C	150	2.8%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**39.0**	**E**	**39.5**	**E**	**60**	**0.9%**
On Ramp from SR-55 NB	Merge	30.4	D	30.9	D	80	1.5%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.4	D	32.1	D	80	1.5%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**90**	**0.9%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.6	C	22.7	C	90	1.6%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	28.0	C	90	1.2%
Jamboree Rd Off to Lane Add	Basic	20.5	C	20.6	C	20	0.5%
University Dr Off Ramp	Basic	12.3	B	12.4	B	20	0.4%

TABLE 8-28
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	15.2	B	15.3	B	20	0.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-29
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**43.0**	**E**	**43.8**	**E**	**90**	**0.8%**
Jamboree Rd Off Ramp	Diverge	28.8	D	29.1	D	90	0.7%
Jamboree Rd Loop On Ramp	Merge	27.2	C	27.4	C	70	0.8%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**80**	**0.7%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.6**	**E**	**37.7**	**E**	**0**	**0.0%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.3	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.5	C	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**31.1**	**F**	**31.4**	**F**	**70**	**0.8%**
Fairview Rd On Ramp	Merge	**34.4**	**F**	**34.7**	**F**	**80**	**0.8%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**39.0**	**F**	**39.6**	**F**	**80**	**0.8%**
Bristol St Off Ramp	Diverge	**27.4**	**F**	**27.7**	**F**	**80**	**0.7%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**90**	**0.7%**
Lane Drop	Basic	34.5	D	35.1	E	90	1.2%
On Ramp from SR-55 NB	Basic	**35.2**	**E**	**35.8**	**E**	**100**	**1.0%**

TABLE 8-29
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS ALTERNATIVE B- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**0.7%**
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**90**	**0.7%**
Jamboree Rd Loop On Ramp	Merge	19.4	B	19.0	B	90	1.5%
Jamboree Rd Direct On Ramp	Merge	17.5	B	17.8	B	100	1.5%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-30
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.7%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	11.0	A	50	1.9%
Baker St Off Ramp	Diverge	3.5	A	3.7	A	50	1.6%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.2	B	50	2.3%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	29.1	D	50	1.1%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.8	B	40	1.6%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**16.0**	**F**	**50**	**1.6%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**17.0**	**F**	**50**	**1.6%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.4**	**F**	**50**	**1.3%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**27.3**	**F**	**250**	**4.1%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.7**	**E**	**37.5**	**E**	**100**	**1.3%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**140**	**1.3%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.7	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.7	D	30.6	D	0	0.0%
Lane Drop	Basic	32.9	D	32.6	D	0	0.0%

TABLE 8-30
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.3	D	30.3	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.1	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.0	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.5	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-31
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.8	D	28.0	D	20	0.4%
MacArthur Blvd On Ramp	Basic	28.8	D	29.0	D	30	0.4%
Jamboree Rd On Ramp	Merge	32.5	D	32.7	D	40	0.5%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.6	D	34.9	D	40	0.5%
Bristol St N Off Ramp	Diverge	**36.0**	**E**	**36.3**	**E**	**40**	**0.5%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**150**	**1.4%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**150**	**1.6%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**140**	**1.6%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.5	D	34.5	D	140	1.9%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	30	0.5%
On Ramp from SR-55 NB	Merge	29.4	D	29.9	D	70	1.4%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	28.0	D	70	1.4%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.9%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	25.0	C	70	1.2%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.1	C	70	1.0%
Jamboree Rd Off to Lane Add	Basic	28.9	D	29.1	D	20	0.4%
University Dr Off Ramp	Basic	16.7	B	16.8	B	20	0.4%

TABLE 8-31
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	25.0	C	25.1	C	20	0.4%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 8-32
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.8**	**F**	**26.1**	**F**	**80**	**1.0%**
Jamboree Rd Off Ramp	Diverge	**18.5**	**F**	**18.7**	**F**	**80**	**0.9%**
Jamboree Rd Loop On Ramp	Merge	**24.0**	**F**	**24.3**	**F**	**80**	**1.1%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.5**	**F**	**41.4**	**F**	**90**	**1.0%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.5**	**F**	**26.6**	**F**	**0**	**0.0%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.1**	**F**	**31.2**	**F**	**0**	**0.0%**
On Ramp from SR-55 SB	Basic	**22.6**	**F**	**22.6**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.5**	**F**	**21.5**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	20.0	C	80	1.3%
Fairview Rd On Ramp	Merge	25.7	C	25.4	C	90	1.3%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.4	C	23.7	C	90	1.3%
Bristol St Off Ramp	Diverge	18.1	B	18.4	B	90	1.1%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.5	D	31.0	D	100	1.2%
Lane Drop	Basic	26.4	D	26.9	D	100	1.6%
On Ramp from SR-55 NB	Basic	26.5	D	27.0	D	110	1.4%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**110**	**1.0%**

TABLE 8-32
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS ALTERNATIVE B- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.4**	**E**	**45.6**	**E**	**90**	**0.8%**
Jamboree Rd Loop On Ramp	Merge	**22.5**	**F**	**22.3**	**F**	**90**	**1.4%**
Jamboree Rd Direct On Ramp	Merge	**22.8**	**F**	**23.5**	**F**	**120**	**1.6%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

8.4.3 IMPACTS

8.4.3.1 **Threshold T-1**

No impact

8.4.3.2 **Threshold T-2**

The intersection of Macarthur Boulevard/Michelson Drive in the City of Irvine will degrade from LOS E to LOS F, with an increase in V/C ratio of 0.06. Since the increase in ICU is greater than 0.01 concurrent with this degradation in LOS, a significant impact occurs.

The intersection of Von Karman Avenue/Alton Parkway in the City of Irvine will degrade from LOS E to LOS F, with an increase in V/C ratio of 0.02. Since the increase in ICU is greater than 0.01 concurrent with this degradation in LOS, a significant impact occurs.

8.4.3.3 **Threshold T-3**

No impact

8.4.3.4 **Threshold T-4**

No Impact

8.4.3.5 **Threshold T-5**

The LOS at the intersection of Campus Drive and Airport Way in the City of Newport Beach would degrade to LOS E with the addition of project trips; therefore a significant impact occurs.

8.4.3.6 **Threshold T-6**

No impact.

8.4.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection to increase by 0.072 at an intersection which is projected to operate at LOS F prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

8.4.3.8 **Threshold T-8**

No impact

8.4.3.9 **Threshold T-9**

No impact

8.4.3.10 **Threshold T-10**

No impact

8.4.3.11 **Threshold T-11**

No impact

8.4.3.12 **Threshold T-12**

No impact

8.4.3.13 **Threshold T-13**

The project results in an increase of over 2 percent on the following segment of the Northbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic:

- On Ramp from I-405 NB to MacArthur Blvd Off Ramp (PM)

The project results in an increase of over 2 percent on the following segment of the Northbound SR-73, which is projected to operate at LOS F prior to the addition of project traffic:

- On Ramp from SR-55 NB (AM)

In both of the above instances, the project would result in a significant cumulative impact.

8.4.3.14 **Threshold T-14**

No impact

8.4.3.15 **Threshold T-15**

No impact

9.0 Alternative C

9.1 EXISTING PLUS ALTERNATIVE C SCENARIO

9.1.1 DESCRIPTION

For Alternative C, the addition of project traffic reflects the incremental MAP between the Proposed Project at 16.9 MAP and the existing MAP of 9.2. The trip generation associated with this increase in MAP is provided in Table 4-19.

9.1.2 RESULTS

As explained in Section 6.1.1, the Existing Plus Project analysis often results in either overstating or understating impacts, or both. Specific to Alternative C, the Existing Plus Project analysis both understates and overstates impacts. As shown below, under the analysis, Alternative C would result in significant impacts at two intersections and 11 Caltrans facilities. However, under the 2026 analysis, which also takes into account cumulative traffic growth and future road improvements, Alternative C would result in significant impacts at five intersections and eight Caltrans facilities. Thus, if used to measure significance, the existing plus project scenario would both understate and overstate project impacts. Therefore, it would be misleading to the public and decision makers to rely on this scenario for purposes of identifying project impacts and mitigation. As a result, this scenario is provided for disclosure, information, and comparison purposes only. Significant traffic impacts and recommended mitigation are assessed under the Year 2016, 2021, and 2026 cumulative conditions scenario because those scenarios accurately account for the long-range projected development of the proposed project within the context of an ever-changing traffic network and associated land uses.

Table 9-1 illustrates the intersection V/C ratio and corresponding incremental change, as well as LOS for each of the 59 study intersections under the existing plus Alternative C project scenario. As shown in this table, there are two locations which degrade from acceptable conditions to LOS E. The intersections of Campus Drive/Airport Way and Campus Drive/Bristol Street North are located in the City of Newport Beach and worsen from LOS B or D to LOS E with the addition of project trips.

TABLE 9-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS ALTERNATIVE C CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Plus Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.56	A	0.62	B	0.06
		PM	0.73	C	0.80	D	0.07
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.68	B	0.70	B	0.02
		PM	0.64	B	0.66	B	0.02
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.59	A	0.62	B	0.03
		PM	0.65	B	0.67	B	0.02
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.68	B	0.76	C	0.08
		PM	0.89	D	0.97	E	0.08
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.54	A	0.56	A	0.02
		PM	0.75	C	0.80	C	0.05
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.374	A	0.390	A	0.016
		PM	0.490	A	0.501	A	0.011
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.79	C	0.80	D	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.88	D	0.89	D	0.01
		PM	0.78	C	0.79	C	0.01
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.66	B	0.69	B	0.03
		PM	0.82	D	0.86	D	0.04
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.58	A	0.59	A	0.01
		PM	0.60	A	0.61	B	0.01
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.650	B	0.661	B	0.011
		PM	0.714	C	0.724	C	0.010
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.496	A	0.498	A	0.002
		PM	0.488	A	0.490	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.610	B	0.616	B	0.006
		PM	0.632	B	0.645	B	0.013
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.49	A	0.54	A	0.05
		PM	0.64	B	0.68	B	0.04
15. Campus Dr at Airport Way[2]	Signal	AM	0.338	A	0.618	B	0.280
		PM	**0.660**	**B**	**0.911**	**E**	**0.251**
16. Campus Dr at Quail St[2]	Signal	AM	0.484	A	0.550	A	0.066
		PM	0.463	A	0.567	A	0.104
17. Campus Dr at Bristol St North[2]	Signal	AM	0.596	A	0.652	B	0.056
		PM	**0.885**	**D**	**0.981**	**E**	**0.096**
18. Campus Dr at Bristol St South[2]	Signal	AM	0.689	B	0.738	C	0.049
		PM	0.439	A	0.503	A	0.064
19. Birch St at Bristol St North[2]	Signal	AM	0.581	A	0.595	A	0.014
		PM	0.581	A	0.596	A	0.015
20. Birch St at Bristol St South[2]	Signal	AM	0.400	A	0.408	A	0.008
		PM	0.434	A	0.450	A	0.016
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.61	B	0.63	B	0.02
		PM	0.71	C	0.74	C	0.03
22. Red Hill Ave at Main St[1]	Signal	AM	0.71	C	0.72	C	0.01

TABLE 9-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS ALTERNATIVE C CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Plus Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.70	C	0.72	C	0.02
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.50	A	0.51	A	0.01
		PM	0.47	A	0.49	A	0.02
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.50	A	0.52	A	0.02
		PM	0.53	A	0.56	A	0.03
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	18.7	C	22.6	C	N/A
		PM	19.4	C	24.9	C	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.369	A	0.384	A	0.015
		PM	0.573	A	0.592	A	0.019
27. Irvine Ave at University Dr[2]	Signal	AM	0.641	B	0.675	B	0.034
		PM	0.719	C	0.753	C	0.034
28. Irvine Ave at 22nd St[2]	Signal	AM	0.619	B	0.644	B	0.025
		PM	0.695	B	0.728	C	0.033
29. Irvine Ave at 20th St[2]	Signal	AM	0.485	A	0.516	A	0.031
		PM	0.624	B	0.656	B	0.032
30. Irvine Ave at 19th St[2]	Signal	AM	0.528	A	0.550	A	0.022
		PM	0.662	B	0.681	B	0.019
31. Irvine Ave at 17th St[2]	Signal	AM	0.540	A	0.556	A	0.016
		PM	0.709	C	0.722	C	0.013
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.22	A	0.23	A	0.01
		PM	0.56	A	0.58	A	0.02
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.44	A	0.46	A	0.02
		PM	0.36	A	0.39	A	0.03
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.32	A	0.33	A	0.01
		PM	0.43	A	0.45	A	0.02
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.82	D	0.84	D	0.02
		PM	0.50	A	0.52	A	0.02
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.531	A	0.550	A	0.019
		PM	0.681	B	0.697	B	0.016
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.576	A	0.588	A	0.012
		PM	0.543	A	0.558	A	0.015
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.397	A	0.402	A	0.005
		PM	0.413	A	0.420	A	0.007
39. Jamboree Rd at Birch St[2]	Signal	AM	0.488	A	0.505	A	0.017
		PM	0.494	A	0.502	A	0.008
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.441	A	0.449	A	0.008
		PM	0.522	A	0.533	A	0.011
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.535	A	0.560	A	0.025
		PM	0.558	A	0.571	A	0.013
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.470	A	0.480	A	0.010
		PM	0.498	A	0.505	A	0.007

TABLE 9-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS ALTERNATIVE C CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Plus Project		
			V/C	LOS	V/C	LOS	Change
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.830	D	0.834	D	0.004
		PM	0.707	C	0.723	C	0.016
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.594	A	0.600	A	0.006
		PM	0.590	A	0.597	A	0.007
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.764	C	0.772	C	0.008
		PM	0.841	D	0.852	D	0.011
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.54	A	0.55	A	0.01
		PM	0.65	B	0.67	B	0.02
47. Red Hill Ave at Baker St[3]	Signal	AM	0.42	A	0.44	A	0.02
		PM	0.61	B	0.63	B	0.02
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.78	C	0.02
		PM	0.62	B	0.63	B	0.01
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.88	D	0.89	D	0.01
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.79	C	0.80	C	0.01
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.45	A	0.46	A	0.01
		PM	0.74	C	0.76	C	0.02
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.70	C	0.71	C	0.01
		PM	0.89	D	0.90	D	0.01
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.76	C	0.78	C	0.02
		PM	0.880	D	0.90	D	0.02
54. Von Karman Ave at Main St[1]	Signal	AM	0.60	B	0.63	B	0.03
		PM	0.78	C	0.79	C	0.01
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.89	D	0.90	E	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.81	D	0.82	D	0.01
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.64	B	0.66	B	0.02
		PM	0.65	B	0.67	B	0.02
58. Jamboree Rd at Main St[1]	Signal	AM	0.77	C	0.77	C	0.00
		PM	0.85	D	0.86	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.65	B	0.68	B	0.03
		PM	0.82	D	0.84	D	0.02

Notes: Signalized intersections evaluated using ICU methodology.
1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

The LOS for each of the four intersections under the shared jurisdiction of Caltrans is provided in Table 9-2. As shown in the table below, the overall intersection delay will improve at a few locations because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 9-2
CALTRANS INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS PROPOSED ALTERNATIVE C CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.1	C	26.0	C
		PM	23.4	C	26.3	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	22.9	C	23.9	C
		PM	25.0	C	23.9	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	15.8	B	16.9	B
		PM	20.6	C	23.2	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**90.8**	**F**	**91.1**	**F**
		PM	30.7	C	30.9	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 9-3, 9-4, 9-5 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405 respectively. Tables 9-6, 9-7, 9-8 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, as shown on the tables, the project would result in an increase of over 2 percent either causing or worsening a deficient LOS at several locations; therefore, the project would result in a significant cumulative impact at the following locations:

- Northbound SR-55: Paularino Avenue On Ramp (PM)
- Northbound SR-55: Paularino Avenue On Ramp to I-405 SB On Ramp (PM)
- Northbound SR-55: On Ramp from I-405 NB to MacArthur Blvd Off Ramp (PM)
- Southbound SR-55: MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp (AM)
- Southbound SR-55: MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB (AM)
- Northbound SR-73: Bristol St N On Ramp to SR-55 N Off Ramp (AM)
- Northbound SR-73: On Ramp from SR-55 NB (AM)
- Northbound SR-73: Off-Ramp to SR-55 SB (PM)
- Northbound SR-73: On Ramp From SR-55 NB (PM)
- Southbound I-405: Jamboree Loop On Ramp (PM)
- Southbound I-405: Jamboree Direct On Ramp (PM)

TABLE 9-3
FREEWAY MAINLINE AND RAMPS OPERATIONS:
SR-55 EXISTING PLUS PROPOSED ALTERNATIVE C -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.3%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	28.8	D	28.9	D	30	0.4%
Baker St Off Ramp	Diverge	21.6	C	21.7	C	30	0.4%
Baker St Off Ramp to SR-73 On Ramp	Basic	**24.9**	**F**	**37.8**	**F**	**30**	**0.7%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**30**	**0.4%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**28.3**	**F**	**44.7**	**F**	**20**	**0.4%**
Paularino Ave On Ramp	Merge	29.6	D	**-**	**F**	**30**	**0.6%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	34.3	D	**-**	**F**	**30**	**0.6%**

TABLE 9-3
FREEWAY MAINLINE AND RAMPS OPERATIONS:
SR-55 EXISTING PLUS PROPOSED ALTERNATIVE C -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 SB	Basic	-	**F**	-	**F**	**30**	**0.4%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	-	**F**	-	**F**	**220**	**2.1%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.1	D	**35.3**	**E**	**160**	**2.1%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**230**	**2.1%**
Off Ramp to I-405 NB	Diverge	29.1	D	28.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	23.2	C	22.7	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.3	D	27.9	C	0	0.0%
Lane Drop	Basic	28.3	D	27.4	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	17.0	B	16.6	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.9	C	21.0	C	80	1.6%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	20.0	C	19.8	C	80	1.6%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	30.0	D	29.7	D	80	1.2%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	16.5	B	20.4	C	70	1.7%
Newport Blvd S/Fair Dr On Ramp	Merge	17.7	B	20.9	C	70	1.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-4
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROPOSED ALTERNATIVE C -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.3**	**E**	**40.9**	**E**	**40**	**0.6%**
MacArthur Blvd On Ramp	Basic	**36.6**	**E**	**37.1**	**E**	**50**	**0.6%**
Jamboree Rd On Ramp	Merge	**34.8**	**D**	**35.1**	**E**	**60**	**0.7%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**23.7**	**C**	**43.7**	**E**	**60**	**1.0%**
Bristol St N Off Ramp	Diverge	**30.5**	**D**	**-**	**F**	**60**	**0.9%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	32.1	D	**-**	**F**	**240**	**2.8%**
Off Ramp to SR-55 SB	Diverge	24.1	C	32.9	D	240	4.6%
On Ramp from SR-55 NB	Weave	33.1	D	**-**	**F**	**180**	**3.4%**
Bear St Off Ramp to Bear St On Ramp	Basic	13.8	B	22.5	C	180	5.3%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.7**	**E**	**39.3**	**E**	**80**	**1.2%**
On Ramp from SR-55 NB	Merge	29.9	D	30.8	D	100	1.9%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	26.2	D	31.9	D	100	2.1%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**110**	**1.2%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	29.4	D	22.5	C	110	1.6%
Jamboree Rd/Bristol St S Off Ramp	Diverge	31.1	D	27.9	C	110	1.3%
Jamboree Rd Off to Lane Add	Basic	26.3	D	20.4	C	20	0.4%

TABLE 9-3
FREEWAY MAINLINE AND RAMPS OPERATIONS:
SR-55 EXISTING PLUS PROPOSED ALTERNATIVE C -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Dr Off Ramp	Basic	15.5	B	12.3	B	20	0.4%
University Off to Jamboree Rd On Ramp	Basic	15.6	B	15.2	B	20	0.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-5
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROPOSED ALTERNATIVE C -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.7**	**E**	**43.8**	**E**	**120**	**1.1%**
Jamboree Rd Off Ramp	Diverge	28.7	D	29.1	D	120	1.0%
Jamboree Rd Loop On Ramp	Merge	27.3	C	27.4	C	90	1.0%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**0.8%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**40.8**	**E**	**37.7**	**E**	**0**	**0.0%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	31.6	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	34.8	D	32.3	D	0	0.0%
On Ramp from SR-55 SB	Basic	27.0	D	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	22.9	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**30.8**	**F**	**31.3**	**F**	**90**	**1.0%**
Fairview Rd On Ramp	Merge	**34.1**	**F**	**34.5**	**F**	**100**	**1.0%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**38.6**	**F**	**39.3**	**F**	**100**	**1.0%**
Bristol St Off Ramp	Diverge	**27.2**	**F**	**27.5**	**F**	**100**	**0.9%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**110**	**0.8%**
Lane Drop	Basic	**36.9**	**E**	34.8	D	110	1.4%
On Ramp from SR-55 NB	Basic	**37.0**	**E**	**35.3**	**E**	**120**	**1.2%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**120**	**0.8%**

TABLE 9-5
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROPOSED ALTERNATIVE C -AM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**0.8%**
Jamboree Rd Loop On Ramp	Merge	18.6	B	19.4	B	100	1.7%
Jamboree Rd Direct On Ramp	Merge	17.2	B	17.5	B	110	1.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-6
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
EXISTING PLUS PROPOSED ALTERNATIVE C -PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	-	**F**	-	**F**	**60**	**0.8%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.7	A	10.9	A	60	2.3%
Baker St Off Ramp	Diverge	3.4	A	3.6	A	60	2.0%
Baker St Off Ramp to SR-73 On Ramp	Basic	14.3	B	12.2	B	60	2.3%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	32.8	D	29.0	D	60	1.2%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	16.0	B	13.8	B	50	1.7%
Paularino Ave On Ramp	Merge	**14.9**	**F**	**15.9**	**F**	**60**	**2.1%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**15.9**	**F**	**16.9**	**F**	**60**	**2.1%**
On Ramp from I-405 SB	Basic	**15.5**	**F**	**16.3**	**F**	**60**	**1.6%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**23.0**	**F**	**27.7**	**F**	**320**	**5.7%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.5**	**E**	**37.7**	**E**	**140**	**1.8%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**180**	**1.7%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.7	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.5	D	0	0.0%
Lane Drop	Basic	33.0	D	32.6	D	0	0.0%

TABLE 9-6
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
EXISTING PLUS PROPOSED ALTERNATIVE C -PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.6	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.2	D	30.2	D	30	0.4%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.0	D	30	0.4%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.3%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	23.5	C	27.0	D	20	0.4%
Newport Blvd S/Fair Dr On Ramp	Merge	22.9	C	25.5	C	40	0.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-7
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROPOSED ALTERNATIVE C PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.6	D	27.8	D	20	0.4%
MacArthur Blvd On Ramp	Basic	28.6	D	28.8	D	30	0.4%
Jamboree Rd On Ramp	Merge	32.3	D	32.4	D	40	0.5%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	23.3	C	34.5	D	40	0.7%
Bristol St N Off Ramp	Diverge	27.9	C	**36.1**	**E**	**40**	**0.6%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**180**	**1.9%**
Off Ramp to SR-55 SB	Diverge	**35.5**	**E**	**-**	**F**	**180**	**2.3%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**160**	**2.3%**
Bear St Off Ramp to Bear St On Ramp	Basic	24.3	C	34.3	D	160	2.7%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.5	D	32.7	D	30	0.5%
On Ramp from SR-55 NB	Merge	29.5	D	29.8	D	80	1.6%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	21.4	C	28.0	D	80	2.0%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**80**	**1.1%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	20.6	C	24.9	C	80	1.6%
Jamboree Rd/Bristol St S Off Ramp	Diverge	21.4	C	25.0	C	80	1.3%
Jamboree Rd Off to Lane Add	Basic	31.2	D	28.8	D	10	0.2%
University Dr Off Ramp	Basic	17.7	B	16.7	B	10	0.2%

TABLE 9-7
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS PROPOSED ALTERNATIVE C PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	23.6	C	24.9	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-8
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROPOSED ALTERNATIVE C -PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.5**	**F**	**25.9**	**F**	**110**	**1.5%**
Jamboree Rd Off Ramp	Diverge	**18.2**	**F**	**18.6**	**F**	**110**	**1.3%**
Jamboree Rd Loop On Ramp	Merge	**24.2**	**F**	**23.9**	**F**	**110**	**1.5%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**41.6**	**F**	**41.0**	**F**	**120**	**1.3%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**43.2**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**33.9**	**F**	**26.2**	**F**	**10**	**0.1%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**36.1**	**F**	**31.0**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**27.2**	**F**	**22.3**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**23.9**	**F**	**21.3**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	20.0	C	110	1.8%
Fairview Rd On Ramp	Merge	25.6	C	25.3	C	120	1.7%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.7	C	120	1.7%
Bristol St Off Ramp	Diverge	18.0	B	18.4	B	120	1.5%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	29.4	D	30.9	D	130	1.6%
Lane Drop	Basic	25.3	C	26.8	D	130	2.1%
On Ramp from SR-55 NB	Basic	25.6	C	26.9	D	140	1.8%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**43.6**	**E**	**-**	**F**	**140**	**1.3%**

TABLE 9-8
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS PROPOSED ALTERNATIVE C -PM

Location	Type	Existing		Existing Plus Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.8**	**E**	**45.4**	**E**	**120**	**1.1%**
Jamboree Rd Loop On Ramp	Merge	**21.3**	**F**	**22.2**	**F**	**120**	**2.0%**
Jamboree Rd Direct On Ramp	Merge	**21.4**	**F**	**23.1**	**F**	**150**	**2.1%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

9.1.3 IMPACTS

9.1.3.1 **Threshold T-1**

No impact

9.1.3.2 **Threshold T-2**

No impact.

9.1.3.3 **Threshold T-3**

No impact

9.1.3.4 **Threshold T-4**

No Impact.

9.1.3.5 **Threshold T-5**

The intersection of Campus Drive/Bristol Street North in the City of Newport Beach worsens from LOS D to LOS E with the addition of project trips. As this intersection is outside of the John Wayne Airport Area, this degradation of LOS is a significant impact.

The LOS at the intersection of Campus Drive and Airport Way in the City of Newport Beach would degrade to LOS E with the addition of project trips; therefore a significant impact occurs.

9.1.3.6 **Threshold T-6**

No impact

9.1.3.7 **Threshold T-7**

No impact

9.1.3.8 **Threshold T-8**

No impact

9.1.3.9 **Threshold T-9**

No impacts

9.1.3.10 **Threshold T-10**

No impact.

9.1.3.11 **Threshold T-11**

No impact

9.1.3.12 **Threshold T-12**

The addition of project traffic causes the following segment on the Southbound SR-55 to degrade from LOS D to LOS F:

- MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp (AM)

The addition of project traffic causes the two following roadway segments on the Northbound SR-73 to degrade from LOS D to LOS F:

- Bristol St N On Ramp to SR-55 N Off Ramp (AM)
- On Ramp from SR-55 NB (AM)

In all instances, the Project's contribution to the increase in traffic is greater than two percent; therefore the project would result in a significant impact at these locations.

9.1.3.13 **Threshold T-13**

The project results in an increase of over 2 percent on the following segments of the Northbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic:

- Paularino Avenue On Ramp (PM)

- Paularino Avenue On Ramp to I-405 SB On Ramp (PM)
- On Ramp from I-405 NB to MacArthur Blvd Off Ramp (PM)

The project results in an increase of over 2 percent on the following segment of the Southbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic:

- MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB (AM)

The project results in an increase of over 2 percent on the following segments of the Northbound SR-73, which is projected to operate at LOS F prior to the addition of project traffic:

- Off-Ramp to SR-55 SB (PM)
- On Ramp From SR-55 NB (PM)

The project results in an increase of over 2 percent on the following segments of the Southbound I-405 which is projected to operate at LOS F prior to the addition of project traffic:

- Jamboree Loop On Ramp (PM)
- Jamboree Direct On Ramp (PM)

In all instances, the project's contribution to the increase in traffic is greater than two percent; therefore, the project would result in a significant cumulative impact at these locations.

9.1.3.14 **Threshold T-14**

No impact

9.1.3.15 **Threshold T-15**

No impact

9.2 2016 PLUS ALTERNATIVE C SCENARIO

9.2.1 DESCRIPTION

This scenario evaluates the traffic impacts associated with Alternative C, which anticipates a MAP level of 16.9 in 2016. The anticipated increase in MAP is shown in Table 4-17.

9.2.2 RESULTS

Table 9-9 provides the LOS results associated with the 59 study intersections evaluated using the ICU methodology. As shown in the table, under this scenario, Alternative C would result in significant impacts at Intersections 4 (MacArthur Blvd. at Michelson Drive), 15 (Campus Drive at Airport Way), and 17 Campus Drive at Bristol Street North) all during the PM peak hour.

TABLE 9-9
INTERSECTION LEVEL OF SERVICE:
2016 PLUS ALTERNATIVE C

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.59	A	0.64	B	0.05
		PM	0.75	C	0.82	D	0.07
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.68	B	0.70	B	0.02
		PM	0.65	B	0.67	B	0.02
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.60	B	0.62	B	0.02
		PM	0.66	B	0.68	B	0.02
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.71	C	0.78	C	0.07
		PM	0.91	E	**1.00**	**F**	0.09
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.57	A	0.58	A	0.01
		PM	0.77	C	0.81	D	0.04
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.391	A	0.405	A	0.014
		PM	0.517	A	0.525	A	0.008
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.69	B	0.70	B	0.01
		PM	0.81	D	0.82	D	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.89	D	0.90	D	0.01
		PM	0.78	C	0.79	C	0.01
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.69	B	0.71	C	0.02
		PM	0.86	D	0.89	D	0.03
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.60	A	0.60	B	0.00
		PM	0.61	B	0.62	B	0.01
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.666	B	0.683	B	0.017
		PM	0.722	C	0.735	C	0.013
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.517	A	0.519	A	0.002

TABLE 9-9
INTERSECTION LEVEL OF SERVICE:
2016 PLUS ALTERNATIVE C

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.498	A	0.500	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.629	B	0.635	B	0.006
		PM	0.641	B	0.656	B	0.015
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.52	A	0.57	A	0.05
		PM	0.66	B	0.70	B	0.04
15. Campus Dr at Airport Way[2]	Signal	AM	0.346	A	0.625	B	0.279
		PM	0.682	B	**0.936**	**E**	0.254
16. Campus Dr at Quail St[2]	Signal	AM	0.506	A	0.563	A	0.057
		PM	0.498	A	0.581	A	0.083
17. Campus Dr at Bristol St North[2]	Signal	AM	0.614	B	0.669	B	0.055
		PM	**0.916**	**E**	**1.011**	**F**	0.095
18. Campus Dr at Bristol St South[2]	Signal	AM	0.710	C	0.753	C	0.043
		PM	0.448	A	0.511	A	0.063
19. Birch St at Bristol St North[2]	Signal	AM	0.596	A	0.608	B	0.012
		PM	0.604	B	0.615	B	0.011
20. Birch St at Bristol St South[2]	Signal	AM	0.416	A	0.419	A	0.003
		PM	0.445	A	0.457	A	0.012
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.63	B	0.65	B	0.02
		PM	0.73	C	0.75	C	0.02
22. Red Hill Ave at Main St[1]	Signal	AM	0.72	C	0.73	C	0.01
		PM	0.72	C	0.73	C	0.01
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.52	A	0.52	A	0.00
		PM	0.49	A	0.51	A	0.02
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.53	A	0.54	A	0.01
		PM	0.56	A	0.58	A	0.02
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	23.4	C	28.1	D	N/A
		PM	23.5	C	27.5	D	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.381	A	0.400	A	0.019
		PM	0.584	A	0.597	A	0.013
27. Irvine Ave at University Dr[2]	Signal	AM	0.669	B	0.700	B	0.031
		PM	0.737	C	0.756	C	0.019
28. Irvine Ave at 22nd St[2]	Signal	AM	0.647	B	0.663	B	0.016
		PM	0.722	C	0.734	C	0.012
29. Irvine Ave at 20th St[2]	Signal	AM	0.512	A	0.528	A	0.016
		PM	0.653	B	0.672	B	0.019
30. Irvine Ave at 19th St[2]	Signal	AM	0.550	A	0.569	A	0.019
		PM	0.678	B	0.691	B	0.013
31. Irvine Ave at 17th St[2]	Signal	AM	0.572	A	0.578	A	0.006
		PM	0.725	C	0.741	C	0.016
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.23	A	0.23	A	0.00
		PM	0.58	A	0.60	A	0.02

TABLE 9-9
INTERSECTION LEVEL OF SERVICE:
2016 PLUS ALTERNATIVE C

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.46	A	0.47	A	0.01
		PM	0.39	A	0.41	A	0.02
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.44	A	0.46	A	0.02
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.83	D	0.85	D	0.02
		PM	0.51	A	0.53	A	0.02
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.553	A	0.559	A	0.006
		PM	0.706	C	0.719	C	0.013
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.594	A	0.594	A	0.000
		PM	0.554	A	0.563	A	0.009
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.405	A	0.409	A	0.004
		PM	0.419	A	0.425	A	0.006
39. Jamboree Rd at Birch St[2]	Signal	AM	0.519	A	0.519	A	0.000
		PM	0.508	A	0.508	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.449	A	0.453	A	0.004
		PM	0.531	A	0.537	A	0.006
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.561	A	0.569	A	0.008
		PM	0.580	A	0.591	A	0.011
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.482	A	0.486	A	0.004
		PM	0.506	A	0.510	A	0.004
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.844	D	0.846	D	0.002
		PM	0.729	C	0.731	C	0.002
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.602	B	0.606	B	0.004
		PM	0.600	B	0.603	B	0.003
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.770	C	0.777	C	0.007
		PM	0.853	D	0.858	D	0.005
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.56	A	0.56	A	0.00
		PM	0.68	B	0.68	B	0.00
47. Red Hill Ave at Baker St[3]	Signal	AM	0.45	A	0.45	A	0.00
		PM	0.63	B	0.64	B	0.01
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.79	C	0.03
		PM	0.63	B	0.64	B	0.01
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.53	A	0.54	A	0.01
		PM	0.89	D	0.90	D	0.01
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.82	D	0.82	D	0.00
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.46	A	0.47	A	0.01
		PM	0.76	C	0.76	C	0.00
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.74	C	0.75	C	0.01
		PM	0.93	E	0.93	E	0.00
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.78	C	0.79	C	0.01

TABLE 9-9
INTERSECTION LEVEL OF SERVICE:
2016 PLUS ALTERNATIVE C

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.92	E	0.94	E	0.02
54. Von Karman Ave at Main St[1]	Signal	AM	0.63	B	0.64	B	0.01
		PM	0.81	D	0.81	D	0.00
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.76	C	0.76	C	0.00
		PM	0.91	E	0.91	E	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.80	D	0.81	D	0.01
		PM	0.83	D	0.84	D	0.01
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.66	B	0.67	B	0.01
		PM	0.68	B	0.69	B	0.01
58. Jamboree Rd at Main St[1]	Signal	AM	0.78	C	0.78	C	0.00
		PM	0.86	D	0.87	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.84	D	0.85	D	0.01

Notes: Signalized intersections evaluated using ICU methodology.

1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 9-10 provides the LOS results for the four intersections under the joint jurisdiction of Caltrans. As shown in the table below, the overall intersection delay will improve at a few locations because the project increases traffic to certain movements which operate under minimal delay. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 9-10
CALTRANS INTERSECTION LEVEL OF SERVICE:
2016 PLUS ALTERNATIVE C

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.4	C	27.5	C
		PM	24.0	C	27.3	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.0	C	24.1	C
		PM	25.2	C	23.9	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	16.4	B	17.3	B
		PM	24.2	C	27.8	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**94.7**	**F**	**94.1**	**F**
		PM	31.0	C	31.0	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 9-11, 9-12, 9-13 provide freeway mainline and ramp LOS results for the AM Peak Hour for the SR-55, SR-73 and I-405, respectively. Tables 9-14, 9-15, 9-16 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the table, most of these facilities would operate at deficient levels of service without project traffic. However, the project would result in an increase of over 2 percent either causing or worsening a deficient LOS at several locations; therefore, the project would result in a significant cumulative impact at the following locations:

- Northbound SR-55: Paularino Avenue On Ramp (PM)
- Northbound SR-55: Paularino Avenue On Ramp to I-405 SB On Ramp (PM)
- Northbound SR-55: On Ramp from I-405 NB to MacArthur Blvd Off Ramp (PM)
- Southbound SR-55: MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB (AM)
- Southbound SR-55: MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp (AM)
- Southbound I-405: Jamboree Direct On Ramp (PM)

TABLE 9-11
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.3%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	28.9	D	29.0	D	30	0.4%
Baker St Off Ramp	Diverge	21.6	C	21.7	C	30	0.4%
Baker St Off Ramp to SR-73 On Ramp	Basic	**37.7**	**F**	**38.0**	**F**	**30**	**0.5%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**30**	**0.3%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**44.5**	**F**	**44.8**	**F**	**20**	**0.3%**
Paularino Ave On Ramp	Merge	**-**	**F**	**-**	**F**	**30**	**0.4%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**-**	**F**	**-**	**F**	**30**	**0.4%**

TABLE 9-11
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 ALTERNATIVE C- AM

Location	Type	Without Project		With Project				
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase	
On Ramp from I-405 SB	Basic	-	**F**	**44**	-	**F**	**30**	**0.3%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	-	**F**	**64**	-	**F**	**220**	**1.7%**
Southbound SR-55								
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**34.2**	**D**	**64**	**35.3**	**E**	**160**	**2.1%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	**64**	-	**F**	**230**	**2.1%**
Off Ramp to I-405 NB	Diverge	28.8	D	65	28.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	65	22.6	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	65	27.9	C	0	0.0%
Lane Drop	Basic	27.7	D	65	27.3	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	**62**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	52	16.5	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	52	21.0	C	80	1.7%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	52	19.7	C	80	1.7%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	52	29.7	D	80	1.2%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	65	20.4	C	70	1.4%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	65	20.8	C	70	1.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-12
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.4**	**E**	**40.9**	**E**	**40**	**0.6%**
MacArthur Blvd On Ramp	Basic	**36.7**	**E**	**37.1**	**E**	**50**	**0.6%**
Jamboree Rd On Ramp	Merge	**34.9**	**D**	**35.2**	**E**	**60**	**0.7%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.2**	**E**	**43.8**	**E**	**60**	**0.7%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**60**	**0.6%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**240**	**2.3%**
Off Ramp to SR-55 SB	Diverge	31.7	D	33.0	D	240	3.4%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**180**	**2.5%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.8	C	22.5	C	180	3.4%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.8**	**E**	**39.5**	**E**	**80**	**1.2%**
On Ramp from SR-55 NB	Merge	30.3	D	30.9	D	100	1.9%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.2	D	32.1	D	100	1.9%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**110**	**1.1%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.5	C	22.6	C	110	2.0%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	27.9	C	110	1.5%
Jamboree Rd Off to Lane Add	Basic	20.4	C	20.5	C	20	0.5%
University Dr Off Ramp	Basic	12.3	B	12.3	B	20	0.4%

TABLE 9-11
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	15.1	B	15.2	B	20	0.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-13
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.8**	**E**	**43.9**	**E**	**120**	**1.1%**
Jamboree Rd Off Ramp	Diverge	28.8	D	29.2	D	120	1.0%
Jamboree Rd Loop On Ramp	Merge	27.1	C	27.4	C	90	1.0%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**0.8%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.5**	**E**	**37.6**	**E**	**0**	**0.0%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.2	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.4	C	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	-	F	-	F	0	0.0%
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**30.9**	**F**	**31.4**	**F**	**90**	**1.0%**
Fairview Rd On Ramp	Merge	**34.2**	**F**	**34.6**	**F**	**100**	**1.0%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**38.8**	**F**	**39.5**	**F**	**100**	**1.0%**
Bristol St Off Ramp	Diverge	**27.3**	**F**	**27.6**	**F**	**100**	**0.9%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**110**	**0.9%**
Lane Drop	Basic	34.2	D	35.0	D	110	1.5%
On Ramp from SR-55 NB	Basic	**34.8**	**D**	**35.5**	**E**	**120**	**1.3%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**120**	**0.9%**

TABLE 9-13
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**0.8%**
Jamboree Rd Loop On Ramp	Merge	19.2	B	19.5	B	100	1.6%
Jamboree Rd Direct On Ramp	Merge	17.3	B	17.6	B	110	1.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-14
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.8%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	11.0	A	60	2.3%
Baker St Off Ramp	Diverge	3.5	A	3.7	A	60	2.0%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.3	B	60	2.8%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	29.2	D	60	1.3%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.8	B	50	2.0%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**16.0**	**F**	**60**	**2.0%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**17.0**	**F**	**60**	**2.0%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.4**	**F**	**60**	**1.5%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**27.9**	**F**	**320**	**5.2%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.6**	**E**	**37.7**	**E**	**140**	**1.8%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**180**	**1.7%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.7	C	0	0.0%

TABLE 9-14
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Paularino Ave Off Ramp	Diverge	30.6	D	30.6	D	0	0.0%
Lane Drop	Basic	32.8	D	32.5	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.6	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.2	D	30.3	D	30	0.4%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.1	D	30	0.4%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	-	**F**	-	**F**	**30**	**0.3%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.0	D	20	0.3%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.6	C	40	0.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-15
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.7	D	27.8	D	20	0.4%
MacArthur Blvd On Ramp	Basic	28.7	D	28.9	D	30	0.4%
Jamboree Rd On Ramp	Merge	32.4	D	32.6	D	40	0.5%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.4	D	34.7	D	40	0.5%
Bristol St N Off Ramp	Diverge	35.9	E	36.2	E	40	0.5%
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	-	**F**	-	**F**	**180**	**1.7%**
Off Ramp to SR-55 SB	Diverge	-	**F**	-	**F**	**180**	**1.9%**
On Ramp from SR-55 NB	Weave	-	**F**	-	**F**	**160**	**1.9%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.2	D	34.4	D	160	2.1%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	30	0.5%
On Ramp from SR-55 NB	Merge	29.4	D	30.0	D	80	1.6%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	28.1	D	80	1.6%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	-	**F**	-	**F**	**80**	**1.0%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	24.9	C	80	1.3%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.0	C	80	1.2%
Jamboree Rd Off to Lane Add	Basic	28.8	D	28.9	D	10	0.2%
University Dr Off Ramp	Basic	16.7	B	16.7	B	10	0.2%

TABLE 9-15
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	24.9	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-16
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.6**	**F**	**26.0**	**F**	**110**	**1.5%**
Jamboree Rd Off Ramp	Diverge	**18.3**	**F**	**18.6**	**F**	**110**	**1.3%**
Jamboree Rd Loop On Ramp	Merge	**23.8**	**F**	**24.1**	**F**	**110**	**1.5%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.1**	**F**	**41.3**	**F**	**120**	**1.3%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.4**	**F**	**26.5**	**F**	**10**	**0.2%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.0**	**F**	**31.2**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**22.5**	**F**	**22.5**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.4**	**F**	**21.4**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	20.0	C	110	1.8%
Fairview Rd On Ramp	Merge	25.6	C	25.4	C	120	1.7%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.7	C	120	1.7%
Bristol St Off Ramp	Diverge	18.1	B	18.4	B	120	1.5%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.4	D	31.1	D	130	1.6%
Lane Drop	Basic	26.3	D	26.9	D	130	2.1%
On Ramp from SR-55 NB	Basic	26.4	D	27.0	D	140	1.8%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**140**	**1.3%**

TABLE 9-16
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.2**	**E**	**45.6**	**E**	**120**	**1.1%**
Jamboree Rd Loop On Ramp	Merge	**22.4**	**F**	**22.3**	**F**	**120**	**1.8%**
Jamboree Rd Direct On Ramp	Merge	**22.6**	**F**	**23.3**	**F**	**150**	**2.0%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

9.2.3 IMPACTS

9.2.3.1 **Threshold T-1**

No impact

9.2.3.2 **Threshold T-2**

The intersection of Macarthur Boulevard/Michelson Drive in the City of Irvine will degrade from LOS E to LOS F, with an increase in V/C ratio of 0.09. Since the increase in ICU is greater than 0.01 concurrent with this degradation in LOS, a significant impact occurs.

9.2.3.3 **Threshold T-3**

No impact

9.2.3.4 **Threshold T-4**

No impact

9.2.3.5 **Threshold T-5**

The LOS at the intersection of Campus Drive and Airport Way in the City of Newport Beach would degrade to LOS E with the addition of project trips; therefore a significant impact occurs.

9.2.3.6 **Threshold T-6**

No impact

9.2.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection to increase by 0.095 at an intersection which is projected to operate at LOS E prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

9.2.3.8 **Threshold T-8**

No impact

9.2.3.9 **Threshold T-9**

No impact

9.2.3.10 **Threshold T-10**

No impact

9.2.3.11 **Threshold T-11**

No impact.

9.2.3.12 **Threshold T-12**

The addition of project traffic causes the following segment on the Southbound SR-55 to degrade from LOS D to LOS F:

- MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp (AM)

As the increase in traffic attributable to the project is greater than 2 percent, a significant impact occurs.

9.2.3.13 **Threshold T-13**

The project results in an increase of over 2 percent on the following segments of the Northbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic:

- Paularino Avenue On Ramp (PM)
- Paularino Avenue On Ramp to I-405 SB On Ramp (PM)
- On Ramp from I-405 NB to MacArthur Blvd Off Ramp (PM)

The project results in an increase of over 2 percent on the following segment of the Southbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic:

- MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB (AM)

The project results in an increase of over 2 percent on the following segments of the Southbound I-405 which is projected to operate at LOS F prior to the addition of project traffic:

- Jamboree Direct On Ramp (PM)

In all instances, the project would add traffic greater than two percent to locations operating at less than acceptable conditions prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at these locations.

9.2.3.14 **Threshold T-14**

No impact.

9.2.3.15 **Threshold T-15**

No impact.

9.3 2021 PLUS ALTERNATIVE C SCENARIO

9.3.1 DESCRIPTION

This scenario analyzes the traffic impacts associated with Alternative C in 2021, which includes a change in MAP from the existing 9.2 level to 16.9. Trip generation for this alternative is shown in Table 4-18.

9.3.2 RESULTS

Table 9-17 provides the LOS results for the 59 intersections evaluated using the ICU methodology. As shown in the table, under this scenario Alternative C would result in significant impacts at Intersections 4 (MacArthur Blvd at Michelson Drive), 15 (Campus Drive at Airport Way) and 17 (Campus Drive at Bristol Street North), all during the PM peak hour.

TABLE 9-17
INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE C SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change

TABLE 9-17
INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE C SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.62	B	0.68	B	0.06
		PM	0.77	C	0.84	D	0.07
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.69	B	0.71	C	0.02
		PM	0.66	B	0.69	B	0.03
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.62	B	0.63	B	0.01
		PM	0.67	B	0.69	B	0.02
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.74	C	0.81	D	0.07
		PM	0.94	E	**1.03**	**F**	0.09
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.58	A	0.60	A	0.02
		PM	0.80	C	0.84	D	0.04
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.408	A	0.423	A	0.015
		PM	0.541	A	0.549	A	0.008
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.70	B	0.71	C	0.01
		PM	0.82	D	0.83	D	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.91	E	0.92	E	0.01
		PM	0.78	C	0.79	C	0.01
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.73	C	0.76	C	0.03
		PM	0.91	E	0.95	E	0.04
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.63	B	0.64	B	0.01
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.684	B	0.702	C	0.018
		PM	0.730	C	0.742	C	0.012
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.546	A	0.548	A	0.002
		PM	0.510	A	0.512	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.659	B	0.665	B	0.006
		PM	0.655	B	0.668	B	0.013
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.55	A	0.59	A	0.04
		PM	0.68	B	0.72	C	0.04
15. Campus Dr at Airport Way[2]	Signal	AM	0.354	A	0.633	B	0.279
		PM	0.703	C	**0.957**	**E**	0.254
16. Campus Dr at Quail St[2]	Signal	AM	0.525	A	0.579	A	0.054
		PM	0.517	A	0.600	B	0.083
17. Campus Dr at Bristol St North[2]	Signal	AM	0.641	B	0.694	B	0.053
		PM	**0.964**	**E**	**1.059**	**F**	0.095
18. Campus Dr at Bristol St South[2]	Signal	AM	0.734	C	0.778	C	0.044
		PM	0.456	A	0.519	A	0.063
19. Birch St at Bristol St North[2]	Signal	AM	0.612	B	0.627	B	0.015
		PM	0.632	B	0.642	B	0.010
20. Birch St at Bristol St South[2]	Signal	AM	0.431	A	0.436	A	0.005
		PM	0.458	A	0.471	A	0.013

TABLE 9-17
INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE C SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.65	B	0.67	B	0.02
		PM	0.75	C	0.77	C	0.02
22. Red Hill Ave at Main St[1]	Signal	AM	0.73	C	0.75	C	0.02
		PM	0.73	C	0.75	C	0.02
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.53	A	0.56	A	0.03
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.55	A	0.57	A	0.02
		PM	0.58	A	0.59	A	0.01
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	26.8	D	33.3	D	N/A
		PM	25.4	D	30.1	D	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.390	A	0.419	A	0.029
		PM	0.591	A	0.603	B	0.012
27. Irvine Ave at University Dr[2]	Signal	AM	0.697	B	0.728	C	0.031
		PM	0.750	C	0.769	C	0.019
28. Irvine Ave at 22nd St[2]	Signal	AM	0.666	B	0.681	B	0.015
		PM	0.725	C	0.737	C	0.012
29. Irvine Ave at 20th St[2]	Signal	AM	0.519	A	0.531	A	0.012
		PM	0.656	B	0.678	B	0.022
30. Irvine Ave at 19th St[2]	Signal	AM	0.556	A	0.575	A	0.019
		PM	0.688	B	0.700	B	0.012
31. Irvine Ave at 17th St[2]	Signal	AM	0.597	A	0.603	B	0.006
		PM	0.744	C	0.750	C	0.006
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.24	A	0.26	A	0.02
		PM	0.59	A	0.62	B	0.03
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.47	A	0.48	A	0.01
		PM	0.40	A	0.43	A	0.03
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.45	A	0.47	A	0.02
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.84	D	0.85	D	0.01
		PM	0.52	A	0.53	A	0.01
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.569	A	0.575	A	0.006
		PM	0.725	C	0.738	C	0.013
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.606	B	0.606	B	0.000
		PM	0.563	A	0.571	A	0.008
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.416	A	0.420	A	0.004
		PM	0.425	A	0.430	A	0.005
39. Jamboree Rd at Birch St[2]	Signal	AM	0.531	A	0.531	A	0.000
		PM	0.530	A	0.530	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.455	A	0.459	A	0.004
		PM	0.537	A	0.542	A	0.005

TABLE 9-17
INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE C SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.567	A	0.575	A	0.008
		PM	0.602	B	0.610	B	0.008
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.491	A	0.495	A	0.004
		PM	0.510	A	0.512	A	0.002
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.858	D	0.863	D	0.005
		PM	0.744	C	0.748	C	0.004
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.608	B	0.612	B	0.004
		PM	0.605	B	0.608	B	0.003
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.770	C	0.778	C	0.008
		PM	0.861	D	0.866	D	0.005
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.58	A	0.58	A	0.00
		PM	0.69	B	0.70	B	0.01
47. Red Hill Ave at Baker St[3]	Signal	AM	0.46	A	0.46	A	0.00
		PM	0.65	B	0.66	B	0.01
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.79	C	0.03
		PM	0.64	B	0.65	B	0.01
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.54	A	0.55	A	0.01
		PM	0.90	E	0.91	E	0.01
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.73	C	0.73	C	0.00
		PM	0.86	D	0.86	D	0.00
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.47	A	0.48	A	0.01
		PM	0.77	C	0.77	C	0.00
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.98	E	0.98	E	0.00
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.81	D	0.82	D	0.01
		PM	0.96	E	0.97	E	0.01
54. Von Karman Ave at Main St[1]	Signal	AM	0.65	B	0.66	B	0.01
		PM	0.83	D	0.83	D	0.00
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.92	E	0.93	E	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.84	D	0.85	D	0.01
		PM	0.86	D	0.87	D	0.01
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.69	B	0.70	B	0.01
		PM	0.70	C	0.71	C	0.01
58. Jamboree Rd at Main St[1]	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.87	D	0.88	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.86	D	0.87	D	0.01

Notes: Signalized intersections evaluated using ICU methodology.
1. Based on City of Irvine intersection analysis methodology.

TABLE 9-17
INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE C SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change

2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 9-18 provides the LOS results for the four intersections under the joint jurisdiction of Caltrans. As shown in the table below, the overall intersection delay will improve at a few locations because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 9-18
CALTRANS INTERSECTION LEVEL OF SERVICE:
2021 ALTERNATIVE C

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.7	C	29.7	C
		PM	24.9	C	29.8	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.3	C	24.4	C
		PM	25.4	C	23.8	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	16.8	B	18.3	B
		PM	30.3	C	33.1	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**99.7**	**F**	**99.2**	**F**
		PM	30.8	C	30.8	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 9-19, 9-20, 9-21 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405, respectively. Tables 9-22, 9-23, 9-24 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the table, most of these facilities would operate at deficient levels of service without project traffic. However, the project would result in an increase of over 2 percent either causing or worsening a deficient LOS at several locations; therefore, the project would result in a significant cumulative impact at the following locations:

- Northbound SR-55: Paularino Avenue On Ramp (PM)
- Northbound SR-55: Paularino Avenue On Ramp to I-405 SB On Ramp (PM)
- Northbound SR-55: On Ramp from I-405 NB to MacArthur Blvd Off Ramp (PM)
- Southbound SR-55: MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp (AM)
- Southbound SR-55: MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB (AM)
- Northbound SR-73: Bristol St. N On Ramp to SR-55 N Off Ramp (AM)
- Northbound SR-73: On Ramp From SR-55 NB (AM)
- Southbound I-405: Jamboree Direct On Ramp (PM)

TABLE 9-19
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.3%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	29.0	D	29.1	D	30	0.4%
Baker St Off Ramp	Diverge	21.7	C	21.8	C	30	0.4%
Baker St Off Ramp to SR-73 On Ramp	Basic	**37.9**	**F**	**38.3**	**F**	**30**	**0.5%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**30**	**0.3%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**44.8**	**F**	**-**	**F**	**20**	**0.3%**
Paularino Ave On Ramp	Merge	**-**	**F**	**-**	**F**	**30**	**0.4%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**-**	**F**	**-**	**F**	**30**	**0.4%**

TABLE 9-19
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 SB	Basic	-	**F**	-	**F**	**30**	**0.3%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	-	**F**	-	**F**	**220**	**1.7%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.2	D	**35.3**	**E**	**160**	**2.1%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**230**	**2.1%**
Off Ramp to I-405 NB	Diverge	28.8	D	28.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.6	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	27.9	C	0	0.0%
Lane Drop	Basic	27.7	D	27.3	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.5	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	21.0	C	80	1.7%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.7	C	80	1.7%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.7	D	80	1.2%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	20.4	C	70	1.4%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.8	C	70	1.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-20
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.4**	**E**	**40.9**	**E**	**40**	**0.6%**
MacArthur Blvd On Ramp	Basic	**36.7**	**E**	**37.1**	**E**	**50**	**0.6%**
Jamboree Rd On Ramp	Merge	**34.9**	**D**	**35.2**	**E**	**60**	**0.7%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.2**	**E**	**43.8**	**E**	**60**	**0.7%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**60**	**0.6%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**240**	**2.3%**
Off Ramp to SR-55 SB	Diverge	31.7	D	32.9	D	240	3.4%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**180**	**2.5%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.7	C	22.4	C	180	3.4%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.9**	**E**	**39.6**	**E**	**80**	**1.2%**
On Ramp from SR-55 NB	Merge	30.4	D	30.9	D	100	1.9%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.3	D	32.2	D	100	1.9%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**110**	**1.1%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.6	C	22.7	C	110	2.0%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	28.0	C	110	1.5%
Jamboree Rd Off to Lane Add	Basic	20.5	C	20.6	C	20	0.5%
University Dr Off Ramp	Basic	12.3	B	12.4	B	20	0.4%

TABLE 9-20
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	15.2	B	15.3	B	20	0.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-21
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.9**	**E**	**44.0**	**E**	**120**	**1.1%**
Jamboree Rd Off Ramp	Diverge	28.8	D	29.3	D	120	1.0%
Jamboree Rd Loop On Ramp	Merge	27.1	C	27.4	C	90	1.0%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**0.8%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.6**	**E**	**37.6**	**E**	**0**	**0.0%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.2	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.4	C	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**31.0**	**F**	**31.5**	**F**	**90**	**1.0%**
Fairview Rd On Ramp	Merge	**34.3**	**F**	**34.7**	**F**	**100**	**1.0%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**39.0**	**F**	**39.7**	**F**	**100**	**1.0%**
Bristol St Off Ramp	Diverge	**27.4**	**F**	**27.7**	**F**	**100**	**0.9%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**110**	**0.9%**
Lane Drop	Basic	34.4	D	**35.2**	**E**	**110**	**1.4%**
On Ramp from SR-55 NB	Basic	**35.0**	**E**	**35.8**	**E**	**120**	**1.2%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**120**	**0.9%**

TABLE 9-21
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**0.8%**
Jamboree Rd Loop On Ramp	Merge	19.3	B	18.9	B	100	1.6%
Jamboree Rd Direct On Ramp	Merge	17.4	B	17.7	B	110	1.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-22
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.8%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	11.0	A	60	2.3%
Baker St Off Ramp	Diverge	3.5	A	3.7	A	60	2.0%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.3	B	60	2.8%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	29.2	D	60	1.3%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.8	B	50	2.0%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**16.0**	**F**	**60**	**2.0%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**17.0**	**F**	**60**	**2.0%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.4**	**F**	**60**	**1.5%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**27.9**	**F**	**320**	**5.2%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.6**	**E**	**37.7**	**E**	**140**	**1.8%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**180**	**1.7%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.7	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.6	D	0	0.0%

TABLE 9-22
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Lane Drop	Basic	32.8	D	32.5	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.3	D	30.3	D	30	0.4%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.1	D	30	0.4%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.3%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.0	D	20	0.3%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.6	C	40	0.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-23
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.7	D	27.9	D	20	0.4%
MacArthur Blvd On Ramp	Basic	28.7	D	28.9	D	30	0.4%
Jamboree Rd On Ramp	Merge	32.4	D	32.6	D	40	0.5%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.4	D	34.7	D	40	0.5%
Bristol St N Off Ramp	Diverge	**35.9**	**E**	**36.2**	**E**	**40**	**0.5%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**180**	**1.7%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**180**	**1.9%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**160**	**1.9%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.3	D	34.4	D	160	2.1%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	30	0.5%
On Ramp from SR-55 NB	Merge	29.4	D	30.0	D	80	1.6%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	28.1	D	80	1.6%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**80**	**1.0%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	24.9	C	80	1.3%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.0	C	80	1.2%
Jamboree Rd Off to Lane Add	Basic	28.8	D	28.9	D	10	0.2%
University Dr Off Ramp	Basic	16.7	B	16.7	B	10	0.2%

TABLE 9-23
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	24.9	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-24
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.6**	**F**	**26.1**	**F**	**110**	**1.4%**
Jamboree Rd Off Ramp	Diverge	**18.4**	**F**	**18.7**	**F**	**110**	**1.3%**
Jamboree Rd Loop On Ramp	Merge	**23.9**	**F**	**24.2**	**F**	**110**	**1.5%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.2**	**F**	**41.4**	**F**	**120**	**1.3%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.4**	**F**	**26.5**	**F**	**10**	**0.2%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.1**	**F**	**31.2**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**22.5**	**F**	**22.5**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.4**	**F**	**21.4**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	20.1	C	110	1.8%
Fairview Rd On Ramp	Merge	25.7	C	25.4	C	120	1.7%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.8	C	120	1.7%
Bristol St Off Ramp	Diverge	18.1	B	18.4	B	120	1.5%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.5	D	31.1	D	130	1.6%
Lane Drop	Basic	26.3	D	27.0	D	130	2.1%
On Ramp from SR-55 NB	Basic	26.5	D	27.1	D	140	1.8%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**140**	**1.3%**

TABLE 9-24
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.3**	**E**	**45.7**	**E**	**120**	**1.1%**
Jamboree Rd Loop On Ramp	Merge	**22.4**	**F**	**22.3**	**F**	**120**	**1.8%**
Jamboree Rd Direct On Ramp	Merge	**22.7**	**F**	**23.5**	**F**	**150**	**2.0%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

9.3.3 IMPACTS

9.3.3.1 **Threshold T-1**

No impact

9.3.3.2 **Threshold T-2**

The intersection of Macarthur Boulevard/Michelson Drive in the City of Irvine will degrade from LOS E to LOS F, with an increase in V/C ratio of 0.09. Since the increase in ICU is greater than 0.01 concurrent with this degradation in LOS, a significant impact occurs.

9.3.3.3 **Threshold T-3**

No impact

9.3.3.4 **Threshold T-4**

No impact

9.3.3.5 **Threshold T-5**

The LOS at the intersection of Campus Drive and Airport Way in the City of Newport Beach would degrade to LOS E with the addition of project trips; therefore a significant impact occurs.

9.3.3.6 **Threshold T-6**

No impact

9.3.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection to increase by 0.095 at an intersection which is projected to operate at LOS E prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

9.3.3.8 **Threshold T-8**

No impact

9.3.3.9 **Threshold T-9**

No impact

9.3.3.10 **Threshold T-10**

No impact.

9.3.3.11 **Threshold T-11**

No impact

9.3.3.12 **Threshold T-12**

The addition of project traffic causes the following segment on the Southbound SR-55 to degrade from LOS D to LOS F:

- MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp (AM)

The Project's contribution to the increase in traffic is greater than two percent; therefore the project would result in a significant impact at this location.

9.3.3.13 **Threshold T-13**

The project results in an increase of over 2 percent on the following segments of the Northbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic:

- Paularino Avenue On Ramp (PM)
- Paularino Avenue On Ramp to I-405 SB On Ramp (PM)
- On Ramp from I-405 NB to MacArthur Blvd Off Ramp (PM)

The project results in an increase of over 2 percent on the following segment of the Southbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic:

- MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB (AM)

The project results in an increase of over 2 percent on the following segments of the Northbound SR-73, which is projected to operate at LOS F prior to the addition of project traffic:

- Bristol St. N On Ramp to SR-55 N Off Ramp (AM)
- On Ramp From SR-55 NB (AM)

The project results in an increase of over 2 percent on the following segments of the Southbound I-405 which is projected to operate at LOS F prior to the addition of project traffic:

- Jamboree Direct On Ramp (PM)

In all instances, the project would add greater than two percent of traffic to facilities already operating at less than acceptable conditions prior to the addition of project traffic and, therefore, the project would result in significant cumulative impacts at these locations.

9.3.3.14 **Threshold T-14**

No impact

9.3.3.15 **Threshold T-15**

No impact

9.4 2026 PLUS ALTERNATIVE C SCENARIO

9.4.1 DESCRIPTION

This scenario analyzes the traffic impacts associated with Alternative C in 2026, which anticipates an increase in MAP from existing levels to 16.9. Trip generation associated with this alternative is provide in Table 4-19.

9.4.2 RESULTS

LOS results for the 59 intersections evaluated using the ICU methodology is provided in Table 9-25. As shown in the table, under this scenario Alternative C would result in significant impacts at Intersections 4 (MacArthur Blvd. at Michelson Drive), 15 (Campus Drive at Airport Way), 17 (Campus Drive at Bristol Street North), 25 (Santa Ana Avenue at Del Mar Avenue), and 53 (Von Karman Avenue at Alton Parkway), during the PM peak hour.

TABLE 9-25
INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE C SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.66	B	0.72	C	0.06
		PM	0.80	C	0.87	D	0.07
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.69	B	0.71	C	0.02
		PM	0.67	B	0.70	C	0.03
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.63	B	0.64	B	0.01
		PM	0.68	B	0.70	C	0.02
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.77	C	0.84	D	0.07
		PM	0.98	E	**1.07**	**F**	0.09
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.60	A	0.62	B	0.02
		PM	0.82	D	0.86	D	0.04
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.425	A	0.438	A	0.013
		PM	0.565	A	0.572	A	0.007
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.84	D	0.85	D	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.93	E	0.93	E	0.00
		PM	0.78	C	0.79	C	0.01
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.78	C	0.80	D	0.02
		PM	0.97	E	1.00	E	0.03
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.63	B	0.64	B	0.01
		PM	0.64	B	0.65	B	0.01

TABLE 9-25
INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE C SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.700	B	0.718	C	0.018
		PM	0.739	C	0.749	C	0.010
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.577	A	0.579	A	0.002
		PM	0.525	A	0.527	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.686	B	0.692	B	0.006
		PM	0.670	B	0.682	B	0.012
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.59	A	0.62	B	0.03
		PM	0.70	B	0.75	C	0.05
15. Campus Dr at Airport Way[2]	Signal	AM	0.362	A	0.642	B	0.280
		PM	0.723	C	**0.982**	**E**	0.259
16. Campus Dr at Quail St[2]	Signal	AM	0.542	A	0.598	A	0.056
		PM	0.535	A	0.619	B	0.084
17. Campus Dr at Bristol St North[2]	Signal	AM	0.666	B	0.721	C	0.055
		PM	**1.009**	**F**	**1.105**	**F**	0.096
18. Campus Dr at Bristol St South[2]	Signal	AM	0.758	C	0.801	D	0.043
		PM	0.467	A	0.530	A	0.063
19. Birch St at Bristol St North[2]	Signal	AM	0.633	B	0.646	B	0.013
		PM	0.658	B	0.668	B	0.010
20. Birch St at Bristol St South[2]	Signal	AM	0.448	A	0.453	A	0.005
		PM	0.469	A	0.481	A	0.012
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.68	B	0.70	B	0.02
		PM	0.77	C	0.79	C	0.02
22. Red Hill Ave at Main St[1]	Signal	AM	0.74	C	0.77	C	0.03
		PM	0.75	C	0.76	C	0.01
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.53	A	0.54	A	0.01
		PM	0.57	A	0.59	A	0.02
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.58	A	0.59	A	0.01
		PM	0.59	A	0.61	B	0.02
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	**36.3**	**E**	**48.3**	**E**	N/A
		PM	28.1	D	**35.0**	**E**	N/A
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.425	A	0.440	A	0.015
		PM	0.597	A	0.609	B	0.012
27. Irvine Ave at University Dr[2]	Signal	AM	0.725	C	0.756	C	0.031
		PM	0.762	C	0.778	C	0.016
28. Irvine Ave at 22nd St[2]	Signal	AM	0.687	B	0.706	C	0.019
		PM	0.741	C	0.753	C	0.012
29. Irvine Ave at 20th St[2]	Signal	AM	0.525	A	0.537	A	0.012
		PM	0.662	B	0.681	B	0.019
30. Irvine Ave at 19th St[2]	Signal	AM	0.559	A	0.581	A	0.022
		PM	0.691	B	0.706	C	0.015
31. Irvine Ave at 17th St[2]	Signal	AM	0.622	B	0.631	B	0.009
		PM	0.769	C	0.781	C	0.012

TABLE 9-25
INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE C SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.28	A	0.29	A	0.01
		PM	0.61	B	0.63	B	0.02
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.49	A	0.50	A	0.01
		PM	0.42	A	0.44	A	0.02
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.46	A	0.48	A	0.02
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.85	D	0.86	D	0.01
		PM	0.52	A	0.53	A	0.01
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.578	A	0.587	A	0.009
		PM	0.744	C	0.759	C	0.015
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.619	B	0.619	B	0.000
		PM	0.569	A	0.577	A	0.008
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.428	A	0.431	A	0.003
		PM	0.430	A	0.436	A	0.006
39. Jamboree Rd at Birch St[2]	Signal	AM	0.550	A	0.550	A	0.000
		PM	0.546	A	0.546	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.461	A	0.466	A	0.005
		PM	0.544	A	0.548	A	0.004
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.579	A	0.587	A	0.008
		PM	0.619	B	0.627	B	0.008
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.499	A	0.501	A	0.002
		PM	0.512	A	0.515	A	0.003
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.872	D	0.874	D	0.002
		PM	0.763	C	0.765	C	0.002
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.614	B	0.619	B	0.005
		PM	0.609	B	0.613	B	0.004
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.775	C	0.783	C	0.008
		PM	0.867	D	0.873	D	0.006
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.60	B	0.60	B	0.00
		PM	0.71	C	0.72	C	0.01
47. Red Hill Ave at Baker St[3]	Signal	AM	0.47	A	0.47	A	0.00
		PM	0.66	B	0.67	B	0.01
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.79	C	0.03
		PM	0.66	B	0.67	B	0.01
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.55	A	0.57	A	0.02
		PM	0.92	E	0.92	E	0.00
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.87	D	0.88	D	0.01
		PM	0.90	D	0.91	E	0.01
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.48	A	0.49	A	0.01
		PM	0.77	C	0.78	C	0.01

TABLE 9-25
INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE C SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.83	D	0.84	D	0.01
		PM	**1.06**	**F**	**1.07**	**F**	0.01
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.83	D	0.84	D	0.01
		PM	0.99	E	**1.01**	**F**	0.02
54. Von Karman Ave at Main St[1]	Signal	AM	0.68	B	0.68	B	0.00
		PM	0.85	D	0.86	D	0.01
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.81	D	0.82	D	0.01
		PM	0.94	E	0.95	E	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.86	D	0.87	D	0.01
		PM	0.89	D	0.90	D	0.01
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.73	C	0.74	C	0.01
58. Jamboree Rd at Main St[1]	Signal	AM	0.80	C	0.80	D	0.00
		PM	0.89	D	0.90	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.87	D	0.88	D	0.01

Notes: Signalized intersections evaluated using ICU methodology.

1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 9-26 provides the LOS results for the four intersections under the joint jurisdiction of Caltrans. As shown in the table below, the overall intersection delay will improve at a few locations because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 9-26
CALTRANS INTERSECTION LEVEL OF SERVICE:
2026 ALTERNATIVE C

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	23.1	C	32.3	C
		PM	26.4	C	33.0	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.4	C	24.6	C
		PM	25.5	C	23.9	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	17.3	B	18.7	B
		PM	35.6	D	38.3	D
Jamboree Rd at I-405 SB Ramps	Signal	**AM**	**106.3**	**F**	**106.0**	**F**
		PM	30.7	C	30.7	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 9-27, 9-28, 9-29 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405, respectively. Tables 9-30, 9-31, 9-32 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, the project would result in an increase of over 2 percent either causing or worsening a deficient LOS at several locations; therefore, the project would result in a significant cumulative impact at the following locations:

- Southbound SR-55: MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp (AM)
- Northbound SR-55: Paularino Avenue On Ramp (PM)
- Northbound SR-55: Paularino Avenue On Ramp to I-405 SB On Ramp (PM)
- Northbound SR-55: On Ramp from I-405 NB to MacArthur Blvd Off Ramp (PM)
- Southbound SR-55: MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB (AM)
- Northbound SR-73: Bristol St. N On Ramp to SR-55 N Off Ramp (AM)
- Northbound SR-73: On Ramp From SR-55 NB (AM)
- Southbound I-405: Jamboree Direct On Ramp (PM)

TABLE 9-27
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	-	**F**	-	**F**	**30**	**0.3%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	29.0	D	29.2	D	30	0.4%
Baker St Off Ramp	Diverge	21.7	C	21.9	C	30	0.4%
Baker St Off Ramp to SR-73 On Ramp	Basic	**38.0**	**F**	**38.4**	**F**	**30**	**0.5%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**30**	**0.3%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**45.0**	**F**	-	**F**	**20**	**0.3%**
Paularino Ave On Ramp	Merge	-	**F**	-	**F**	**30**	**0.4%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	-	**F**	-	**F**	**30**	**0.4%**
On Ramp from I-405 SB	Basic	-	**F**	-	**F**	**30**	**0.3%**

TABLE 9-27
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	-	**F**	-	**F**	**220**	**1.7%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.2	D	**35.3**	**E**	**160**	**2.1%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**230**	**2.1%**
Off Ramp to I-405 NB	Diverge	28.8	D	28.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.6	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	27.9	C	0	0.0%
Lane Drop	Basic	27.7	D	27.3	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.5	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	21.0	C	80	1.7%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.7	C	80	1.7%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.7	D	80	1.2%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	20.4	C	70	1.4%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.8	C	70	1.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-20
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.5**	**E**	**41.0**	**E**	**40**	**0.6%**
MacArthur Blvd On Ramp	Basic	**36.8**	**E**	**37.2**	**E**	**50**	**0.6%**
Jamboree Rd On Ramp	Merge	35.0	D	**35.2**	**E**	**60**	**0.7%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.3**	**E**	**44.0**	**E**	**60**	**0.7%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**60**	**0.6%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**240**	**2.3%**
Off Ramp to SR-55 SB	Diverge	31.7	D	33.0	D	240	3.4%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**180**	**2.5%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.7	C	22.4	C	180	3.4%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**39.0**	**E**	**39.7**	**E**	**80**	**1.2%**
On Ramp from SR-55 NB	Merge	30.4	D	31.0	D	100	1.8%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.4	D	32.3	D	100	1.8%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**110**	**1.1%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.6	C	22.7	C	110	2.0%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	28.0	C	110	1.5%
Jamboree Rd Off to Lane Add	Basic	20.5	C	20.6	C	20	0.5%
University Dr Off Ramp	Basic	12.3	B	12.4	B	20	0.4%

TABLE 9-20
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	15.2	B	15.3	B	20	0.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-21
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**43.0**	**E**	**44.0**	**E**	**120**	**1.1%**
Jamboree Rd Off Ramp	Diverge	28.8	D	29.3	D	120	1.0%
Jamboree Rd Loop On Ramp	Merge	27.2	C	27.5	C	90	1.0%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**0.8%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.6**	**E**	**37.7**	**E**	**0**	**0.0%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.3	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.5	C	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**31.1**	**F**	**31.5**	**F**	**90**	**1.0%**
Fairview Rd On Ramp	Merge	**34.4**	**F**	**34.8**	**F**	**100**	**1.0%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**39.0**	**F**	**39.8**	**F**	**100**	**1.0%**
Bristol St Off Ramp	Diverge	**27.4**	**F**	**27.7**	**F**	**100**	**0.9%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**110**	**0.9%**
Lane Drop	Basic	**34.5**	**D**	**35.3**	**E**	**110**	**1.4%**
On Ramp from SR-55 NB	Basic	**35.2**	**E**	**35.9**	**E**	**120**	**1.2%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**120**	**0.9%**

TABLE 9-21
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS ALTERNATIVE C- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**100**	**0.8%**
Jamboree Rd Loop On Ramp	Merge	19.4	B	19.0	B	100	1.6%
Jamboree Rd Direct On Ramp	Merge	17.5	B	17.8	B	110	1.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-22
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.8%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	11.0	A	60	2.3%
Baker St Off Ramp	Diverge	3.5	A	3.7	A	60	2.0%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.3	B	60	2.8%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	29.2	D	60	1.3%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.8	B	50	2.0%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**16.0**	**F**	**60**	**2.0%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**17.0**	**F**	**60**	**2.0%**
On Ramp from I-405 SB	Basic	16.2	F	16.4	F	60	1.5%
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**27.9**	**F**	**320**	**5.2%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.7**	**E**	**37.8**	**E**	**140**	**1.8%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**180**	**1.7%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.7	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.7	D	30.6	D	0	0.0%
Lane Drop	Basic	32.9	D	32.6	D	0	0.0%

TABLE 9-22
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.3	D	30.3	D	30	0.4%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.1	D	30	0.4%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.3%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.0	D	20	0.3%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.6	C	40	0.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-23
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.8	D	28.0	D	20	0.4%
MacArthur Blvd On Ramp	Basic	28.8	D	29.0	D	30	0.4%
Jamboree Rd On Ramp	Merge	32.5	D	32.7	D	40	0.5%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.6	D	34.9	D	40	0.5%
Bristol St N Off Ramp	Diverge	**36.0**	**E**	**36.3**	**E**	**40**	**0.5%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**180**	**1.6%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**180**	**1.9%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**160**	**1.8%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.5	D	34.7	D	160	2.1%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	30	0.5%
On Ramp from SR-55 NB	Merge	29.4	D	30.0	D	80	1.6%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	28.1	D	80	1.6%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**80**	**1.0%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	25.0	C	80	1.3%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.1	C	80	1.1%
Jamboree Rd Off to Lane Add	Basic	28.9	D	29.0	D	10	0.2%
University Dr Off Ramp	Basic	16.7	B	16.7	B	10	0.2%

TABLE 9-23
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	25.0	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 9-24
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.8**	**F**	**26.2**	**F**	**110**	**1.4%**
Jamboree Rd Off Ramp	Diverge	**18.5**	**F**	**18.8**	**F**	**110**	**1.3%**
Jamboree Rd Loop On Ramp	Merge	**24.0**	**F**	**24.4**	**F**	**110**	**1.5%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.5**	**F**	**41.7**	**F**	**120**	**1.3%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.5**	**F**	**26.6**	**F**	**10**	**0.2%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.1**	**F**	**31.3**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**22.6**	**F**	**22.6**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.5**	**F**	**21.5**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	20.1	C	110	1.8%
Fairview Rd On Ramp	Merge	25.7	C	25.4	C	120	1.7%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.4	C	23.8	C	120	1.7%
Bristol St Off Ramp	Diverge	18.1	B	18.5	B	120	1.5%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.5	D	31.2	D	130	1.6%
Lane Drop	Basic	26.4	D	27.0	D	130	2.1%
On Ramp from SR-55 NB	Basic	26.5	D	27.1	D	140	1.8%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**140**	**1.3%**

TABLE 9-24
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS ALTERNATIVE C- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.4**	**E**	**45.7**	**E**	**120**	**1.1%**
Jamboree Rd Loop On Ramp	Merge	**22.5**	**F**	**22.4**	**F**	**120**	**1.8%**
Jamboree Rd Direct On Ramp	Merge	**22.8**	**F**	**23.6**	**F**	**150**	**2.0%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

9.4.3 IMPACTS

9.4.3.1 **Threshold T-1**

No impact.

9.4.3.2 **Threshold T-2**

The intersection of Macarthur Boulevard/Michelson Drive in the City of Irvine will degrade from LOS E to LOS F, with an increase in V/C ratio of 0.09. Since the increase in ICU is greater than 0.01 concurrent with this degradation in LOS, a significant impact occurs.

The intersection of Von Karman Avenue/Alton Parkway in the City of Irvine will degrade from LOS E to LOS F, with an increase in V/C ratio of 0.02. Since the increase in ICU is greater than 0.01 concurrent with this degradation in LOS, a significant impact occurs.

9.4.3.3 **Threshold T-3**

No impact.

9.4.3.4 **Threshold T-4**

No impact.

9.4.3.5 **Threshold T-5**

The LOS at the intersection of Campus Drive and Airport Way in the City of Newport Beach would degrade to LOS E with the addition of project trips; therefore a significant impact occurs.

9.4.3.6 **Threshold T-6**

No impact

9.4.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection in the City of Newport Beach to increase by 0.096 at an intersection which is projected to operate at LOS F prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

9.4.3.8 **Threshold T-8**

No impact

9.4.3.9 **Threshold T-9**

The addition of project traffic causes the intersection of Santa Ana Avenue/Del Mar Avenue to operate at LOS E during the PM Peak Hour. As this LOS result exceeds the LOS D threshold, a significant impact occurs in the City of Costa Mesa.

9.4.3.10 **Threshold T-10**

No impact

9.4.3.11 **Threshold T-11**

No impact.

9.4.3.12 **Threshold T-12**

The addition of project traffic causes the following segment on the Southbound SR-55 to degrade from LOS D to LOS F:

- MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp (AM)

In the above instance, the Project's contribution to the increase is traffic is greater than two percent; therefore, the project would result in a significant impact at this location.

9.4.3.13 **Threshold T-13**

The project results in an increase of over 2 percent on the following segments of the Northbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic:

- Paularino Avenue On Ramp (PM)
- Paularino Avenue On Ramp to I-405 SB On Ramp (PM)
- On Ramp from I-405 NB to MacArthur Blvd Off Ramp (PM)

The project results in an increase of over 2 percent on the following segment of the Southbound SR-55, which is projected to operate at LOS F prior to the addition of project traffic:

- MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB (AM)

The project results in an increase of over 2 percent on the following segments of the Northbound SR-73, which is projected to operate at LOS F prior to the addition of project traffic:

- Bristol St. N On Ramp to SR-55 N Off Ramp (AM)
- On Ramp From SR-55 NB- (AM)

The project results in an increase of over 2 percent on the following segments of the Southbound I-405 which is projected to operate at LOS F prior to the addition of project traffic:

- Jamboree Direct On Ramp- (PM)

In all instances, the project would greater than two percent of traffic to facilities already operating at less than acceptable conditions prior to the addition of project traffic and, therefore, the project would result in a significant cumulative impact at these locations.

10.0 No Project Alternative

10.1 EXISTING PLUS NO PROJECT ALTERNATIVE

10.1.1 DESCRIPTION

For the No Project Alternative the addition of project traffic reflects the incremental MAP between the Proposed Project at 10.8 MAP and the existing MAP of 9.2. The trip generation associated with this increase in MAP is provided in Table 4-7. The No Project scenario reflects the anticipated level of incremental vehicle traffic that would occur under the existing Settlement Agreement, which JWA could attain within the existing entitlements.

10.1.2 RESULTS

Table 10-1 illustrates the intersection V/C ratio and corresponding incremental change, as well as LOS for each of the 59 study intersections under the existing plus No Project scenario. As shown in this table, there is one location which degrades from acceptable conditions to LOS E. The intersection at Campus Drive/Bristol Street North is located in the City of Newport Beach and worsens from LOS D to LOS E with the addition of project trips.

TABLE 10-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS NO PROJECT ALTERNATIVE CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Plus No Project		Change
			V/C	LOS	V/C	LOS	
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.56	A	0.58	A	0.02
		PM	0.73	C	0.75	C	0.02
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.68	B	0.68	B	0.00
		PM	0.64	B	0.65	B	0.01
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.59	A	0.60	B	0.01
		PM	0.65	B	0.65	B	0.00
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.68	B	0.71	C	0.03
		PM	0.89	D	0.91	E	0.02
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.54	A	0.55	A	0.01
		PM	0.75	C	0.76	C	0.01
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.374	A	0.384	A	0.010
		PM	0.490	A	0.496	A	0.006
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.68	B	0.68	B	0.00
		PM	0.79	C	0.80	C	0.01

TABLE 10-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS NO PROJECT ALTERNATIVE CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Plus No Project		
			V/C	LOS	V/C	LOS	Change
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.88	D	0.89	D	0.01
		PM	0.78	C	0.78	C	0.00
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.66	B	0.67	B	0.01
		PM	0.82	D	0.83	D	0.01
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.58	A	0.59	A	0.01
		PM	0.60	A	0.60	B	0.00
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.650	B	0.657	B	0.007
		PM	0.714	C	0.720	C	0.006
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.496	A	0.498	A	0.002
		PM	0.488	A	0.490	A	0.002
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.610	B	0.613	B	0.003
		PM	0.632	B	0.638	B	0.006
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.49	A	0.51	A	0.02
		PM	0.64	B	0.65	B	0.01
15. Campus Dr at Airport Way[2]	Signal	AM	0.338	A	0.403	A	0.065
		PM	0.660	B	0.721	C	0.061
16. Campus Dr at Quail St[2]	Signal	AM	0.484	A	0.508	A	0.024
		PM	0.463	A	0.502	A	0.039
17. Campus Dr at Bristol St North[2]	Signal	AM	0.596	A	0.610	B	0.014
		PM	0.885	D	0.908	E	0.023
18. Campus Dr at Bristol St South[2]	Signal	AM	0.689	B	0.703	C	0.014
		PM	0.439	A	0.447	A	0.008
19. Birch St at Bristol St North[2]	Signal	AM	0.581	A	0.586	A	0.005
		PM	0.581	A	0.590	A	0.009
20. Birch St at Bristol St South[2]	Signal	AM	0.400	A	0.405	A	0.005
		PM	0.434	A	0.442	A	0.008
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.61	B	0.62	B	0.01
		PM	0.71	C	0.72	C	0.01
22. Red Hill Ave at Main St[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.70	C	0.71	C	0.01
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.50	A	0.51	A	0.01
		PM	0.47	A	0.48	A	0.01
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.50	A	0.51	A	0.01
		PM	0.53	A	0.55	A	0.02
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	18.7	C	21.20	C	2.50
		PM	19.4	C	22.90	C	3.50
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.369	A	0.376	A	0.007
		PM	0.573	A	0.585	A	0.012
27. Irvine Ave at University Dr[2]	Signal	AM	0.641	B	0.656	B	0.015
		PM	0.719	C	0.737	C	0.018
28. Irvine Ave at 22nd St[2]	Signal	AM	0.619	B	0.637	B	0.018

TABLE 10-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS NO PROJECT ALTERNATIVE CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Plus No Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.695	B	0.722	C	0.027
29. Irvine Ave at 20th St[2]	Signal	AM	0.485	A	0.509	A	0.024
		PM	0.624	B	0.650	B	0.026
30. Irvine Ave at 19th St[2]	Signal	AM	0.528	A	0.547	A	0.019
		PM	0.662	B	0.675	B	0.013
31. Irvine Ave at 17th St[2]	Signal	AM	0.540	A	0.550	A	0.010
		PM	0.709	C	0.719	C	0.010
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.22	A	0.23	A	0.01
		PM	0.56	A	0.57	A	0.01
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.44	A	0.45	A	0.01
		PM	0.36	A	0.38	A	0.02
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.32	A	0.33	A	0.01
		PM	0.43	A	0.44	A	0.01
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.82	D	0.84	D	0.02
		PM	0.50	A	0.52	A	0.02
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.531	A	0.547	A	0.016
		PM	0.681	B	0.691	B	0.010
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.576	A	0.588	A	0.012
		PM	0.543	A	0.552	A	0.009
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.397	A	0.398	A	0.001
		PM	0.413	A	0.416	A	0.003
39. Jamboree Rd at Birch St[2]	Signal	AM	0.488	A	0.505	A	0.017
		PM	0.494	A	0.502	A	0.008
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.441	A	0.445	A	0.004
		PM	0.522	A	0.529	A	0.007
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.535	A	0.558	A	0.023
		PM	0.558	A	0.569	A	0.011
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.470	A	0.478	A	0.008
		PM	0.498	A	0.503	A	0.005
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.830	D	0.834	D	0.004
		PM	0.707	C	0.721	C	0.014
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.594	A	0.597	A	0.003
		PM	0.590	A	0.594	A	0.004
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.764	C	0.770	C	0.006
		PM	0.841	D	0.847	D	0.006
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.54	A	0.55	A	0.01
		PM	0.65	B	0.66	B	0.01
47. Red Hill Ave at Baker St[3]	Signal	AM	0.42	A	0.44	A	0.02
		PM	0.61	B	0.63	B	0.02
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.77	C	0.01

TABLE 10-1
INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS NO PROJECT ALTERNATIVE CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Plus No Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.62	B	0.62	B	0.00
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.88	D	0.89	D	0.01
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.79	C	0.80	C	0.01
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.45	A	0.46	A	0.01
		PM	0.74	C	0.75	C	0.01
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.70	C	0.71	C	0.01
		PM	0.89	D	0.90	D	0.01
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.76	C	0.77	C	0.01
		PM	0.880	D	0.89	D	0.01
54. Von Karman Ave at Main St[1]	Signal	AM	0.60	B	0.62	B	0.02
		PM	0.78	C	0.79	C	0.01
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.89	D	0.90	D	0.01
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.78	C	0.79	C	0.01
		PM	0.81	D	0.82	D	0.01
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.64	B	0.65	B	0.01
		PM	0.65	B	0.67	B	0.02
58. Jamboree Rd at Main St[1]	Signal	AM	0.77	C	0.77	C	0.00
		PM	0.85	D	0.86	D	0.01
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.65	B	0.66	B	0.01
		PM	0.82	D	0.84	D	0.02

Notes: Signalized intersections evaluated using ICU methodology.

1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

The LOS for each of the four intersections under the shared jurisdiction of Caltrans is provided in Table 10-2. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 10-2
CALTRANS INTERSECTION LEVEL OF SERVICE:
EXISTING PLUS NO PROJECT ALTERNATIVE CONDITIONS

Intersection	Traffic Control	Peak Hour	Existing		Existing Plus No Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.1	C	22.6	C
		PM	23.4	C	23.8	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	22.9	C	23.0	C
		PM	25.0	C	24.7	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	15.8	B	16.4	B
		PM	20.6	C	21.4	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**90.8**	**F**	**91.5**	**F**
		PM	30.7	C	30.9	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 10-3, 10-4, 20-5 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405 respectively. Tables 10-6, 10-7, 10-8 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, because the addition of project trips would not result in a decrease in LOS from acceptable to unacceptable, and because the addition of project trips would not increase traffic by 2 percent or more, impacts would be less than significant.

TABLE 10-3
FREEWAY MAINLINE AND RAMPS OPERATIONS:
SR-55 EXISTING PLUS NO PROJECT ALTERNATIVE -AM

Location	Type	Existing		Existing Plus No Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	28.8	D	28.9	D	20	0.3%
Baker St Off Ramp	Diverge	21.6	C	21.6	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**24.9**	**F**	**37.7**	**F**	**20**	**0.4%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**20**	**0.3%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**28.3**	**F**	**44.5**	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	**29.6**	**D**	**-**	**F**	**20**	**0.4%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**34.3**	**D**	**-**	**F**	**20**	**0.4%**
On Ramp from I-405 SB	Basic	**-**	**F**	**-**	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.1	D	34.4	D	40	0.5%

TABLE 10-3
FREEWAY MAINLINE AND RAMPS OPERATIONS:
SR-55 EXISTING PLUS NO PROJECT ALTERNATIVE -AM

Location	Type	Existing		Existing Plus No Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**60**	**0.6%**
Off Ramp to I-405 NB	Diverge	29.1	D	28.8	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	23.2	C	22.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.3	D	28.0	D	0	0.0%
Lane Drop	Basic	28.3	D	27.6	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	17.0	B	16.7	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.9	C	20.8	C	40	0.8%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	20.0	C	19.7	C	40	0.8%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	30.0	D	29.7	D	40	0.6%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	16.5	B	20.4	C	30	0.7%
Newport Blvd S/Fair Dr On Ramp	Merge	17.7	B	20.9	C	30	0.7%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-4
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS NO PROJECT ALTERNATIVE -AM

Location	Type	Existing		Existing Plus No Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.3**	**E**	**40.5**	**E**	**10**	**0.2%**
MacArthur Blvd On Ramp	Basic	**36.6**	**E**	**36.8**	**E**	**20**	**0.3%**
Jamboree Rd On Ramp	Merge	34.8	D	35.0	D	30	0.3%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	23.7	C	43.4	**E**	**30**	**0.5%**
Bristol St N Off Ramp	Diverge	30.5	D	-	**F**	**30**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	32.1	D	-	**F**	**70**	**0.8%**
Off Ramp to SR-55 SB	Diverge	24.1	C	32.0	D	70	1.3%
On Ramp from SR-55 NB	Weave	33.1	D	-	**F**	**50**	**0.9%**
Bear St Off Ramp to Bear St On Ramp	Basic	13.8	B	21.9	C	50	1.5%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.7**	**E**	**38.9**	**E**	**30**	**0.5%**
On Ramp from SR-55 NB	Merge	29.9	D	30.4	D	40	0.8%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	26.2	D	31.3	D	40	0.8%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	29.4	D	22.5	C	50	0.7%
Jamboree Rd/Bristol St S Off Ramp	Diverge	31.1	D	27.8	C	50	0.6%
Jamboree Rd Off to Lane Add	Basic	26.3	D	20.4	C	30	0.6%
University Dr Off Ramp	Basic	15.5	B	12.2	B	30	0.5%

TABLE 10-4
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS NO PROJECT ALTERNATIVE -AM

Location	Type	Existing		Existing Plus No Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	15.6	B	15.1	B	30	1.0%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-5
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS NO PROJECT ALTERNATIVE -AM

Location	Type	Existing		Existing Plus No Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.7**	**E**	**43.0**	**E**	**30**	**0.3%**
Jamboree Rd Off Ramp	Diverge	28.7	D	28.8	D	30	0.2%
Jamboree Rd Loop On Ramp	Merge	27.3	C	27.2	C	20	0.2%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.2%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**40.8**	**E**	**37.7**	**E**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	31.6	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	34.8	D	32.2	D	0	0.0%
On Ramp from SR-55 SB	Basic	27.0	D	24.5	C	0	0.0%
Bristol St N On Ramp	Merge	22.9	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**30.8**	**F**	**30.9**	**F**	**20**	**0.2%**
Fairview Rd On Ramp	Merge	**34.1**	**F**	**34.2**	**F**	**30**	**0.3%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**38.6**	**F**	**38.8**	**F**	**30**	**0.3%**
Bristol St Off Ramp	Diverge	**27.2**	**F**	**27.3**	**F**	**30**	**0.3%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.3%**
Lane Drop	Basic	**36.9**	**E**	34.2	D	40	0.5%
On Ramp from SR-55 NB	Basic	**37.0**	**E**	34.8	D	50	0.5%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	-	**F**	**50**	**0.3%**

TABLE 10-5
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS NO PROJECT ALTERNATIVE -AM

Location	Type	Existing		Existing Plus No Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	-	**F**	**50**	**0.4%**
Jamboree Rd Loop On Ramp	Merge	18.6	B	19.3	B	50	0.8%
Jamboree Rd Direct On Ramp	Merge	17.2	B	17.3	B	60	0.9%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-6
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
EXISTING PLUS NO PROJECT ALTERNATIVE -PM

Location	Type	Existing		Existing Plus No Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	-	**F**	-	**F**	**20**	**0.3%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.7	A	10.8	A	20	0.8%
Baker St Off Ramp	Diverge	3.4	A	3.5	A	20	0.7%
Baker St Off Ramp to SR-73 On Ramp	Basic	14.3	B	12.0	B	20	0.8%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	32.8	D	28.7	D	20	0.4%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	16.0	B	13.6	B	10	0.3%
Paularino Ave On Ramp	Merge	**14.9**	**F**	**15.8**	**F**	**20**	**0.7%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**15.9**	**F**	**16.8**	**F**	**20**	**0.7%**
On Ramp from I-405 SB	Basic	**15.5**	**F**	**16.2**	**F**	**20**	**0.5%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**23.0**	**F**	**26.0**	**F**	**80**	**1.4%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.5**	**E**	**36.8**	**E**	**30**	**0.4%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**50**	**0.5%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.6	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.7	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.5	D	0	0.0%
Lane Drop	Basic	33.0	D	32.6	D	0	0.0%

TABLE 10-6
PROJECT FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
EXISTING PLUS NO PROJECT ALTERNATIVE -PM

Location	Type	Existing		Existing Plus No Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.6	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.2	D	30.1	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	29.9	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	-	**F**	-	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	23.5	C	26.9	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	22.9	C	25.4	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-7
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Existing		Existing Plus No Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.6	D	27.7	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.6	D	28.7	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.3	D	32.4	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	23.3	C	34.4	D	30	0.5%
Bristol St N Off Ramp	Diverge	27.9	C	35.9	E	30	0.5%
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	-	**F**	-	**F**	**60**	**0.6%**
Off Ramp to SR-55 SB	Diverge	**35.5**	**E**	-	**F**	**60**	**0.8%**
On Ramp from SR-55 NB	Weave	-	**F**	-	**F**	**50**	**0.7%**
Bear St Off Ramp to Bear St On Ramp	Basic	24.3	C	33.4	D	50	0.8%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.5	D	32.7	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.5	D	29.5	D	30	0.6%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	21.4	C	27.7	D	30	0.8%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	-	**F**	-	**F**	**30**	**0.4%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	20.6	C	24.9	C	30	0.6%

TABLE 10-7
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
EXISTING PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Existing		Existing Plus No Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Jamboree Rd/Bristol St S Off Ramp	Diverge	21.4	C	25.0	C	30	0.5%
Jamboree Rd Off to Lane Add	Basic	31.2	D	28.9	D	10	0.2%
University Dr Off Ramp	Basic	17.7	B	16.7	B	10	0.2%
University Off to Jamboree Rd On Ramp	Basic	23.6	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-8
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Existing		Existing Plus No Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.5**	**F**	**25.6**	**F**	**30**	**0.4%**
Jamboree Rd Off Ramp	Diverge	**18.2**	**F**	**18.3**	**F**	**30**	**0.3%**
Jamboree Rd Loop On Ramp	Merge	**24.2**	**F**	**23.7**	**F**	**30**	**0.4%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**41.6**	**F**	**40.2**	**F**	**40**	**0.4%**
MacArthur Blvd On Ramp to SR-55	Weave	**-**	**F**	**43.4**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**33.9**	**F**	**26.3**	**F**	**10**	**0.1%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**36.1**	**F**	**31.0**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**27.2**	**F**	**22.4**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**23.9**	**F**	**21.4**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off Ramp	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.7	C	30	0.5%
Fairview Rd On Ramp	Merge	25.6	C	25.7	C	40	0.6%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.4	C	40	0.6%
Bristol St Off Ramp	Diverge	18.0	B	18.1	B	40	0.5%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	29.4	D	30.5	D	50	0.6%

TABLE 10-8
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
EXISTING PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Existing		Existing Plus No Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Lane Drop	Basic	25.3	C	26.4	D	50	0.8%
On Ramp from SR-55 NB	Basic	25.6	C	26.5	D	60	0.8%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**43.6**	**E**	**43.9**	**E**	**60**	**0.6%**
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.8**	**E**	**45.1**	**E**	**60**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**21.3**	**F**	**22.1**	**F**	**60**	**1.0%**
Jamboree Rd Direct On Ramp	Merge	**21.4**	**F**	**22.8**	**F**	**70**	**1.0%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

10.1.3 IMPACTS

10.1.3.1 **Threshold T-1**

No impact.

10.1.3.2 **Threshold T-2**

No impact.

10.1.3.3 **Threshold T-3**

No impact.

10.1.3.4 **Threshold T-4**

No Impact.

10.1.3.5 **Threshold T-5**

The intersection of Campus Drive/Bristol Street North in the City of Newport Beach worsens from LOS D to LOS E with the addition of project trips. As this intersection is outside of the John Wayne Airport Area, this degradation of LOS is a significant impact.

10.1.3.6 **Threshold T-6**

No impact

10.1.3.7 **Threshold T-7**

No impact

10.1.3.8 **Threshold T-8**

No impact

10.1.3.9 **Threshold T-9**

No impacts

10.1.3.10 **Threshold T-10**

No impact.

10.1.3.11 **Threshold T-11**

No impact.

10.1.3.12 **Threshold T-12**

No impact

10.1.3.13 **Threshold T-13**

No impact.

10.1.3.14 **Threshold T-14**

No impact.

10.1.3.15 **Threshold T-15**

No impact.

10.2 2016 PLUS NO PROJECT SCENARIO

10.2.1 DESCRIPTION

This scenario evaluates the traffic impacts associated with the No Project Scenario, which anticipates a MAP level of 10.8 in 2016. The anticipated increase in MAP is shown in Table 4-7.

10.2.2 RESULTS

Table 10-9 provides the LOS results associated with the 59 study intersections evaluated using the ICU methodology. As shown in the table, under this scenario, the No Project Scenario would result in significant impacts at 17 Campus Drive at Bristol Street North) during the PM peak hour.

TABLE 10-9
INTERSECTION LEVEL OF SERVICE:
2016 PLUS NO PROJECT ALTERNATIVE

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.59	A	0.60	A	0.01
		PM	0.75	C	0.75	C	0.00
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.68	B	0.69	B	0.01
		PM	0.65	B	0.65	B	0.00
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.60	B	0.60	B	0.00
		PM	0.66	B	0.66	B	0.00
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.91	E	0.93	E	0.02
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.57	A	0.57	A	0.00
		PM	0.77	C	0.78	C	0.01
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.391	A	0.393	A	0.002
		PM	0.517	A	0.518	A	0.001
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.81	D	0.81	D	0.00
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.89	D	0.90	D	0.01
		PM	0.78	C	0.78	C	0.00
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.86	D	0.87	D	0.01
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.60	A	0.60	A	0.00
		PM	0.61	B	0.61	B	0.00
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.666	B	0.668	B	0.002
		PM	0.722	C	0.728	C	0.006
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.517	A	0.517	A	0.000

TABLE 10-9
INTERSECTION LEVEL OF SERVICE:
2016 PLUS NO PROJECT ALTERNATIVE

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.498	A	0.498	A	0.000
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.629	B	0.629	B	0.000
		PM	0.641	B	0.645	B	0.004
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.52	A	0.53	A	0.01
		PM	0.66	B	0.67	B	0.01
15. Campus Dr at Airport Way[2]	Signal	AM	0.346	A	0.407	A	0.061
		PM	0.682	B	0.734	C	0.052
16. Campus Dr at Quail St[2]	Signal	AM	0.506	A	0.519	A	0.013
		PM	0.498	A	0.515	A	0.017
17. Campus Dr at Bristol St North[2]	Signal	AM	0.614	B	0.626	B	0.012
		PM	**0.916**	**E**	**0.936**	**E**	0.020
18. Campus Dr at Bristol St South[2]	Signal	AM	0.710	C	0.716	C	0.006
		PM	0.448	A	0.453	A	0.005
19. Birch St at Bristol St North[2]	Signal	AM	0.596	A	0.598	A	0.002
		PM	0.604	B	0.606	B	0.002
20. Birch St at Bristol St South[2]	Signal	AM	0.416	A	0.416	A	0.000
		PM	0.445	A	0.447	A	0.002
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.63	B	0.63	B	0.00
		PM	0.73	C	0.74	C	0.01
22. Red Hill Ave at Main St[1]	Signal	AM	0.72	C	0.72	C	0.00
		PM	0.72	C	0.72	C	0.00
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.52	A	0.52	A	0.00
		PM	0.49	A	0.50	A	0.01
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.56	A	0.56	A	0.00
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	23.4	C	23.4	C	0.00
		PM	23.5	C	23.5	C	0.00
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.381	A	0.385	A	0.004
		PM	0.584	A	0.589	A	0.005
27. Irvine Ave at University Dr[2]	Signal	AM	0.669	B	0.678	B	0.009
		PM	0.737	C	0.741	C	0.004
28. Irvine Ave at 22nd St[2]	Signal	AM	0.647	B	0.650	B	0.003
		PM	0.722	C	0.722	C	0.000
29. Irvine Ave at 20th St[2]	Signal	AM	0.512	A	0.516	A	0.004
		PM	0.653	B	0.653	B	0.000
30. Irvine Ave at 19th St[2]	Signal	AM	0.550	A	0.550	A	0.000
		PM	0.678	B	0.678	B	0.000
31. Irvine Ave at 17th St[2]	Signal	AM	0.572	A	0.572	A	0.000
		PM	0.725	C	0.728	C	0.003
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.23	A	0.23	A	0.00

TABLE 10-9
INTERSECTION LEVEL OF SERVICE:
2016 PLUS NO PROJECT ALTERNATIVE

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.58	A	0.58	A	0.00
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.46	A	0.46	A	0.00
		PM	0.39	A	0.39	A	0.00
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.44	A	0.44	A	0.00
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.83	D	0.84	D	0.01
		PM	0.51	A	0.52	A	0.01
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.553	A	0.553	A	0.000
		PM	0.706	C	0.706	C	0.000
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.594	A	0.594	A	0.000
		PM	0.554	A	0.556	A	0.002
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.405	A	0.406	A	0.001
		PM	0.419	A	0.420	A	0.001
39. Jamboree Rd at Birch St[2]	Signal	AM	0.519	A	0.519	A	0.000
		PM	0.508	A	0.508	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.449	A	0.449	A	0.000
		PM	0.531	A	0.533	A	0.002
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.561	A	0.564	A	0.003
		PM	0.580	A	0.582	A	0.002
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.482	A	0.484	A	0.002
		PM	0.506	A	0.508	A	0.002
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.844	D	0.844	D	0.000
		PM	0.729	C	0.729	C	0.000
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.602	B	0.603	B	0.001
		PM	0.600	B	0.600	B	0.000
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.770	C	0.770	C	0.000
		PM	0.853	D	0.853	D	0.000
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.56	A	0.56	A	0.00
		PM	0.68	B	0.68	B	0.00
47. Red Hill Ave at Baker St[3]	Signal	AM	0.45	A	0.45	A	0.00
		PM	0.63	B	0.63	B	0.00
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.77	C	0.01
		PM	0.63	B	0.63	B	0.00
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.89	D	0.89	D	0.00
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.82	D	0.82	D	0.00
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.46	A	0.47	A	0.01
		PM	0.76	C	0.76	C	0.00
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.74	C	0.74	C	0.00

TABLE 10-9
INTERSECTION LEVEL OF SERVICE:
2016 PLUS NO PROJECT ALTERNATIVE

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.93	E	0.93	E	0.00
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.78	C	0.78	C	0.00
		PM	0.92	E	0.92	E	0.00
54. Von Karman Ave at Main St[1]	Signal	AM	0.63	B	0.63	B	0.00
		PM	0.81	D	0.81	D	0.00
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.76	C	0.76	C	0.00
		PM	0.91	E	0.91	E	0.00
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.80	D	0.80	D	0.00
		PM	0.83	D	0.84	D	0.01
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.66	B	0.66	B	0.00
		PM	0.68	B	0.68	B	0.00
58. Jamboree Rd at Main St[1]	Signal	AM	0.78	C	0.78	C	0.00
		PM	0.86	D	0.86	D	0.00
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.68	B	0.68	B	0.00
		PM	0.84	D	0.84	D	0.00

Notes: Signalized intersections evaluated using ICU methodology.
1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 10-10 provides the LOS results for the four intersections under the joint jurisdiction of Caltrans. As shown in the table below, the overall intersection delay will improve at a few locations because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 10-10
CALTRANS INTERSECTION LEVEL OF SERVICE:
2016 PLUS NO PROJECT ALTERNATIVE

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.4	C	22.9	C
		PM	24.0	C	24.4	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.0	C	23.1	C
		PM	25.2	C	24.8	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	16.4	B	16.4	B
		PM	24.2	C	24.8	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**94.7**	**F**	**94.5**	**F**
		PM	31.0	C	31.0	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 10-11, 10-12, 10-13 provide freeway mainline and ramp LOS results for the AM Peak Hour for the SR-55, SR-73 and I-405, respectively. Tables 10-14, 10-15, 10-16 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in bold. As shown in the table, most of these facilities would operate at deficient levels of service without project traffic. However, because the addition of project trips would not result in a decrease in LOS from acceptable to unacceptable, and because the addition of project trips would not increase traffic by 2 percent or more, impacts would be less than significant.

TABLE 10-11
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PLUS NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	-	**F**	-	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	28.9	D	29.0	D	20	0.3%
Baker St Off Ramp	Diverge	21.6	C	21.7	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**37.7**	**F**	**37.9**	**F**	**20**	**0.3%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**44.5**	**F**	**44.7**	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	-	**F**	-	**F**	**20**	**0.3%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	-	**F**	-	**F**	**20**	**0.3%**
On Ramp from I-405 SB	Basic	-	**F**	-	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	-	**F**	-	**F**	**60**	**0.5%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.2	D	34.5	D	40	0.5%

TABLE 10-11
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PLUS NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**60**	**0.6%**
Off Ramp to I-405 NB	Diverge	28.8	D	28.8	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.9	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	28.1	D	0	0.0%
Lane Drop	Basic	27.7	D	27.6	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.7	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	20.8	C	40	0.8%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.8	C	40	0.8%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.7	D	40	0.6%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	20.4	C	30	0.6%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.9	C	30	0.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-12
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.4**	**E**	**40.5**	**E**	**10**	**0.2%**
MacArthur Blvd On Ramp	Basic	**36.7**	**E**	**36.8**	**E**	**20**	**0.3%**
Jamboree Rd On Ramp	Merge	34.9	D	**35.1**	**E**	**30**	**0.3%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.2**	**E**	**43.5**	**E**	**30**	**0.3%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**30**	**0.3%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.7%**
Off Ramp to SR-55 SB	Diverge	31.7	D	32.1	D	70	1.0%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**50**	**0.7%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.8	C	21.9	C	50	0.9%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.8**	**E**	**39.1**	**E**	**30**	**0.5%**
On Ramp from SR-55 NB	Merge	30.3	D	30.6	D	40	0.7%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.2	D	31.6	D	40	0.7%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.5	C	22.6	C	50	0.9%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	27.9	C	50	0.7%
Jamboree Rd Off to Lane Add	Basic	20.4	C	20.6	C	30	0.8%
University Dr Off Ramp	Basic	12.3	B	12.4	B	30	0.6%

TABLE 10-12
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	15.1	B	15.3	B	30	1.1%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-13
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.8**	**E**	**43.1**	**E**	**30**	**0.3%**
Jamboree Rd Off Ramp	Diverge	28.8	D	28.9	D	30	0.2%
Jamboree Rd Loop On Ramp	Merge	27.1	C	27.2	C	20	0.2%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.2%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.5**	**E**	**37.7**	**E**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.3	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.4	C	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**30.9**	**F**	**31.0**	**F**	**20**	**0.2%**
Fairview Rd On Ramp	Merge	**34.2**	**F**	**34.3**	**F**	**30**	**0.3%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**38.8**	**F**	**39.0**	**F**	**30**	**0.3%**
Bristol St Off Ramp	Diverge	**27.3**	**F**	**27.4**	**F**	**30**	**0.3%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.3%**
Lane Drop	Basic	34.2	D	34.5	D	40	0.5%
On Ramp from SR-55 NB	Basic	34.8	D	**35.1**	**E**	**50**	**0.5%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**

TABLE 10-13
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
Jamboree Rd Loop On Ramp	Merge	19.2	B	19.4	B	50	0.8%
Jamboree Rd Direct On Ramp	Merge	17.3	B	17.5	B	60	0.9%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-14
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.3%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	10.8	A	20	0.8%
Baker St Off Ramp	Diverge	3.5	A	3.5	A	20	0.7%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.1	B	20	0.9%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	28.9	D	20	0.4%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.6	B	10	0.4%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**15.8**	**F**	**20**	**0.7%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**16.8**	**F**	**20**	**0.7%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.2**	**F**	**20**	**0.5%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**26.1**	**F**	**80**	**1.3%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.6**	**E**	**36.8**	**E**	**30**	**0.4%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.7	D	0	0.0%

TABLE 10-14
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2016 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Lane Drop	Basic	32.8	D	32.7	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.2	D	30.3	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.1	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	-	**F**	-	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.1	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.5	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-15
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.7	D	27.7	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.7	D	28.8	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.4	D	32.5	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.4	D	34.6	D	30	0.4%
Bristol St N Off Ramp	Diverge	**35.9**	**E**	**36.1**	**E**	**30**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**60**	**0.6%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**50**	**0.6%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.2	D	33.6	D	50	0.7%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.4	D	29.6	D	30	0.6%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	27.7	D	30	0.6%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.4%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	24.9	C	30	0.5%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.0	C	30	0.4%
Jamboree Rd Off to Lane Add	Basic	28.8	D	28.9	D	10	0.2%
University Dr Off Ramp	Basic	16.7	B	16.7	B	10	0.2%

TABLE 10-15
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2016 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	24.9	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-16
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.6**	**F**	**25.7**	**F**	**30**	**0.4%**
Jamboree Rd Off Ramp	Diverge	**18.3**	**F**	**18.4**	**F**	**30**	**0.3%**
Jamboree Rd Loop On Ramp	Merge	**23.8**	**F**	**23.9**	**F**	**30**	**0.4%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.1**	**F**	**40.5**	**F**	**40**	**0.4%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.4**	**F**	**26.5**	**F**	**10**	**0.2%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.0**	**F**	**31.2**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**22.5**	**F**	**22.5**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.4**	**F**	**21.4**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.8	C	30	0.5%
Fairview Rd On Ramp	Merge	25.6	C	25.8	C	40	0.6%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.4	C	40	0.6%
Bristol St Off Ramp	Diverge	18.1	B	18.2	B	40	0.5%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.4	D	30.7	D	50	0.6%
Lane Drop	Basic	26.3	D	26.5	D	50	0.8%
On Ramp from SR-55 NB	Basic	26.4	D	26.7	D	60	0.8%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**44.2**	**E**	**60**	**0.6%**

TABLE 10-16
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2016 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.2**	**E**	**45.4**	**E**	**60**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**22.4**	**F**	**22.2**	**F**	**60**	**0.9%**
Jamboree Rd Direct On Ramp	Merge	**22.6**	**F**	**23.0**	**F**	**70**	**0.9%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

10.2.3 IMPACTS

10.2.3.1 **Threshold T-1**

No impact

10.2.3.2 **Threshold T-2**

No impact

10.2.3.3 **Threshold T-3**

No impact

10.2.3.4 **Threshold T-4**

No impact

10.2.3.5 **Threshold T-5**

No impact

10.2.3.6 **Threshold T-6**

No impact

10.2.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection to increase by 0.020 at an intersection which is projected to operate at LOS E prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

10.2.3.8 **Threshold T-8**

No impact.

10.2.3.9 **Threshold T-9**

No impact.

10.2.3.10 **Threshold T-10**

No impact.

10.2.3.11 **Threshold T-11**

No impact.

10.2.3.12 **Threshold T-12**

No impact.

10.2.3.13 **Threshold T-13**

No impact.

10.2.3.14 **Threshold T-14**

No impact.

10.2.3.15 **Threshold T-15**

No impact.

10.3 2021 PLUS NO PROJECT ALTERNATIVE SCENARIO

10.3.1 DESCRIPTION

This scenario analyzes the traffic impacts associated with the No Project Scenario in 2021, which includes a change in MAP from the existing 9.2 level to 10.8. Trip generation for this alternative is shown in Table 4-7.

10.3.2 RESULTS

Table 10-17 provides the LOS results for the 59 intersections evaluated using the ICU methodology. As shown in the table, under this scenario the No Project alternative would result in significant impacts at Intersection 17 (Campus Drive at Bristol Street North), during the PM peak hour.

TABLE 10-17
INTERSECTION LEVEL OF SERVICE:
2021 NO PROJECT ALTERNATIVE SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.62	B	0.64	B	0.02
		PM	0.77	C	0.78	C	0.01
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.66	B	0.66	B	0.00
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.67	B	0.67	B	0.00
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.74	C	0.75	C	0.01
		PM	0.94	E	0.96	E	0.02
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.58	A	0.58	A	0.00
		PM	0.80	C	0.81	D	0.01
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.408	A	0.410	A	0.002
		PM	0.541	A	0.543	A	0.002
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.70	B	0.70	B	0.00
		PM	0.82	D	0.83	D	0.01
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.91	E	0.91	E	0.00
		PM	0.78	C	0.78	C	0.00
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.73	C	0.74	C	0.01
		PM	0.91	E	0.92	E	0.01
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.62	B	0.62	B	0.00
		PM	0.63	B	0.63	B	0.00
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.684	B	0.686	B	0.002
		PM	0.730	C	0.735	C	0.005
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.546	A	0.546	A	0.000

TABLE 10-17
INTERSECTION LEVEL OF SERVICE:
2021 NO PROJECT ALTERNATIVE SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.510	A	0.510	A	0.000
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.659	B	0.659	B	0.000
		PM	0.655	B	0.657	B	0.002
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.55	A	0.56	A	0.01
		PM	0.68	B	0.69	B	0.01
15. Campus Dr at Airport Way[2]	Signal	AM	0.354	A	0.416	A	0.062
		PM	0.703	C	0.755	C	0.052
16. Campus Dr at Quail St[2]	Signal	AM	0.525	A	0.535	A	0.010
		PM	0.517	A	0.533	A	0.016
17. Campus Dr at Bristol St North[2]	Signal	AM	0.641	B	0.651	B	0.010
		PM	**0.964**	**E**	**0.984**	**E**	0.020
18. Campus Dr at Bristol St South[2]	Signal	AM	0.734	C	0.740	C	0.006
		PM	0.456	A	0.463	A	0.007
19. Birch St at Bristol St North[2]	Signal	AM	0.612	B	0.617	B	0.005
		PM	0.632	B	0.634	B	0.002
20. Birch St at Bristol St South[2]	Signal	AM	0.431	A	0.433	A	0.002
		PM	0.458	A	0.460	A	0.002
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.65	B	0.66	B	0.01
		PM	0.75	C	0.76	C	0.01
22. Red Hill Ave at Main St[1]	Signal	AM	0.73	C	0.73	C	0.00
		PM	0.73	C	0.74	C	0.01
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.53	A	0.54	A	0.01
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.55	A	0.55	A	0.00
		PM	0.58	A	0.58	A	0.00
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	26.8	D	26.8	D	0.00
		PM	25.4	D	25.4	D	0.00
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.390	A	0.398	A	0.008
		PM	0.591	A	0.595	A	0.004
27. Irvine Ave at University Dr[2]	Signal	AM	0.697	B	0.706	C	0.009
		PM	0.750	C	0.753	C	0.003
28. Irvine Ave at 22nd St[2]	Signal	AM	0.666	B	0.669	B	0.003
		PM	0.725	C	0.725	C	0.000
29. Irvine Ave at 20th St[2]	Signal	AM	0.519	A	0.519	A	0.000
		PM	0.656	B	0.659	B	0.003
30. Irvine Ave at 19th St[2]	Signal	AM	0.556	A	0.556	A	0.000
		PM	0.688	B	0.688	B	0.000
31. Irvine Ave at 17th St[2]	Signal	AM	0.597	A	0.597	A	0.000
		PM	0.744	C	0.744	C	0.000
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.24	A	0.25	A	0.01
		PM	0.59	A	0.59	A	0.00

TABLE 10-17
INTERSECTION LEVEL OF SERVICE:
2021 NO PROJECT ALTERNATIVE SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.47	A	0.47	A	0.00
		PM	0.40	A	0.40	A	0.00
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.45	A	0.45	A	0.00
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.84	D	0.84	D	0.00
		PM	0.52	A	0.52	A	0.00
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.569	A	0.569	A	0.000
		PM	0.725	C	0.725	C	0.000
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.606	B	0.606	B	0.000
		PM	0.563	A	0.565	A	0.002
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.416	A	0.417	A	0.001
		PM	0.425	A	0.425	A	0.000
39. Jamboree Rd at Birch St[2]	Signal	AM	0.531	A	0.531	A	0.000
		PM	0.530	A	0.530	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.455	A	0.455	A	0.000
		PM	0.537	A	0.537	A	0.000
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.567	A	0.570	A	0.003
		PM	0.602	B	0.602	B	0.000
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.491	A	0.493	A	0.002
		PM	0.510	A	0.510	A	0.000
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.858	D	0.860	D	0.002
		PM	0.744	C	0.746	C	0.002
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.608	B	0.609	B	0.001
		PM	0.605	B	0.605	B	0.000
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.770	C	0.772	C	0.002
		PM	0.861	D	0.861	D	0.000
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.58	A	0.58	A	0.00
		PM	0.69	B	0.69	B	0.00
47. Red Hill Ave at Baker St[3]	Signal	AM	0.46	A	0.46	A	0.00
		PM	0.65	B	0.65	B	0.00
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.77	C	0.01
		PM	0.64	B	0.64	B	0.00
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.54	A	0.55	A	0.01
		PM	0.90	E	0.90	E	0.00
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.73	C	0.73	C	0.00
		PM	0.86	D	0.86	D	0.00
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.47	A	0.48	A	0.01
		PM	0.77	C	0.77	C	0.00
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.78	C	0.78	C	0.00
		PM	0.98	E	0.98	E	0.00
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.81	D	0.81	D	0.00

TABLE 10-17
INTERSECTION LEVEL OF SERVICE:
2021 NO PROJECT ALTERNATIVE SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.96	E	0.96	E	0.00
54. Von Karman Ave at Main St[1]	Signal	AM	0.65	B	0.65	B	0.00
		PM	0.83	D	0.83	D	0.00
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.78	C	0.78	C	0.00
		PM	0.92	E	0.92	E	0.00
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.84	D	0.84	D	0.00
		PM	0.86	D	0.86	D	0.00
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.69	B	0.69	B	0.00
		PM	0.70	C	0.71	C	0.01
58. Jamboree Rd at Main St[1]	Signal	AM	0.78	C	0.78	C	0.00
		PM	0.87	D	0.87	D	0.00
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.71	C	0.71	C	0.00
		PM	0.86	D	0.86	D	0.00

Notes: Signalized intersections evaluated using ICU methodology.

1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 10-18 provides the LOS results for the four intersections under the joint jurisdiction of Caltrans. As shown in the table below, the overall intersection delay will improve at a few locations because the project increases traffic to certain movements which have available capacity or "green time". For example, if volumes are increased at a right-turn lane where volumes were low pre-project, the intersection may operate more efficiently by utilizing the available capacity or "green time" allowing more vehicles to travel through the intersection. Since intersection delay is report as a weighted average of all movements as provided for by the Highway Capacity Manual, this increase in traffic volume actually results in a reduction of overall intersection delay. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 10-18
CALTRANS INTERSECTION LEVEL OF SERVICE:
2021 NO PROJECT ALTERNATIVE

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	22.7	C	23.3	C
		PM	24.9	C	25.6	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.3	C	23.4	C
		PM	25.4	C	25.0	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	16.8	B	17.3	B
		PM	30.3	C	31.1	C
Jamboree Rd at I-405 SB Ramps	Signal	AM	**99.7**	**F**	**99.6**	**F**
		PM	30.8	C	30.8	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 10-19, 10-20, and 10-21 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405, respectively. Tables 10-22, 10-23, 10-24 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the table, most of these facilities would operate at deficient levels of service without project traffic. However, because the addition of project trips would not result in a decrease in LOS from acceptable to unacceptable, and because the addition of project trips would not increase traffic by 2 percent or more, impacts would be less than significant.

TABLE 10-19
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PLUS NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	-	**F**	-	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	29.0	D	29.1	D	20	0.3%
Baker St Off Ramp	Diverge	21.7	C	21.8	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**37.9**	**F**	**38.1**	**F**	**20**	**0.3%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**44.8**	**F**	**45.0**	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	-	**F**	-	**F**	**20**	**0.3%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	-	**F**	-	**F**	**20**	**0.3%**
On Ramp from I-405 SB	Basic	-	**F**	-	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	-	**F**	-	**F**	**60**	**0.5%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.2	D	34.5	D	40	0.5%

TABLE 10-19
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PLUS NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**60**	**0.6%**
Off Ramp to I-405 NB	Diverge	28.8	D	28.8	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.9	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	28.1	D	0	0.0%
Lane Drop	Basic	27.7	D	27.6	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.7	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	20.8	C	40	0.8%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.8	C	40	0.8%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.7	D	40	0.6%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	20.4	C	30	0.6%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.9	C	30	0.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-20
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.4**	**E**	**40.5**	**E**	**10**	**0.2%**
MacArthur Blvd On Ramp	Basic	**36.7**	**E**	**36.8**	**E**	**20**	**0.3%**
Jamboree Rd On Ramp	Merge	34.9	D	**35.1**	**E**	**30**	**0.3%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.2**	**E**	**43.5**	**E**	**30**	**0.3%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**30**	**0.3%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.7%**
Off Ramp to SR-55 SB	Diverge	31.7	D	32.0	D	70	1.0%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**50**	**0.7%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.7	C	21.9	C	50	0.9%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**38.9**	**E**	**39.2**	**E**	**30**	**0.5%**
On Ramp from SR-55 NB	Merge	30.4	D	30.6	D	40	0.7%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.3	D	31.7	D	40	0.7%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.6	C	22.7	C	50	0.9%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	28.0	C	50	0.7%
Jamboree Rd Off to Lane Add	Basic	20.5	C	20.7	C	30	0.8%
University Dr Off Ramp	Basic	12.3	B	12.4	B	30	0.6%

TABLE 10-20
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	15.2	B	15.4	B	30	1.1%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-21
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**42.9**	**E**	**43.2**	**E**	**30**	**0.3%**
Jamboree Rd Off Ramp	Diverge	28.8	D	28.9	D	30	0.2%
Jamboree Rd Loop On Ramp	Merge	27.1	C	27.2	C	20	0.2%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.2%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.6**	**E**	**37.7**	**E**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.7	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.3	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.4	C	24.4	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**31.0**	**F**	**31.1**	**F**	**20**	**0.2%**
Fairview Rd On Ramp	Merge	**34.3**	**F**	**34.5**	**F**	**30**	**0.3%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**39.0**	**F**	**39.2**	**F**	**30**	**0.3%**
Bristol St Off Ramp	Diverge	**27.4**	**F**	**27.5**	**F**	**30**	**0.3%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.3%**
Lane Drop	Basic	34.4	D	34.7	D	40	0.5%
On Ramp from SR-55 NB	Basic	**35.0**	**E**	**35.3**	**E**	**50**	**0.5%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**

TABLE 10-21
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
Jamboree Rd Loop On Ramp	Merge	19.3	B	19.4	B	50	0.8%
Jamboree Rd Direct On Ramp	Merge	17.4	B	17.6	B	60	0.9%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-22
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.3%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	10.8	A	20	0.8%
Baker St Off Ramp	Diverge	3.5	A	3.5	A	20	0.7%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.1	B	20	0.9%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	28.9	D	20	0.4%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.6	B	10	0.4%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**15.8**	**F**	**20**	**0.7%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**16.8**	**F**	**20**	**0.7%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.2**	**F**	**20**	**0.5%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**26.1**	**F**	**80**	**1.3%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.6**	**E**	**36.8**	**E**	**30**	**0.4%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.6	D	30.7	D	0	0.0%
Lane Drop	Basic	32.8	D	32.7	D	0	0.0%

TABLE 10-22
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2021 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.3	D	30.3	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.2	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.1	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.5	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE10-23
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.7	D	27.8	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.7	D	28.9	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.4	D	32.6	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.4	D	34.7	D	30	0.4%
Bristol St N Off Ramp	Diverge	**35.9**	**E**	**36.1**	**E**	**30**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**60**	**0.6%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**50**	**0.6%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.3	D	33.7	D	50	0.7%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.4	D	29.6	D	30	0.6%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	27.7	D	30	0.6%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.4%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	24.9	C	30	0.5%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.0	C	30	0.4%
Jamboree Rd Off to Lane Add	Basic	28.8	D	28.9	D	10	0.2%
University Dr Off Ramp	Basic	16.7	B	16.7	B	10	0.2%

TABLE10-23
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2021 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	24.9	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-24
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.6**	**F**	**25.8**	**F**	**30**	**0.4%**
Jamboree Rd Off Ramp	Diverge	**18.4**	**F**	**18.5**	**F**	**30**	**0.3%**
Jamboree Rd Loop On Ramp	Merge	**23.9**	**F**	**24.0**	**F**	**30**	**0.4%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.2**	**F**	**40.6**	**F**	**40**	**0.4%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.4**	**F**	**26.5**	**F**	**10**	**0.2%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.1**	**F**	**31.2**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**22.5**	**F**	**22.5**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.4**	**F**	**21.4**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.8	C	30	0.5%
Fairview Rd On Ramp	Merge	25.7	C	25.8	C	40	0.6%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.3	C	23.5	C	40	0.6%
Bristol St Off Ramp	Diverge	18.1	B	18.2	B	40	0.5%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.5	D	30.7	D	50	0.6%
Lane Drop	Basic	26.3	D	26.6	D	50	0.8%
On Ramp from SR-55 NB	Basic	26.5	D	26.7	D	60	0.8%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**44.2**	**E**	**60**	**0.6%**

TABLE 10-24
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2021 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.3**	**E**	**45.4**	**E**	**60**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**22.4**	**F**	**22.2**	**F**	**60**	**0.9%**
Jamboree Rd Direct On Ramp	Merge	**22.7**	**F**	**23.2**	**F**	**70**	**0.9%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

10.3.3 IMPACTS

10.3.3.1 **Threshold T-1**

No impact

10.3.3.2 **Threshold T-2**

No impact

10.3.3.3 **Threshold T-3**

No impact

10.3.3.4 **Threshold T-4**

No impact

10.3.3.5 **Threshold T-5**

No impact

10.3.3.6 **Threshold T-6**

No impact

10.3.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection to increase by 0.020 at an intersection which is projected to operate at LOS E prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

10.3.3.8 **Threshold T-8**

No impact

10.3.3.9 **Threshold T-9**

No impact

10.3.3.10 **Threshold T-10**

No impact.

10.3.3.11 **Threshold T-11**

No impact.

10.3.3.12 **Threshold T-12**

No impact

10.3.3.13 **Threshold T-13**

No impact

10.3.3.14 **Threshold T-14**

No impact

10.3.3.15 **Threshold T-15**

No impact

10.4 2026 PLUS NO PROJECT SCENARIO

10.4.1 DESCRIPTION

This scenario analyzes the traffic impacts associated with the No Project Scenario in 2026, which anticipates an increase in MAP from existing levels to 10.8. Trip generation associated with this alternative is provided in Table 4-7.

10.4.2 RESULTS

LOS results for the 59 intersections evaluated using the ICU methodology is provided in Table 10-25. As shown in the table, under this scenario the No Project alternative would result in significant impacts at Intersection, 17 (Campus Drive at Bristol) during the PM peak hour.

TABLE 10-25
INTERSECTION LEVEL OF SERVICE:
2026 PLUS NO PROJECT ALTERNATIVE SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
1. MacArthur Blvd at Main Street[1]	Signal	AM	0.66	B	0.67	B	0.01
		PM	0.80	C	0.81	D	0.01
2. MacArthur Blvd at I-405 NB Ramps[1,4]	Signal	AM	0.69	B	0.70	B	0.01
		PM	0.67	B	0.67	B	0.00
3. MacArthur Blvd at I-405 SB Ramps[1,4]	Signal	AM	0.63	B	0.63	B	0.00
		PM	0.68	B	0.68	B	0.00
4. MacArthur Blvd at Michelson Drive[1]	Signal	AM	0.77	C	0.79	C	0.02
		PM	0.98	E	0.99	E	0.01
5. MacArthur Blvd at Campus Drive[1,2]	Signal	AM	0.60	A	0.60	A	0.00
		PM	0.82	D	0.83	D	0.01
6. MacArthur Blvd at Birch Street[2]	Signal	AM	0.425	A	0.425	A	0.000
		PM	0.565	A	0.566	A	0.001
7. Jamboree Rd at I-405 NB Ramps[1]	Signal	AM	0.71	C	0.71	C	0.00
		PM	0.84	D	0.84	D	0.00
8. Jamboree Rd at I-405 SB Ramps[1]	Signal	AM	0.93	E	0.93	E	0.00
		PM	0.78	C	0.78	C	0.00
9. Jamboree Rd at Michelson Drive[1]	Signal	AM	0.78	C	0.78	C	0.00
		PM	0.97	E	0.97	E	0.00
10. Jamboree Rd at Campus Drive[1,2]	Signal	AM	0.63	B	0.64	B	0.01
		PM	0.64	B	0.64	B	0.00
11. Jamboree Rd at MacArthur Boulevard[2,4]	Signal	AM	0.700	B	0.702	C	0.002
		PM	0.739	C	0.742	C	0.003
12. Jamboree Rd at Bristol Street North[2]	Signal	AM	0.577	A	0.577	A	0.000

TABLE 10-25
INTERSECTION LEVEL OF SERVICE:
2026 PLUS NO PROJECT ALTERNATIVE SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.525	A	0.525	A	0.000
13. Jamboree Rd at Bristol Street South[2]	Signal	AM	0.686	B	0.686	B	0.000
		PM	0.670	B	0.671	B	0.001
14. Von Karman Ave at Michelson Drive[1]	Signal	AM	0.59	A	0.60	A	0.01
		PM	0.70	B	0.71	C	0.01
15. Campus Dr at Airport Way[2]	Signal	AM	0.362	A	0.424	A	0.062
		PM	0.723	C	0.780	C	0.057
16. Campus Dr at Quail St[2]	Signal	AM	0.542	A	0.554	A	0.012
		PM	0.535	A	0.552	A	0.017
17. Campus Dr at Bristol St North[2]	Signal	AM	0.666	B	0.678	B	0.012
		PM	**1.009**	**F**	**1.030**	**F**	0.021
18. Campus Dr at Bristol St South[2]	Signal	AM	0.758	C	0.763	C	0.005
		PM	0.467	A	0.474	A	0.007
19. Birch St at Bristol St North[2]	Signal	AM	0.633	B	0.635	B	0.002
		PM	0.658	B	0.660	B	0.002
20. Birch St at Bristol St South[2]	Signal	AM	0.448	A	0.450	A	0.002
		PM	0.469	A	0.471	A	0.002
21. Red Hill Ave at MacArthur Blvd[1]	Signal	AM	0.68	B	0.68	B	0.00
		PM	0.77	C	0.78	C	0.01
22. Red Hill Ave at Main St[1]	Signal	AM	0.74	C	0.75	C	0.01
		PM	0.75	C	0.75	C	0.00
23. Santa Ana Ave at Bristol St[3]	Signal	AM	0.53	A	0.53	A	0.00
		PM	0.57	A	0.57	A	0.00
24. Santa Ana Ave at Mesa Dr[3]	Signal	AM	0.58	A	0.58	A	0.00
		PM	0.59	A	0.60	B	0.01
25. Santa Ana Ave at Del Mar Ave[3,5]	Signal	AM	**36.3**	**E**	**36.3**	**E**	0.00
		PM	28.1	D	29.0	D	0.90
26. Irvine Ave at Mesa Dr[2]	Signal	AM	0.425	A	0.425	A	0.000
		PM	0.597	A	0.601	B	0.004
27. Irvine Ave at University Dr[2]	Signal	AM	0.725	C	0.734	C	0.009
		PM	0.762	C	0.762	C	0.000
28. Irvine Ave at 22nd St[2]	Signal	AM	0.687	B	0.694	B	0.007
		PM	0.741	C	0.741	C	0.000
29. Irvine Ave at 20th St[2]	Signal	AM	0.525	A	0.525	A	0.000
		PM	0.662	B	0.662	B	0.000
30. Irvine Ave at 19th St[2]	Signal	AM	0.559	A	0.563	A	0.004
		PM	0.691	B	0.694	B	0.003
31. Irvine Ave at 17th St[2]	Signal	AM	0.622	B	0.625	B	0.003
		PM	0.769	C	0.772	C	0.003
32. Newport Blvd SB at Mesa Dr[3]	Signal	AM	0.28	A	0.28	A	0.00
		PM	0.61	B	0.61	B	0.00
33. Newport Blvd NB at Mesa Dr[3]	Signal	AM	0.49	A	0.49	A	0.00

TABLE 10-25
INTERSECTION LEVEL OF SERVICE:
2026 PLUS NO PROJECT ALTERNATIVE SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
		PM	0.42	A	0.42	A	0.00
34. Newport Blvd SB at Del Mar Ave[3]	Signal	AM	0.33	A	0.33	A	0.00
		PM	0.46	A	0.46	A	0.00
35. Newport Blvd NB at Del Mar Ave[3]	Signal	AM	0.85	D	0.85	D	0.00
		PM	0.52	A	0.52	A	0.00
36. Von Karman Ave at Campus Dr[2]	Signal	AM	0.578	A	0.581	A	0.003
		PM	0.744	C	0.747	C	0.003
37. Von Karman Ave at MacArthur Blvd[2]	Signal	AM	0.619	B	0.619	B	0.000
		PM	0.569	A	0.571	A	0.002
38. Bayview Pl at Bristol St South[2]	Signal	AM	0.428	A	0.428	A	0.000
		PM	0.430	A	0.431	A	0.001
39. Jamboree Rd at Birch St[2]	Signal	AM	0.550	A	0.550	A	0.000
		PM	0.546	A	0.546	A	0.000
40. Jamboree Rd at Bayview Way[2]	Signal	AM	0.461	A	0.461	A	0.000
		PM	0.544	A	0.544	A	0.000
41. Jamboree Rd at University Dr/Eastbluff Dr[2]	Signal	AM	0.579	A	0.579	A	0.000
		PM	0.619	B	0.619	B	0.000
42. Jamboree Rd at Bison Ave[2]	Signal	AM	0.499	A	0.499	A	0.000
		PM	0.512	A	0.512	A	0.000
43. Jamboree Rd at Eastbluff Dr/Ford Rd[2]	Signal	AM	0.872	D	0.872	D	0.000
		PM	0.763	C	0.763	C	0.000
44. MacArthur Blvd at Bison Ave[2]	Signal	AM	0.614	B	0.616	B	0.002
		PM	0.609	B	0.609	B	0.000
45. MacArthur Blvd at Ford Rd/Bonita Canyon Dr[2]	Signal	AM	0.775	C	0.777	C	0.002
		PM	0.867	D	0.869	D	0.002
46. Red Hill Ave at Paularino Ave[3]	Signal	AM	0.60	B	0.60	B	0.00
		PM	0.71	C	0.71	C	0.00
47. Red Hill Ave at Baker St[3]	Signal	AM	0.47	A	0.47	A	0.00
		PM	0.66	B	0.66	B	0.00
48. MacArthur Blvd at SR-55 NB Ramps[1]	Signal	AM	0.76	C	0.77	C	0.01
		PM	0.66	B	0.66	B	0.00
49. Red Hill Ave at Dyer Rd[1]	Signal	AM	0.55	A	0.56	A	0.01
		PM	0.92	E	0.92	E	0.00
50. Red Hill Ave at Alton Pkwy[1]	Signal	AM	0.87	D	0.87	D	0.00
		PM	0.90	D	0.90	E	0.00
51. Red Hill Ave at McGaw Ave[1]	Signal	AM	0.48	A	0.48	A	0.00
		PM	0.77	C	0.77	C	0.00
52. Von Karman Ave at Barranca Pkwy[1]	Signal	AM	0.83	D	0.83	D	0.00
		PM	**1.06**	**F**	**1.06**	**F**	0.00
53. Von Karman Ave at Alton Pkwy[1]	Signal	AM	0.83	D	0.83	D	0.00
		PM	0.99	E	0.99	E	0.00

TABLE 10-25
INTERSECTION LEVEL OF SERVICE:
2026 PLUS NO PROJECT ALTERNATIVE SCENARIO

Intersection	Traffic Control	Peak Hour	Without Project		With Project		
			V/C	LOS	V/C	LOS	Change
54. Von Karman Ave at Main St[1]	Signal	AM	0.68	B	0.68	B	0.00
		PM	0.85	D	0.85	D	0.00
55. Jamboree Road at Barranca Parkway[1]	Signal	AM	0.81	D	0.81	D	0.00
		PM	0.94	E	0.94	E	0.00
56. Jamboree Rd at Alton Pkwy	Signal	AM	0.86	D	0.86	D	0.00
		PM	0.89	D	0.89	D	0.00
57. Jamboree Rd at McGaw Ave[1]	Signal	AM	0.71	C	0.72	C	0.01
		PM	0.73	C	0.73	C	0.00
58. Jamboree Rd at Main St[1]	Signal	AM	0.80	C	0.80	C	0.00
		PM	0.89	D	0.89	D	0.00
59. Harvard Ave at Michelson Dr[1]	Signal	AM	0.73	C	0.73	C	0.00
		PM	0.87	D	0.87	D	0.00

Notes: Signalized intersections evaluated using ICU methodology.

1. Based on City of Irvine intersection analysis methodology.
2. Based on City of Newport Beach intersection analysis methodology.
3. Based on City of Costa Mesa intersection analysis methodology.
4. Based on CMP intersection analysis methodology.
5. AWSC = All Way Stop Control; average intersection delay is reported.
6. Intersections operating below acceptable standards are noted in **bold.**

Table 10-26 provides the LOS results for the four intersections under the joint jurisdiction of Caltrans. Because the addition of project-generated trips would not cause the LOS to degrade from acceptable to unacceptable LOS, and because project trips would not cause a 2 second delay increase at an intersection operating a unacceptable LOS prior to the addition of project traffic, under this scenario, the project would not result in significant impacts at the Caltrans intersections.

TABLE 10-26
CALTRANS INTERSECTION LEVEL OF SERVICE:
2026 PLUS NO PROJECT ALTERNATIVE

Intersection	Traffic Control	Peak Hour	Without Project		With Project	
			Delay	LOS	Delay	LOS
MacArthur Blvd at I-405 NB Ramps	Signal	AM	23.1	C	24.1	C
		PM	26.4	C	27.4	C
MacArthur Blvd at I-405 SB Ramps	Signal	AM	23.4	C	23.6	C
		PM	25.5	C	25.1	C
Jamboree Rd at I-405 NB Ramps	Signal	AM	17.3	B	17.7	B
		PM	35.6	D	36.3	D
Jamboree Rd at I-405 SB Ramps	Signal	**AM**	**106.3**	**F**	**106.3**	**F**
		PM	30.7	C	30.7	C

Notes:
1. Intersections operating below acceptable standards are noted in **bold.**

Tables 10-27, 10-28, 10-29 provide freeway mainline and ramp LOS results for the AM Peak Hour for SR-55, SR-73, and I-405, respectively. Tables 10-30, 10-31, 10-32 provide freeway and ramp LOS results for the PM Peak Hour for these same facilities. Deficient levels of service are shown in **bold**. As shown in the tables, most of these facilities would operate at deficient levels of service without project traffic. However, because the addition of project trips would not result in a decrease in LOS from acceptable to unacceptable, and because the addition of project trips would not increase traffic by 2 percent or more, impacts would be less than significant.

TABLE 10-27
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PLUS NO PROJECT ALTERNATIVE - AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	-	**F**	-	**F**	**20**	**0.2%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	29.0	D	29.1	D	20	0.3%
Baker St Off Ramp	Diverge	21.7	C	21.8	C	20	0.3%
Baker St Off Ramp to SR-73 On Ramp	Basic	**38.0**	**F**	**38.3**	**F**	**20**	**0.3%**
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	**45.0**	**F**	-	**F**	**10**	**0.2%**
Paularino Ave On Ramp	Merge	-	**F**	-	**F**	**20**	**0.3%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	-	**F**	-	**F**	**20**	**0.3%**
On Ramp from I-405 SB	Basic	-	**F**	-	**F**	**20**	**0.2%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	-	**F**	-	**F**	**60**	**0.5%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	34.2	D	34.5	D	40	0.5%

TABLE 10-27
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PLUS NO PROJECT ALTERNATIVE - AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	-	**F**	-	**F**	**60**	**0.6%**
Off Ramp to I-405 NB	Diverge	28.8	D	28.8	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	22.9	C	22.9	C	0	0.0%
Paularino Ave Off Ramp	Diverge	28.1	D	28.1	D	0	0.0%
Lane Drop	Basic	27.7	D	27.6	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	-	**F**	-	**F**	**20**	**0.2%**
Baker St On Ramp	Basic	16.7	B	16.7	B	20	0.5%
On Ramp from SR-73 NB	Merge	20.7	C	20.8	C	40	0.8%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	19.7	C	19.8	C	40	0.8%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	29.7	D	29.7	D	40	0.6%
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	20.4	C	20.4	C	30	0.6%
Newport Blvd S/Fair Dr On Ramp	Merge	20.9	C	20.9	C	30	0.6%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-28
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS NO PROJECT ALTERNATIVE - AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	**40.5**	**E**	**40.6**	**E**	**10**	**0.2%**
MacArthur Blvd On Ramp	Basic	**36.8**	**E**	**36.9**	**E**	**20**	**0.3%**
Jamboree Rd On Ramp	Merge	35.0	D	**35.1**	**E**	**30**	**0.3%**
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	**43.3**	**E**	**43.6**	**E**	**30**	**0.3%**
Bristol St N Off Ramp	Diverge	**-**	**F**	**-**	**F**	**30**	**0.3%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**70**	**0.7%**
Off Ramp to SR-55 SB	Diverge	31.7	D	32.1	D	70	1.0%
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**50**	**0.7%**
Bear St Off Ramp to Bear St On Ramp	Basic	21.7	C	21.9	C	50	0.9%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	**39.0**	**E**	**39.3**	**E**	**30**	**0.5%**
On Ramp from SR-55 NB	Merge	30.4	D	31.7	D	40	0.7%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	31.4	D	31.7	D	40	0.7%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	22.6	C	22.7	C	50	0.9%
Jamboree Rd/Bristol St S Off Ramp	Diverge	27.9	C	28.0	C	50	0.7%
Jamboree Rd Off to Lane Add	Basic	20.5	C	20.7	C	30	0.8%
University Dr Off Ramp	Basic	12.3	B	12.4	B	30	0.6%

TABLE 10-28
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS NO PROJECT ALTERNATIVE - AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	15.2	B	15.4	B	30	1.1%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-29
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**43.0**	**E**	**43.3**	**E**	**30**	**0.3%**
Jamboree Rd Off Ramp	Diverge	28.8	D	29.0	D	30	0.2%
Jamboree Rd Loop On Ramp	Merge	27.2	C	27.2	C	20	0.2%
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.2%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**37.6**	**E**	**37.7**	**E**	**10**	**0.1%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	27.7	D	27.8	D	0	0.0%
Bristol St/Ave of the Arts Off Ramp	Diverge	32.2	D	32.3	D	0	0.0%
On Ramp from SR-55 SB	Basic	24.5	C	24.5	C	0	0.0%
Bristol St N On Ramp	Merge	21.5	C	21.5	C	0	0.0%
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	**31.1**	**F**	**31.2**	**F**	**20**	**0.2%**
Fairview Rd On Ramp	Merge	**34.4**	**F**	**34.5**	**F**	**30**	**0.3%**
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	**39.0**	**F**	**39.3**	**F**	**30**	**0.3%**
Bristol St Off Ramp	Diverge	**27.4**	**F**	**27.5**	**F**	**30**	**0.3%**
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	**-**	**F**	**-**	**F**	**40**	**0.3%**
Lane Drop	Basic	34.5	D	34.8	D	40	0.5%
On Ramp from SR-55 NB	Basic	**35.2**	**E**	**35.5**	**E**	**50**	**0.5%**
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**

TABLE 10-29
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS NO PROJECT ALTERNATIVE- AM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**-**	**F**	**-**	**F**	**50**	**0.4%**
Jamboree Rd Loop On Ramp	Merge	19.4	B	18.9	B	50	0.8%
Jamboree Rd Direct On Ramp	Merge	17.5	B	17.7	B	60	0.9%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-30
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PLUS NO PROJECT ALTERNATIVE - PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-55							
Fair Dr/Del Mar Ave/Newport Blvd On Ramp to SR-73 Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.3%**
SR-73 Off Ramp to Baker St Off Ramp	Basic	10.8	A	10.8	A	20	0.8%
Baker St Off Ramp	Diverge	3.5	A	3.5	A	20	0.7%
Baker St Off Ramp to SR-73 On Ramp	Basic	12.0	B	12.1	B	20	0.9%
On Ramp from SR-73 NB to Off Ramp to I-405 SB	Weave	28.6	D	28.9	D	20	0.4%
Off Ramp to I-405 SB to Paularino Ave On Ramp	Basic	13.6	B	13.6	B	10	0.4%
Paularino Ave On Ramp	Merge	**15.7**	**F**	**15.8**	**F**	**20**	**0.7%**
Paularino Ave On Ramp to I-405 SB On Ramp	Basic	**16.7**	**F**	**16.8**	**F**	**20**	**0.7%**
On Ramp from I-405 SB	Basic	**16.2**	**F**	**16.2**	**F**	**20**	**0.5%**
On Ramp from I-405 NB to MacArthur Blvd Off Ramp	Weave	**25.5**	**F**	**26.1**	**F**	**80**	**1.3%**
Southbound SR-55							
MacArthur Blvd Loop On Ramp to MacArthur Blvd Direct On Ramp	Basic	**36.7**	**E**	**36.9**	**E**	**30**	**0.4%**
MacArthur Blvd Direct On Ramp to Off Ramp to I-405 SB	Weave	**-**	**F**	**-**	**F**	**50**	**0.5%**
Off Ramp to I-405 NB	Diverge	33.7	D	33.7	D	0	0.0%
I-405 NB Off Ramp to Paularino Ave Off Ramp	Basic	25.8	C	25.8	C	0	0.0%
Paularino Ave Off Ramp	Diverge	30.7	D	30.7	D	0	0.0%

TABLE 10-30
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-55
2026 PLUS NO PROJECT ALTERNATIVE - PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Lane Drop	Basic	32.9	D	32.8	D	0	0.0%
On Ramp from I-405 NB to Off Ramp to SR-73 SB	Weave	**-**	**F**	**-**	**F**	**10**	**0.1%**
Baker St On Ramp	Basic	23.7	C	23.7	C	10	0.2%
On Ramp from SR-73 NB	Merge	30.3	D	30.3	D	20	0.3%
SR-73 NB On Ramp to SR-73 SB On Ramp	Basic	30.1	D	30.2	D	20	0.3%
SR-73 SB On Ramp to Newport Blvd S/Mesa Dr Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
Newport Blvd S/Mesa Dr Off to Newport Blvd S/Fair Dr On Ramp	Basic	27.1	D	27.1	D	10	0.2%
Newport Blvd S/Fair Dr On Ramp	Merge	25.5	C	25.5	C	20	0.3%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-31
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS NO PROJECT ALTERNATIVE - PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound SR-73							
Lane Drop to MacArthur Blvd On Ramp	Basic	27.8	D	27.9	D	10	0.2%
MacArthur Blvd On Ramp	Basic	28.8	D	28.9	D	20	0.3%
Jamboree Rd On Ramp	Merge	32.5	D	32.7	D	30	0.4%
Jamboree Rd On Ramp to Bristol St N Off Ramp	Basic	34.6	D	34.8	D	30	0.4%
Bristol St N Off Ramp	Diverge	**36.0**	**E**	**36.2**	**E**	**30**	**0.4%**
Bristol St N On Ramp to SR-55 N Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.5%**
Off Ramp to SR-55 SB	Diverge	**-**	**F**	**-**	**F**	**60**	**0.6%**
On Ramp from SR-55 NB	Weave	**-**	**F**	**-**	**F**	**50**	**0.6%**
Bear St Off Ramp to Bear St On Ramp	Basic	33.5	D	33.9	D	50	0.7%
Southbound SR-73							
Bear St On Ramp to SR-55 S Off Ramp	Weave	32.6	D	32.8	D	20	0.3%
On Ramp from SR-55 NB	Merge	29.4	D	29.6	D	30	0.6%
SR-55 NB On Ramp to SR-55 SB On Ramp	Basic	27.5	D	27.7	D	30	0.6%
On Ramp from SR-55 SB to Campus/Bristol St S Off Ramp	Weave	**-**	**F**	**-**	**F**	**30**	**0.4%**
Campus/Bristol St S Off to Jamboree Rd Off	Basic	24.9	C	25.0	C	30	0.5%
Jamboree Rd/Bristol St S Off Ramp	Diverge	25.0	C	25.1	C	30	0.4%
Jamboree Rd Off to Lane Add	Basic	28.9	D	29.0	D	10	0.2%
University Dr Off Ramp	Basic	16.7	B	16.7	B	10	0.2%

TABLE 10-31
FREEWAY MAINLINE AND RAMPS OPERATIONS: SR-73
2026 PLUS NO PROJECT ALTERNATIVE - PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
University Off to Jamboree Rd On Ramp	Basic	25.0	C	25.0	C	10	0.2%

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

TABLE 10-32
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
Northbound I-405							
Culver St On Ramp to Jamboree Rd Off Ramp	Basic	**25.8**	**F**	**25.9**	**F**	**30**	**0.4%**
Jamboree Rd Off Ramp	Diverge	**18.5**	**F**	**18.6**	**F**	**30**	**0.3%**
Jamboree Rd Loop On Ramp	Merge	**24.0**	**F**	**24.2**	**F**	**30**	**0.4%**
Jamboree Rd Direct On Ramp to MacArthur Blvd Off Ramp	Weave	**40.5**	**F**	**40.9**	**F**	**40**	**0.4%**
MacArthur Blvd On Ramp to SR-55 NB & SB Off Ramp	Weave	**-**	**F**	**-**	**F**	**20**	**0.2%**
SR-55 Off Ramp to Bristol St Off Ramp	Basic	**26.5**	**F**	**26.6**	**F**	**10**	**0.2%**
Bristol St/Ave of the Arts Off Ramp	Diverge	**31.1**	**F**	**31.3**	**F**	**10**	**0.1%**
On Ramp from SR-55 SB	Basic	**22.6**	**F**	**22.6**	**F**	**0**	**0.0%**
Bristol St N On Ramp	Merge	**21.5**	**F**	**21.5**	**F**	**0**	**0.0%**
Bristol St S On Ramp to S Coast Off	Weave	**-**	**F**	**-**	**F**	**0**	**0.0%**
Southbound I-405							
Off Ramp to I-405 SB to Fairview Rd On Ramp	Basic	19.7	C	19.8	C	30	0.5%
Fairview Rd On Ramp	Merge	25.7	C	25.8	C	40	0.6%
Fairview Rd On Ramp to Bristol St Off Ramp	Basic	23.4	C	23.5	C	40	0.6%
Bristol St Off Ramp	Diverge	18.1	B	18.2	B	40	0.5%
Bristol St On Ramp to SR-55 NB Off Ramp	Weave	30.5	D	30.8	D	50	0.6%
Lane Drop	Basic	26.4	D	26.6	D	50	0.8%
On Ramp from SR-55 NB	Basic	26.5	D	26.8	D	60	0.8%
SR-55 SB On Ramp to MacArthur Blvd Off Ramp	Weave	**-**	**F**	**-**	**F**	**60**	**0.6%**

TABLE 10-32
FREEWAY MAINLINE AND RAMPS OPERATIONS: I-405
2026 PLUS NO PROJECT ALTERNATIVE- PM

Location	Type	Without Project		With Project			
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Project Trips	Percent Increase
MacArthur Blvd On Ramp to Jamboree Rd Off Ramp	Weave	**44.4**	**E**	**44.9**	**E**	**60**	**0.6%**
Jamboree Rd Loop On Ramp	Merge	**22.5**	**F**	**22.0**	**F**	**60**	**0.9%**
Jamboree Rd Direct On Ramp	Merge	**22.8**	**F**	**23.1**	**F**	**70**	**0.9%**

Notes: Source: Fehr & Peers 2014

1. Freeway facilities operating below acceptable standards are noted in **bold.**
2. Analysis performed using the HCM 2010 methodology.
3. pc/mi/ln = passenger cars per mile per lane.

10.4.3 IMPACTS

10.4.3.1 **Threshold T-1**

No impact.

10.4.3.2 **Threshold T-2**

No impact.

10.4.3.3 **Threshold T-3**

No impact.

10.4.3.4 **Threshold T-4**

No impact.

10.4.3.5 **Threshold T-5**

No impact.

10.4.3.6 **Threshold T-6**

No impact

10.4.3.7 **Threshold T-7**

The addition of project traffic causes the ICU at the Campus Drive/North Bristol Street intersection in the City of Newport Beach to increase by 0.021 at an intersection which is projected to operate at LOS F prior to the addition of project traffic. Since this increase in ICU is greater than 0.01, a significant impact occurs.

10.4.3.8 **Threshold T-8**

No impact

10.4.3.9 **Threshold T-9**

No impact.

10.4.3.10 **Threshold T-10**

No impact

10.4.3.11 **Threshold T-11**

No impact.

10.4.3.12 **Threshold T-12**

No impact.

10.4.3.13 **Threshold T-13**

No impact.

10.4.3.14 **Threshold T-14**

No impact.

10.4.3.15 **Threshold T-15**

No impact.

11.0 Caltrans Ramp Queue Analysis

A 95th percentile queue analysis has been prepared utilizing the *Synchro 7* software to determine if adequate queue storage is provided at the following Caltrans ramp locations:

- I-405 Northbound Off-Ramp at MacArthur Boulevard
- I-405 Southbound Off-Ramp at MacArthur Boulevard
- I-405 Northbound Off-Ramp at Jamboree Road
- I-405 Southbound Off-Ramp at Jamboree Road

The queues for each of the four Caltrans off-ramp locations are provided in Table 11-1 to Table 11-5. As shown in the table below, adequate queue storage is forecast to be provided at the Caltrans off-ramp locations.

TABLE 11-1
OFF-RAMP QUEUE ANALSYSIS
EXISTING AND PROPOSED PROJECT

Scenario	Off-Ramp Location	Peak Hour	Movement	Capacity (per lane)	Queue	Exceed Capacity?
Existing Conditions	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	222	No
		PM	WBL	825	145	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	483	No
		PM	WBL	1865	279	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	293[1]	No
		PM	WBL	1030	134	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	640[1]	No
		PM	EBL	830	502[1]	No
Existing Plus Project	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	233	No
		PM	WBL	825	161	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	485	No
		PM	WBL	1865	279	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	299[1]	No
		PM	WBL	1030	136	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	643[1]	No
		PM	EBL	830	504[1]	No
2016 Plus Project	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	230	No
		PM	WBL	825	155	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	485	No
		PM	WBL	1865	286	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	299[1]	No
		PM	WBL	1030	138	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	650[1]	No
		PM	EBL	830	505[1]	No

TABLE 11-1
OFF-RAMP QUEUE ANALSYSIS
EXISTING AND PROPOSED PROJECT

Scenario	Off-Ramp Location	Peak Hour	Movement	Capacity (per lane)	Queue	Exceed Capacity?
2021 Plus Project	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	238	No
		PM	WBL	825	168	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	491	No
		PM	WBL	1865	291	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	310[1]	No
		PM	WBL	1030	147	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	666[1]	No
		PM	EBL	830	507[1]	No
2026 Plus Project	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	246	No
		PM	WBL	825	177	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	491	No
		PM	WBL	1865	297	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	314[1]	No
		PM	WBL	1030	153	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	687[1]	No
		PM	EBL	830	508[1]	No

Notes: Queues reported are the longest queues per lane. Capacity is reported per lane (Capacity = storage for movement with worst queue ÷ number of lanes).
1 = 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

TABLE 11-2
OFF-RAMP QUEUE ANALSYSIS
ALTERNATIVE A PROJECT

Scenario	Off-Ramp Location	Peak Hour	Movement	Capacity (per lane)	Queue	Exceed Capacity?
Existing Plus Alternative A	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	236	No
		PM	WBL	825	161	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	485	No
		PM	WBL	1865	279	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	299[1]	No
		PM	WBL	1030	136	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	643[1]	No
		PM	EBL	830	504[1]	No
2016 Plus Alternative A	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	230	No
		PM	WBL	825	155	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	485	No
		PM	WBL	1865	286	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	299[1]	No
		PM	WBL	1030	138	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	650[1]	No
		PM	EBL	830	505[1]	No
2021 Plus Alternative A	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	236	No
		PM	WBL	825	164	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	491	No
		PM	WBL	1865	291	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	310[1]	No
		PM	WBL	1030	147	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	666[1]	No
		PM	EBL	830	507[1]	No
2026 Plus Alternative A	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	246	No
		PM	WBL	825	177	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	491	No
		PM	WBL	1865	297	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	314[1]	No
		PM	WBL	1030	153	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	687[1]	No
		PM	EBL	830	508[1]	No

Notes: Queues reported are the longest queues per lane. Capacity is reported per lane (Capacity = storage for movement with worst queue ÷ number of lanes).
1 = 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

TABLE 11-3
OFF-RAMP QUEUE ANALSYSIS
ALTERNATIVE B PROJECT

Scenario	Off-Ramp Location	Peak Hour	Movement	Capacity (per lane)	Queue	Exceed Capacity?
Existing Plus Alternative B	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	242	No
		PM	WBL	825	171	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	485	No
		PM	WBL	1865	279	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	303[1]	No
		PM	WBL	1030	136	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	643[1]	No
		PM	EBL	830	504[1]	No
2016 Plus Alternative B	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	230	No
		PM	WBL	825	155	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	485	No
		PM	WBL	1865	286	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	299[1]	No
		PM	WBL	1030	138	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	650[1]	No
		PM	EBL	830	505[1]	No
2021 Plus Alternative B	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	240	No
		PM	WBL	825	174	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	491	No
		PM	WBL	1865	291	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	310[1]	No
		PM	WBL	1030	147	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	666[1]	No
		PM	EBL	830	507[1]	No
2026 Plus Alternative B	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	257	No
		PM	WBL	825	186	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	491	No
		PM	WBL	1865	297	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	318[1]	No
		PM	WBL	1030	153	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	687[1]	No
		PM	EBL	830	508[1]	No

Notes: Queues reported are the longest queues per lane. Capacity is reported per lane (Capacity = storage for movement with worst queue ÷ number of lanes).
1 = 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

TABLE 11-4
OFF-RAMP QUEUE ANALSYSIS
ALTERNATIVE C PROJECT

Scenario	Off-Ramp Location	Peak Hour	Movement	Capacity (per lane)	Queue	Exceed Capacity?
Existing Plus Alternative C	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	250	No
		PM	WBL	825	180	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	485	No
		PM	WBL	1865	279	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	303[1]	No
		PM	WBL	1030	136	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	643[1]	No
		PM	EBL	830	504[1]	No
2016 Plus Alternative C	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	257	No
		PM	WBL	825	183	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	485	No
		PM	WBL	1865	286	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	306[1]	No
		PM	WBL	1030	140	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	650[1]	No
		PM	EBL	830	505[1]	No
2021 Plus Alternative C	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	260	No
		PM	WBL	825	190	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	491	No
		PM	WBL	1865	291	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	314[1]	No
		PM	WBL	1030	147	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	666[1]	No
		PM	EBL	830	507[1]	No
2026 Plus Alternative C	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	268	No
		PM	WBL	825	198	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	491	No
		PM	WBL	1865	297	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	318[1]	No
		PM	WBL	1030	153	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	687[1]	No
		PM	EBL	830	508[1]	No

Notes: Queues reported are the longest queues per lane. Capacity is reported per lane (Capacity = storage for movement with worst queue ÷ number of lanes).
1 = 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

TABLE 11-5
OFF-RAMP QUEUE ANALSYSIS
NO PROJECT ALTERNATIVE

Scenario	Off-Ramp Location	Peak Hour	Movement	Capacity (per lane)	Queue	Exceed Capacity?
Existing Plus No Project Alternative	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	228	No
		PM	WBL	825	152	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	485	No
		PM	WBL	1865	279	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	299[1]	No
		PM	WBL	1030	136	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	643[1]	No
		PM	EBL	830	504[1]	No
2016 Plus No Project Alternative	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	230	No
		PM	WBL	825	155	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	485	No
		PM	WBL	1865	286	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	299[1]	No
		PM	WBL	1030	138	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	650[1]	No
		PM	EBL	830	505[1]	No
2021 Plus No Project Alternative	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	233	No
		PM	WBL	825	161	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	491	No
		PM	WBL	1865	291	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	306[1]	No
		PM	WBL	1030	145	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	666[1]	No
		PM	EBL	830	507[1]	No
2026 Plus No Project Alternative	I-405 NB Off-Ramp at MacArthur Blvd	AM	WBL	825	238	No
		PM	WBL	825	168	No
	I-405 SB Off-Ramp at MacArthur Blvd	AM	WBL	1865	491	No
		PM	WBL	1865	297	No
	I-405 NB Off-Ramp at Jamboree Rd	AM	WBL	1030	310[1]	No
		PM	WBL	1030	151	No
	I-405 SB Off-Ramp at Jamboree Rd	AM	EBR	925	687[1]	No
		PM	EBL	830	508[1]	No

Notes: Queues reported are the longest queues per lane. Capacity is reported per lane (Capacity = storage for movement with worst queue ÷ number of lanes).
1 = 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

12.0 Impact Summary

As shown in Table 12.-1, the following five intersections are impacted either directly or indirectly in one or more of the scenarios:

- MacArthur and Michelson
- Campus and Airport
- Campus and Bristol North
- Santa Ana and Del Mar
- Von Karman and Alton

As shown in Table 12-2, the following freeway locations are impacted directly or indirectly in one or more of the scenarios:

- Northbound SR-55: Paularino Avenue On Ramp
- Northbound SR-55: Paularino Ave On Ramp to I-405 SB On Ramp
- Northbound SR-55: On Ramp from I-405 NB to McArthur Blvd Off Ramp
- Southbound SR-55: McArthur Blvd Loop On Ramp to McArthur Blvd Direct On Ramp
- Southbound SR-55: McArthur Blvd Direct On Ramp to Off Ramp to I-405 SB
- Northbound SR-73: Bristol St N On Ramp to SR-55 N Off Ramp
- Northbound SR-73: Off Ramp to SR-55 SB
- Northbound SR-73: On Ramp from SR-55 NB
- Southbound I-405: Jamboree Rd Loop On Ramp
- Southbound I-405: Jamboree Rd Direct On Ramp

TABLE 12-1 INTERSECTION IMPACT SUMMARY

		Proposed Project								Alternative A								Alternative B								Alternative C								No Project							
		Ex.		2016		2021		2026		Ex.		2016		2021		2026		Ex.		2016		2021		2026		Ex.		2016		2021		2026		Ex.		2016		2021		2026	
#	Intersection Locations	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
4	MacArthur & Michelson								D								D								D				D		D		D							
15	Campus & Airport																								D				D		D		D							
17	Campus & Bristol N.		D		C		C		C		D		C		C		C		D		C		C		C		D		C		C		C		D		C		C
25	Santa Ana & Del Mar																														D								
53	Von Karman & Alton								D								D								D							D								

Source: *Fehr & Peers, 2013*

Notes: D = Direct Impact; C = Cumulative Impact; Ex. = Existing

TABLE 12-2 FREEWAY IMPACT SUMMARY

	Proposed Project								Alternative A								Alternative B								Alternative C								No Project							
	Ex.		2016		2021		2026		Ex.		2016		2021		2026		Ex.		2016		2021		2026		Ex.		2016		2021		2026		Ex.		2016		2021		2026	
Intersection Locations	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
Northbound SR-55																																								
Paularino Ave On Ramp																										C		C		C		C								
Paularino Ave On Ramp to I-405 SB On Ramp																										C		C		C		C								
On Ramp from I-405 NB to McArthur Blvd Off Ramp		C				C		C		C						C		C				C		C		C		C		C		C								
Southbound SR-55																																									
McArthur Blvd Loop On Ramp to McArthur Blvd Direct On Ramp																									D		D		D		D										
McArthur Blvd Direct On Ramp to Off Ramp to I-405 SB																									C		C		C		C										
Northbound SR-73																																									
Jamboree Rd On Ramp																																									
Jamboree Rd On Ramp to Bristol St N Off Ramp																																									
Bristol St N On Ramp to SR-55 N Off Ramp																	D								D				C		C										
Off Ramp to SR-55 SB																										C															
On Ramp from SR-55 NB																	D						C		D	C			C		C										
Southbound SR-73																																									
No Impacts																																									
Northbound I-405																																									
No Impacts																																									
Southbound I-405																																									
Jamboree Rd Loop On Ramp																										C															
Jamboree Rd Direct On Ramp																										C		C		C		C								

Source: *Fehr & Peers, 2013*

Notes: D = Direct Impact; C = Cumulative Impact; Ex. = Existing

13.0 MITIGATION

This chapter presents mitigation measures for the various intersections and freeway facilities that would be significantly impacted by the proposed project and/or its alternatives.

13.1 INTERSECTION MITIGATION MEASURES

There are five intersections which require mitigation as described below.

13.1.1 INTERSECTION #4- MACARTHUR BOULEVARD/MICHELSON DRIVE

The intersection of MacArthur Boulevard / Michelson Drive would be significantly impacted under the proposed project, and Alternatives A, B, and C. The following mitigation measure is recommended:

Mitigation Measure: The County of Orange/JWA shall coordinate with the City of Irvine and, once agreement is reached as to costs and parameters of design, pay to the City the full cost of converting the traffic signal at the intersection of MacArthur Boulevard / Michelson Drive so that the signal for the westbound right-turn lane under overlap phasing conditions is fully operational prior to JWA serving 12.5 MAP.

Implementation: Mitigating this impact will require converting the traffic signal for the westbound right-turn lane to operate under overlap conditions. The traffic signal currently can accommodate overlap phasing but the phasing is not currently implemented. This impact is a direct impact in that the project causes the intersection to operate deficiently. This intersection is under the jurisdiction of the City of Irvine. As no physical improvement is required, JWA would coordinate with the City of Irvine to implement the phasing such that it is fully operational prior to JWA reaching 12.5 MAP. Since this impact is directly attributable to incremental traffic from the Project, JWA would pay for the full cost of this signal timing change. The City of Irvine would then be responsible for implementing the improvement.

13.1.3 INTERSECTION #15- CAMPUS DRIVE/AIRPORT WAY

The intersection of Campus Drive / Airport Way would be significantly impacted under Alternatives B and C. The following mitigation measure is recommended:

Mitigation Measure: The County of Orange/JWA shall coordinate with the City of Newport Beach and, once agreement is reached as to costs and parameters of design, pay to the City the full cost of adding a second northbound left-turn lane at the intersection of Campus Drive / Airport Way that is fully operational prior to JWA serving 15.0 MAP

Implementation: Mitigating this impact will require the addition of a second northbound left-turn lane. This impact is a direct impact as the addition of project traffic causes the intersection to degrade from acceptable to unacceptable levels. This intersection is under the jurisdiction of the City of Newport Beach. JWA would be responsible for paying to the City of Newport Beach the cost of the improvement in a manner that would ensure the improvement is fully constructed and operational prior JWA reaching the 15.0 MAP level. The City of Newport Beach would then be responsible for the construction of this mitigation measure

13.1.3 INTERSECTION #17- CAMPUS DRIVE/NORTH BRISTOL STREET

The intersection of Campus Drive / North Bristol Street would be significantly impacted under the proposed project, Alternatives A, B, and C, and the No Project alternative. The following mitigation measure is recommended:

Mitigation Measure: Pursuant to EIR 582 mitigation measure T-1, JWA shall coordinate with the City of Newport Beach to construct a third southbound right-turn lane at the intersection of Campus Drive / North Bristol Street that is fully operational prior to JWA serving 10.8 MAP.

Implementation: Mitigating this impact will require the addition of a third southbound right-turn lane. This proposed mitigation measure is identical to one identified in the traffic analysis prepared in connection with the previous Settlement Agreement amendment (EIR 582, SCH No. 2001011068). This impact is a cumulative impact which the project contributes to but is not fully responsible for as this intersection operates at a deficient LOS prior to the introduction of project traffic. This impact is therefore different from the impact identified in EIR 582, which was an impact directly attributable to the project. Growth in background traffic volumes since the previous analysis was completed have worsened conditions at this intersection such that the additional traffic from JWA is now contributing to an already deficient condition rather than creating a new (i.e., direct project impact) deficient condition.

The typical approach for mitigating a project's cumulative impact is the payment of a fair share contribution. In this instance, JWA presently is implementing this additional right-turn lane through consultations with Orange County and the City of Newport Beach. JWA has completed planning studies for this improvement and is currently in the process of preparing construction plans, which are approximately 70 percent complete as of March 2014. JWA has also agreed to fund necessary ancillary construction work at this location, including any utility relocation that might be required. This improvement is currently scheduled to be completed by 2016, which is the first year in which the impact would occur.

13.1.4 INTERSECTION #25- SANTA ANA AVENUE/DEL MAR AVENUE

The intersection of Santa Ana Avenue / Del Mar Avenue would be significantly impacted under Alternative C. The following mitigation measure is recommended:

Mitigation Measure: The County of Orange/JWA shall coordinate with the City of Costa Mesa and, once agreement is reached as to costs and parameters of design, pay to the City the full cost of adding a traffic signal at the intersection of Santa Ana Avenue and Del Mar Avenue that is fully operational prior to JWA serving 16.9 MAP.

Implementation: Mitigating this impact will require the addition of a traffic signal. This impact is a direct impact which occurs as the result of additional project traffic causing an intersection to degrade from acceptable to unacceptable conditions. This intersection is under the jurisdiction of the City of Costa Mesa. JWA would pay for the cost of installing the traffic signal, which would be implemented by the City of Costa Mesa, in a manner that would ensure the improvement would be fully constructed and operational prior to reaching 16.9 MAP.

13.1.5 INTERSECTION #53- VON KARMAN AVENUE/ALTON PARKWAY

The intersection of Von Karman Avenue / Alton Parkway would be significantly impacted under the proposed project, and Alternatives A, B, and C. The following mitigation measure is recommended:

Mitigation Measure: The County of Orange/JWA shall coordinate with the City of Irvine and, once agreement is reached as to costs and parameters of design, pay to the City the full cost of adding a northbound right-turn lane at the intersection of Von Karman Avenue and Alton Parkway that is fully operational prior to JWA serving 12.5 MAP.

Implementation: Mitigating this impact will require the addition of a northbound right-turn lane. This impact is a direct impact as the addition of project traffic causes the intersection to degrade from acceptable to unacceptable levels. This intersection is under the jurisdiction of the City of Irvine. JWA would be responsible for paying to the City of Irvine the cost of the improvement prior to reaching the 12.5 MAP threshold, which is the lowest threshold at which this impact would occur. The City of Irvine would then be responsible for the construction of this mitigation measure.

FREEWAY MITIGATION MEASURES

Mitigating the identified significant impacts to the freeway and mainline segments would require a complete reconstruction of the SR-55, SR-73, and the I-405 freeways to add travel lanes and upgrade each of the deficient ramp locations. Since the freeways in the study area are interconnected systems, it would not be possible, nor effective, to provide isolated spot improvements of one segment of the freeway where deficient operations are observed.

It also is noted that both FAA and SCAG projections indicate that forecasted passenger demand at JWA exceeds the current Settlement Agreement limits of 10.8 MAP, and that FAA projections anticipate unconstrained passenger demand at JWA reaching 12.8 MAP by 2030. (Technical Report Capacity Analysis, AECOM, Section 7 (2014).) As JWA currently serves approximately 9 million annual passengers, allowing an increase in MAP to only 10.8 MAP likely would cause residents of Orange County to divert to other airports in the region to satisfy their air travel needs. This diversion of workers and residents to other facilities, such as Los Angeles International Airport (LAX), Long Beach and Ontario, likely would result in additional travel on the regional roadway system, which could result in additional congestion, vehicle miles traveled (VMT) and emissions for these longer distance trips. As such, by increasing the MAP limit at JWA, the Proposed Project, as well as Alternatives A, B, or C, likely would eliminate the need for a certain number of air passengers to travel to another airport, thereby reducing congestion on the regional freeway system.

OCTA is currently finalizing a comprehensive study of the SR-55 to evaluate potential improvements through the Caltrans Project Report/Environmental Document (PR/ED) process. This study has tentatively identified improvements to the SR-55 to add a mainline lane and also improve several interchanges. However; no additional travel lanes have been proposed for the segment between I-405 and MacArthur Boulevard as of May 2014. Additionally there is no dedicated funding for these proposed improvements. The *Regional Transportation Plan* indicates that this improvement could be funded in 2035, which would be an insufficient timeframe to address impacts that might occur as early as 2026, and in the case of the Proposed Project as early as 2021.

OCTA is also currently evaluating various proposals to improve operation on I-405 throughout the Study Area. Various concepts have been evaluated including a toll lane, a general use travel lane, or some combination of the two. Regardless of the proposed improvement, it would not provide for sufficient capacity to fully mitigate the impacts identified along I-405.

No improvements are pending for SR-73 at this time (March 2014). Additionally, as shown in Table 12-2 the majority of the identified significant freeway impacts result from a cumulative condition in that traffic from JWA is added to facilities which would operate at a deficient level even without project traffic. As shown in previous chapters, the contribution of JWA to these segments is minimal, and ranges from 2% to 5%.

Implementation: As discussed in this section, implementation of the Proposed Project would result in a significant cumulative impact to the northbound segment of SR-55 between the on-ramp from I-405 northbound to the MacArthur Boulevard off-ramp. Similarly, implementation of each of the Alternatives, other than the No Project Alternative, would result in significant impacts to various ramps and/or mainline segments of SR-55, SR-73, and I-405. As noted above, the physical improvements necessary to provide the additional capacity for the Proposed Project would require the addition of a general purpose travel lane and no definitive plans identifying such additional lanes are currently available as May 2014. While OCTA, Caltrans, and other agencies are currently studying potential improvements to SR-55 through the Caltrans PR/ED process, widening the SR-55 between I-405 and the MacArthur Boulevard off-ramp to add a general purpose travel lane is not being considered at this time.

14.0 Level of Significance After Mitigation

There are five intersections which require mitigation as described below.

14.1.1 INTERSECTION #4- MACARTHUR BOULEVARD/MICHELSON DRIVE

With the implementation of the proposed mitigation measure at this intersection, the LOS would improve to the following condition under each respective scenario:

- Proposed Project (LOS D)- 2026
- Alternative A (LOS D)- 2026
- Alternative B (LOS D)- 2026
- Alternative C (LOS E)- 2016

With this improvement in LOS, the resulting impact would be less than significant. However, because full implementation of the subject improvement is outside the jurisdiction and control of JWA and, therefore, implementation cannot be assured, in the event the improvement is not fully operational prior to JWA serving 12.5 MAP, the project's impacts at the intersection would remain significant and unavoidable as there is no other feasible mitigation that would fully reduce the identified impacts to less than significant.

14.1.2 INTERSECTION #15- CAMPUS DRIVE/AIRPORT WAY

With the implementation of the proposed mitigation measure at this intersection, the LOS would improve to the following condition under each respective scenario:

- Alternative B (LOS C)-2026
- Alternative C (LOS D)-2016

With this improvement in LOS, the resulting impact would be less than significant. However, because full implementation of the subject improvement is outside the jurisdiction and control of JWA and, therefore, implementation cannot be assured, in the event the improvement is not fully operational prior to JWA serving 15.0 MAP, the project's impacts at the intersection would remain significant and unavoidable as there is no other feasible mitigation that would fully reduce the identified impacts to less than significant.

14.1.3 INTERSECTION #17- CAMPUS DRIVE/NORTH BRISTOL STREET.

With the implementation of the recommended mitigation measure at this intersection, the LOS would improve to the following condition under each respective scenario:

- Proposed Project (LOS D)-2016
- Alternative A (LOS D)-2016

- Alternative B (LOS E)-2016
- Alternative C (LOS E)-2016
- No Project (LOS D)-2016

With this improvement in LOS, the resulting impact would be less than significant.

14.1.4 INTERSECTION #25- SANTA ANA AVENUE/DEL MAR AVENUE

With the implementation of the recommended mitigation measure, the LOS would improve to the following condition:

- Alternative C (LOS B)-2026

With this improvement in LOS, the resulting impact would be less than significant. However, because full implementation of the subject improvement is outside the jurisdiction and control of JWA and, therefore, implementation cannot be assured, in the event the improvement is not fully operational prior to JWA serving 16.9 MAP, the project's impacts at the intersection would remain significant and unavoidable as there is no other feasible mitigation that would fully reduce the identified impacts to less than significant.

14.1.5 INTERSECTION #53- VON KARMAN AVENUE/ALTON PARKWAY

With the implementation of the proposed mitigation measure at this intersection, the LOS would improve to the following condition under each respective scenario:

- Proposed Project (LOS D)-2026
- Alternative A (LOS D)-2026
- Alternative B (LOS D)-2026
- Alternative C (LOS D)-2026

With this improvement in LOS, the resulting impact would be less than significant. However, because full implementation of the subject improvement is outside the jurisdiction and control of JWA and, therefore, implementation cannot be assured, in the event the improvement is not fully operational prior to JWA serving 12.5 MAP, the project's impacts at the intersection would remain significant and unavoidable as there is no other feasible mitigation that would fully reduce the identified impacts to less than significant.

14.2 FREEWAY MITIGATON MEASURES

Because there is no feasible mitigation to address the identified significant impacts to state facilities, impacts to the regional freeways would be significant and unavoidable.

APPENDIX A: EXISTING TRAFFIC COUNTS

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-001 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			Main St			Main St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 4	NR 2	SL 2	ST 4	SR 1	EL 1	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL
7:00 AM	103	145	237	87	88	9	9	93	69	31	50	23	944
7:15 AM	147	163	271	100	103	8	6	120	77	38	72	30	1135
7:30 AM	137	165	276	78	100	16	9	175	99	50	107	48	1260
7:45 AM	188	303	270	112	154	16	11	221	125	44	130	42	1616
8:00 AM	177	253	327	124	106	14	13	230	111	59	136	51	1601
8:15 AM	146	227	322	120	142	18	15	205	101	51	132	53	1532
8:30 AM	156	180	334	102	131	15	14	198	87	71	155	45	1488
8:45 AM	151	188	337	111	153	24	9	148	93	57	127	42	1440
TOTAL VOLUMES :	1205	1624	2374	834	977	120	86	1390	762	401	909	334	11016
APPROACH %'s :	23.16%	31.21%	45.63%	43.19%	50.60%	6.21%	3.84%	62.11%	34.05%	24.39%	55.29%	20.32%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	667	963	1253	458	533	63	53	854	424	225	553	191	6237
PEAK HR FACTOR :		0.947			0.934			0.932			0.894		0.965

UTURNS	NB	SB	EB	WB
	0	4	0	0
	0	2	0	0
	1	5	0	0
	0	1	0	0
	0	2	0	0
	0	0	0	0
	1	3	0	0
	0	1	0	0
TOTAL	2	18	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-001 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			Main St			Main St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 4	NR 2	SL 2	ST 4	SR 1	EL 1	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL
4:00 PM	127	239	90	47	132	13	20	109	142	159	176	125	1379
4:15 PM	119	241	92	52	146	11	19	126	127	131	174	100	1338
4:30 PM	116	213	104	58	148	16	17	144	119	191	212	152	1490
4:45 PM	130	236	131	67	153	17	14	159	127	131	168	86	1419
5:00 PM	152	245	141	62	219	11	21	207	166	208	277	163	1872
5:15 PM	145	287	161	66	194	16	17	242	139	178	279	138	1862
5:30 PM	149	242	157	96	150	15	15	238	142	176	269	110	1759
5:45 PM	150	284	151	57	188	22	16	256	155	154	234	109	1776
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1088	1987	1027	505	1330	121	139	1481	1117	1328	1789	983	12895
APPROACH %'s :	26.52%	48.44%	25.04%	25.82%	68.00%	6.19%	5.08%	54.11%	40.81%	32.39%	43.63%	23.98%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	596	1058	610	281	751	64	69	943	602	716	1059	520	7269
PEAK HR FACTOR :		0.954			0.938			0.945			0.885		0.971

UTURNS	NB	SB	EB	WB
	0	2	0	0
	0	3	0	0
	0	3	0	0
	0	2	2	0
	0	0	0	0
	0	1	0	0
	0	5	0	0
	0	2	1	0
	NB	SB	EB	WB
	0	18	3	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-002 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			I-405 NB Ramps			I-405 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	4	2	2	4	0	0	0	0	2	0	2	
7:00 AM	0	296	59	25	173	0	0	0	0	144	0	194	891
7:15 AM	0	320	40	26	188	0	0	0	0	146	0	245	965
7:30 AM	0	357	51	30	215	0	0	0	0	150	0	225	1028
7:45 AM	0	468	65	32	283	0	0	0	0	174	0	286	1308
8:00 AM	0	501	73	42	230	0	0	0	0	198	0	260	1304
8:15 AM	0	469	82	28	253	0	0	0	0	200	0	222	1254
8:30 AM	0	453	79	47	240	0	0	0	0	221	0	220	1260
8:45 AM	0	438	102	37	264	0	0	0	0	202	0	235	1278
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3302	551	267	1846	0	0	0	0	1435	0	1887	9288
APPROACH %'s :	0.00%	85.70%	14.30%	12.64%	87.36%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	43.20%	0.00%	56.80%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	0	1891	299	149	1006	0	0	0	0	793	0	988	5126
PEAK HR FACTOR :		0.954			0.917			0.000			0.968		0.980

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-002 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			I-405 NB Ramps			I-405 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 4	NR 2	SL 2	ST 4	SR 0	EL 0	ET 0	ER 0	WL 2	WT 0	WR 2	TOTAL
4:00 PM	0	362	205	136	294	0	0	0	0	81	0	97	1175
4:15 PM	0	372	246	107	299	0	0	0	0	83	0	74	1181
4:30 PM	0	350	203	158	300	0	0	0	0	94	0	81	1186
4:45 PM	0	420	184	140	273	0	0	0	0	77	0	80	1174
5:00 PM	0	465	189	159	430	0	0	0	0	87	0	70	1400
5:15 PM	0	503	214	133	375	0	0	0	0	92	0	89	1406
5:30 PM	0	472	192	132	330	0	0	0	0	78	0	82	1286
5:45 PM	0	470	163	160	333	0	0	0	0	100	0	108	1334
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3414	1596	1125	2634	0	0	0	0	692	0	681	10142
APPROACH %'s :	0.00%	68.14%	31.86%	29.93%	70.07%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	50.40%	0.00%	49.60%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	1910	758	584	1468	0	0	0	0	357	0	349	5426
PEAK HR FACTOR :		0.930			0.871			0.000			0.849		0.965

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-002 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			I-405 NB Ramps			I-405 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	4	2	2	4	0	0	0	0	2	0	2	
7:00 AM												63	63
7:15 AM												88	88
7:30 AM												108	108
7:45 AM												111	111
8:00 AM												110	110
8:15 AM												109	109
8:30 AM												119	119
8:45 AM												132	132
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	840	840
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	470	470
PEAK HR FACTOR :		0.000			0.000			0.000			0.890		0.890

UTURNS			
NB	SB	EB	WB

	NB	SB	EB	WB
TOTAL VOLUMES :	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-002 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			I-405 NB Ramps			I-405 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	4	2	2	4	0	0	0	0	2	0	2	
4:00 PM												22	22
4:15 PM												20	20
4:30 PM												25	25
4:45 PM												24	24
5:00 PM												23	23
5:15 PM												31	31
5:30 PM												29	29
5:45 PM												33	33
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	207	207
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	116	116
PEAK HR FACTOR :		0.000			0.000			0.000			0.879		0.879

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-003 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			I-405 SB Ramps			I-405 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 4	NR 1	SL 2	ST 4	SR 1	EL 0	ET 0	ER 0	WL 2	WT 1	WR 1	TOTAL
7:00 AM	0	123	64	43	204	72	0	0	0	229	28	232	995
7:15 AM	0	142	67	24	242	61	0	0	0	244	21	217	1018
7:30 AM	2	199	62	29	271	61	0	0	0	251	15	211	1101
7:45 AM	3	251	90	27	358	64	0	0	0	281	18	276	1368
8:00 AM	1	282	75	33	333	66	0	0	0	253	29	291	1363
8:15 AM	2	283	84	36	354	66	0	0	0	268	22	267	1382
8:30 AM	1	296	88	30	353	73	0	0	0	282	39	241	1403
8:45 AM	1	291	85	43	345	69	0	0	0	323	44	254	1455
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	10	1867	615	265	2460	532	0	0	0	2131	216	1989	10085
APPROACH %'s :	0.40%	74.92%	24.68%	8.14%	75.53%	16.33%	#DIV/0!	#DIV/0!	#DIV/0!	49.15%	4.98%	45.87%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	5	1152	332	142	1385	274	0	0	0	1126	134	1053	5603
PEAK HR FACTOR :		0.967			0.985			0.000			0.931		0.963

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
2	0	0	0
3	0	0	0
1	0	0	0
2	0	0	0
1	0	0	0
1	0	0	0
NB	SB	EB	WB
10	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-003 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			I-405 SB Ramps			I-405 SB Ramps				UTURNS			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
LANES:	NL 0	NT 4	NR 1	SL 2	ST 4	SR 1	EL 0	ET 0	ER 0	WL 2	WT 1	WR 1	TOTAL	NB	SB	EB	WB
4:00 PM	6	481	117	137	171	64	0	0	0	132	30	86	1224	6	0	0	0
4:15 PM	4	522	130	75	241	62	0	0	0	109	21	95	1259	4	0	0	0
4:30 PM	2	458	131	115	227	48	0	0	0	124	30	88	1223	2	0	0	0
4:45 PM	3	490	119	84	219	44	0	0	0	132	14	119	1224	3	0	0	0
5:00 PM	4	514	141	149	315	48	0	0	0	126	17	143	1457	4	0	0	0
5:15 PM	5	600	118	100	322	40	0	0	0	110	12	118	1425	5	0	0	0
5:30 PM	5	520	99	92	268	42	0	0	0	148	25	135	1334	5	0	0	0
5:45 PM	5	482	116	91	293	53	0	0	0	145	22	145	1352	5	0	0	0
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
TOTAL VOLUMES :	34	4067	971	843	2056	401	0	0	0	1026	171	929	10498	34	0	0	0
APPROACH %'s :	0.67%	80.19%	19.14%	25.55%	62.30%	12.15%	#DIV/0!	#DIV/0!	#DIV/0!	48.26%	8.04%	43.70%					
PEAK HR START TIME :	500 PM												TOTAL				
PEAK HR VOL :	19	2116	474	432	1198	183	0	0	0	529	76	541	5568				
PEAK HR FACTOR :		0.902			0.885			0.000			0.918		0.955				

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-004 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			Michelson Dr			Michelson Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 2	ST 3.5	SR 0.5	EL 1	ET 2	ER 1	WL 2	WT 1	WR 1	TOTAL
7:00 AM	47	103	23	215	222	0	70	6	6	10	8	14	724
7:15 AM	22	144	29	239	248	2	46	7	9	8	6	31	791
7:30 AM	37	201	34	246	277	1	47	14	19	6	9	21	912
7:45 AM	41	265	59	274	363	0	53	10	20	11	12	36	1144
8:00 AM	39	227	65	253	325	2	60	17	11	17	14	33	1063
8:15 AM	27	267	70	238	373	2	57	14	13	14	18	50	1143
8:30 AM	33	222	57	286	346	6	76	25	16	20	13	40	1140
8:45 AM	42	257	62	261	402	1	81	18	26	19	14	41	1224
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	288	1686	399	2012	2556	14	490	111	120	105	94	266	8141
APPROACH %'s :	12.14%	71.05%	16.81%	43.91%	55.78%	0.31%	67.96%	15.40%	16.64%	22.58%	20.22%	57.20%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	141	973	254	1038	1446	11	274	74	66	70	59	164	4570
PEAK HR FACTOR :		0.940			0.939			0.828			0.893		0.933

UTURNS

	NB	SB	EB	WB
7:00 AM	5	50	0	0
7:15 AM	5	56	0	0
7:30 AM	7	42	0	0
7:45 AM	0	61	0	0
8:00 AM	1	43	0	0
8:15 AM	2	41	0	0
8:30 AM	2	41	0	0
8:45 AM	1	45	0	0
TOTAL VOLUMES :	23	379	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-004 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			Michelson Dr			Michelson Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 2	ST 3.5	SR 0.5	EL 1	ET 2	ER 1	WL 2	WT 1	WR 1	TOTAL
4:00 PM	40	325	19	114	190	3	102	25	22	86	34	151	1111
4:15 PM	40	333	14	114	237	6	126	26	45	68	21	138	1168
4:30 PM	35	311	20	115	233	2	150	32	44	87	21	126	1176
4:45 PM	26	324	22	113	233	6	60	9	28	71	8	158	1058
5:00 PM	22	435	25	102	335	2	39	9	17	87	10	167	1250
5:15 PM	18	446	22	120	319	2	71	17	23	94	17	178	1327
5:30 PM	17	354	28	135	285	0	59	18	13	107	18	154	1188
5:45 PM	50	345	27	147	296	4	59	29	23	93	22	159	1254
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	248	2873	177	960	2128	25	666	165	215	693	151	1231	9532
APPROACH %'s :	7.52%	87.11%	5.37%	30.84%	68.36%	0.80%	63.67%	15.77%	20.55%	33.40%	7.28%	59.33%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	107	1580	102	504	1235	8	228	73	76	381	67	658	5019
PEAK HR FACTOR :		0.920			0.977			0.849			0.957		0.946

UTURNS

NB	SB	EB	WB
1	22	0	0
2	32	0	0
4	20	0	0
7	25	1	0
3	24	0	0
1	21	0	0
1	31	3	0
3	39	0	0
NB	SB	EB	WB
22	214	4	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-005 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			Campus Dr			Campus Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 1	ST 4	SR 1	EL 2	ET 3	ER 0	WL 2	WT 3	WR 1	TOTAL
7:00 AM	2	86	7	54	133	43	63	78	13	5	20	5	509
7:15 AM	6	92	5	44	116	24	90	129	9	3	28	9	555
7:30 AM	6	140	7	65	171	40	88	134	6	7	34	14	712
7:45 AM	8	158	9	64	177	42	189	227	15	4	53	16	962
8:00 AM	8	183	16	77	224	43	122	259	17	9	42	16	1016
8:15 AM	13	172	13	70	211	48	191	307	17	13	58	19	1132
8:30 AM	10	182	9	71	198	58	142	218	18	8	49	20	983
8:45 AM	11	200	22	55	251	81	127	224	30	10	41	11	1063
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	1213	88	500	1481	379	1012	1576	125	59	325	110	6932
APPROACH %'s :	4.69%	88.86%	6.45%	21.19%	62.75%	16.06%	37.30%	58.09%	4.61%	11.94%	65.79%	22.27%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	42	737	60	273	884	230	582	1008	82	40	190	66	4194
PEAK HR FACTOR :		0.900			0.896			0.812			0.822		0.926

UTURNS

NB	SB	EB	WB
1	0	0	0
1	0	0	0
1	1	1	0
1	0	1	0
1	0	0	0
2	0	5	1
0	1	2	0
2	3	3	0
NB	SB	EB	WB
9	5	12	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-005 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			Campus Dr			Campus Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 1	ST 4	SR 1	EL 2	ET 3	ER 0	WL 2	WT 3	WR 1	TOTAL
4:00 PM	20	215	10	19	138	103	79	70	23	18	158	41	894
4:15 PM	14	185	8	18	202	98	95	63	35	13	153	33	917
4:30 PM	37	225	5	22	200	155	68	63	29	18	199	33	1054
4:45 PM	17	165	6	24	185	109	83	91	21	19	188	24	932
5:00 PM	26	294	5	24	264	142	105	79	27	22	260	43	1291
5:15 PM	21	239	10	39	214	122	87	98	22	31	298	61	1242
5:30 PM	31	267	8	35	218	177	100	107	24	16	258	47	1288
5:45 PM	21	213	6	39	202	120	69	88	10	5	209	29	1011
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	187	1803	58	220	1623	1026	686	659	191	142	1723	311	8629
APPROACH %'s :	9.13%	88.04%	2.83%	7.67%	56.57%	35.76%	44.66%	42.90%	12.43%	6.53%	79.18%	14.29%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	99	1013	29	137	898	561	361	372	83	74	1025	180	4832
PEAK HR FACTOR :		0.878			0.928			0.883			0.820		0.936

UTURNS				
NB	SB	EB	WB	
1	0	3	0	
1	0	4	1	
3	0	8	0	
0	1	2	0	
1	0	11	0	
0	0	4	0	
1	2	7	0	
0	2	1	0	
NB	SB	EB	WB	
7	5	40	1	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-006 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			Birch St			Birch St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 1	SL 1	ST 4	SR 0	EL 1.5	ET 1.5	ER 0	WL 1	WT 1.5	WR 0.5	TOTAL
7:00 AM	4	87	11	15	98	27	15	20	4	2	14	6	303
7:15 AM	6	94	12	15	83	31	16	43	3	5	17	6	331
7:30 AM	2	134	18	28	104	33	20	45	11	6	18	7	426
7:45 AM	5	160	26	20	149	44	30	74	21	4	23	7	563
8:00 AM	9	176	22	32	144	49	21	80	12	5	34	13	597
8:15 AM	12	177	23	18	168	62	32	87	13	7	29	15	643
8:30 AM	10	167	22	22	136	49	40	81	13	9	43	14	606
8:45 AM	8	202	35	24	205	48	26	71	16	6	37	15	693
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	56	1197	169	174	1087	343	200	501	93	44	215	83	4162
APPROACH %'s :	3.94%	84.18%	11.88%	10.85%	67.77%	21.38%	25.19%	63.10%	11.71%	12.87%	62.87%	24.27%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	39	722	102	96	653	208	119	319	54	27	143	57	2539
PEAK HR FACTOR :		0.881			0.864			0.918			0.860		0.916

UTURNS

NB	SB	EB	WB
2	0	0	0
3	1	0	0
1	0	0	0
2	2	0	0
1	1	0	0
5	1	0	0
1	0	0	0
1	0	0	0
NB	SB	EB	WB
16	5	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-006 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			Birch St			Birch St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 1	SL 1	ST 4	SR 0	EL 1.5	ET 1.5	ER 0	WL 1	WT 1.5	WR 0.5	TOTAL
4:00 PM	9	156	8	11	124	38	63	38	10	15	70	37	579
4:15 PM	14	156	6	16	167	64	52	40	9	15	48	24	611
4:30 PM	12	165	0	12	158	44	55	32	8	17	76	39	618
4:45 PM	20	137	3	21	193	40	55	34	9	23	75	30	640
5:00 PM	35	169	5	9	189	49	89	59	9	23	124	34	794
5:15 PM	37	186	13	16	226	63	75	40	10	26	120	35	847
5:30 PM	31	165	8	5	179	50	85	51	11	25	115	45	770
5:45 PM	25	158	12	14	192	45	53	27	8	29	110	52	725
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	183	1292	55	104	1428	393	527	321	74	173	738	296	5584
APPROACH %'s :	11.96%	84.44%	3.59%	5.40%	74.18%	20.42%	57.16%	34.82%	8.03%	14.33%	61.14%	24.52%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	128	678	38	44	786	207	302	177	38	103	469	166	3136
PEAK HR FACTOR :		0.894			0.850			0.823			0.966		0.926

UTURNS	NB	SB	EB	WB
	2	3	0	0
	2	2	0	0
	2	0	0	0
	4	2	0	0
	2	0	0	0
	2	1	0	0
	5	2	0	0
	5	1	0	0
	NB	SB	EB	WB
TOTAL VOLUMES :	24	11	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-007 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			I-405 NB Ramps			I-405 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 3	NR 1	SL 0	ST 4	SR 0	EL 0	ET 0	ER 0	WL 3	WT 0	WR 1	TOTAL
7:00 AM	0	330	81	0	302	223	0	0	0	284	0	182	1402
7:15 AM	0	389	92	0	360	293	0	0	0	290	0	190	1614
7:30 AM	0	368	130	0	473	308	0	0	0	294	0	170	1743
7:45 AM	0	480	128	0	494	310	0	0	0	315	0	164	1891
8:00 AM	0	485	108	0	497	299	0	0	0	297	0	159	1845
8:15 AM	0	563	88	0	501	266	0	0	0	311	0	157	1886
8:30 AM	0	491	108	0	521	311	0	0	0	263	0	177	1871
8:45 AM	0	490	98	0	475	313	0	0	0	280	0	178	1834
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3596	833	0	3623	2323	0	0	0	2334	0	1377	14086
APPROACH %'s :	0.00%	81.19%	18.81%	0.00%	60.93%	39.07%	#DIV/0!	#DIV/0!	#DIV/0!	62.89%	0.00%	37.11%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	0	2019	432	0	2013	1186	0	0	0	1186	0	657	7493
PEAK HR FACTOR :		0.941			0.961			0.000			0.962		0.991

UTURNS	NB	SB	EB	WB
TOTAL VOLUMES :	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-007 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			I-405 NB Ramps			I-405 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 3	NR 1	SL 0	ST 4	SR 0	EL 0	ET 0	ER 0	WL 3	WT 0	WR 1	TOTAL
4:00 PM	0	658	254	0	377	267	0	0	0	115	0	88	1759
4:15 PM	0	677	192	0	342	222	0	0	0	145	0	73	1651
4:30 PM	0	735	218	0	437	274	0	0	0	130	0	70	1864
4:45 PM	0	696	187	0	381	250	0	0	0	108	0	72	1694
5:00 PM	0	729	207	0	460	325	0	0	0	127	0	71	1919
5:15 PM	0	787	174	0	477	270	0	0	0	135	0	91	1934
5:30 PM	0	817	169	0	454	227	0	0	0	161	0	109	1937
5:45 PM	0	814	166	0	429	198	0	0	0	219	0	115	1941
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	5913	1567	0	3357	2033	0	0	0	1140	0	689	14699
APPROACH %'s :	0.00%	79.05%	20.95%	0.00%	62.28%	37.72%	#DIV/0!	#DIV/0!	#DIV/0!	62.33%	0.00%	37.67%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	3147	716	0	1820	1020	0	0	0	642	0	386	7731
PEAK HR FACTOR :		0.979			0.904			0.000			0.769		0.996

UTURNS				
NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-008 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			I-405 SB Ramps			I-405 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	4	2	0	4	1	1.5	0	2.5	0	0	0	
7:00 AM	0	179	76	0	527	51	227	0	281	0	0	0	1341
7:15 AM	0	234	100	0	601	56	252	0	311	0	0	0	1554
7:30 AM	0	282	103	0	693	66	208	0	324	0	0	0	1676
7:45 AM	0	283	115	0	753	64	333	0	370	0	0	0	1918
8:00 AM	0	310	137	0	725	66	279	0	321	0	0	0	1838
8:15 AM	0	344	143	0	782	33	312	0	376	0	0	0	1990
8:30 AM	0	308	117	0	708	69	282	0	417	0	0	0	1901
8:45 AM	0	305	119	0	712	49	291	0	413	0	0	0	1889
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2245	910	0	5501	454	2184	0	2813	0	0	0	14107
APPROACH %'s :	0.00%	71.16%	28.84%	0.00%	92.38%	7.62%	43.71%	0.00%	56.29%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	0	1245	512	0	2968	232	1206	0	1484	0	0	0	7647
PEAK HR FACTOR :		0.902			0.979			0.957			0.000		0.961

UTURNS				
NB	SB	EB	WB	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-008 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			I-405 SB Ramps			I-405 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	4	2	0	4	1	1.5	0	2.5	0	0	0	
4:00 PM	0	624	264	0	312	177	281	0	134	0	0	0	1792
4:15 PM	0	581	267	0	359	131	295	0	171	0	0	0	1804
4:30 PM	0	643	266	0	369	196	302	0	142	0	0	0	1918
4:45 PM	0	585	246	0	350	127	296	0	170	0	0	0	1774
5:00 PM	0	672	278	0	379	211	266	0	145	0	0	0	1951
5:15 PM	0	670	271	0	463	145	288	0	134	0	0	0	1971
5:30 PM	0	677	244	0	470	149	312	0	165	0	0	0	2017
5:45 PM	0	686	275	0	522	117	290	0	175	0	0	0	2065
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	5138	2111	0	3224	1253	2330	0	1236	0	0	0	15292
APPROACH %'s :	0.00%	70.88%	29.12%	0.00%	72.01%	27.99%	65.34%	0.00%	34.66%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	2705	1068	0	1834	622	1156	0	619	0	0	0	8004
PEAK HR FACTOR :		0.982			0.961			0.930			0.000		0.969

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-009 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			Michelson Dr			Michelson Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 2	ST 4	SR 1	EL 2	ET 2	ER 0	WL 2	WT 2	WR 1	TOTAL
7:00 AM	18	170	25	211	310	233	20	18	2	17	30	64	1118
7:15 AM	32	200	23	230	412	286	34	13	4	24	37	100	1395
7:30 AM	39	251	47	209	452	335	33	26	2	23	60	92	1569
7:45 AM	36	270	47	276	451	382	46	34	4	39	101	92	1778
8:00 AM	52	333	66	233	499	339	21	29	5	34	75	90	1776
8:15 AM	50	346	87	218	482	349	37	32	6	52	104	107	1870
8:30 AM	47	286	63	289	562	339	37	24	9	56	81	98	1891
8:45 AM	48	316	54	214	546	336	26	27	7	40	84	86	1784
TOTAL VOLUMES :	NL 322	NT 2172	NR 412	SL 1880	ST 3714	SR 2599	EL 254	ET 203	ER 39	WL 285	WT 572	WR 729	TOTAL 13181
APPROACH %'s :	11.08%	74.74%	14.18%	22.95%	45.33%	31.72%	51.21%	40.93%	7.86%	17.97%	36.07%	45.96%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	197	1281	270	954	2089	1363	121	112	27	182	344	381	7321
PEAK HR FACTOR :		0.905			0.926			0.867			0.862		0.968

UTURNS	NB	SB	EB	WB
	2	1	0	0
	1	0	0	0
	1	4	0	0
	0	1	0	0
	3	3	0	0
	3	2	0	0
	1	2	0	0
	1	3	0	0
TOTAL VOLUMES :	12	16	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-009 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			Michelson Dr			Michelson Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 2	ST 4	SR 1	EL 2	ET 2	ER 0	WL 2	WT 2	WR 1	TOTAL
4:00 PM	19	409	35	102	236	68	194	88	17	47	46	278	1539
4:15 PM	15	533	50	134	339	66	144	66	20	41	54	177	1639
4:30 PM	11	490	38	97	315	65	197	103	20	41	36	215	1628
4:45 PM	11	438	49	146	282	60	191	111	27	54	51	201	1621
5:00 PM	16	452	60	131	288	52	223	173	25	64	38	276	1798
5:15 PM	19	505	62	165	399	54	217	181	22	83	48	211	1966
5:30 PM	16	528	72	153	376	70	170	144	27	52	66	231	1905
5:45 PM	10	542	82	142	457	79	215	167	24	51	48	198	2015
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	117	3897	448	1070	2692	514	1551	1033	182	433	387	1787	14111
APPROACH %'s :	2.62%	87.34%	10.04%	25.02%	62.96%	12.02%	56.07%	37.35%	6.58%	16.61%	14.84%	68.55%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	61	2027	276	591	1520	255	825	665	98	250	200	916	7684
PEAK HR FACTOR :		0.932			0.872			0.943			0.903		0.953

UTURNS	NB	SB	EB	WB
	2	6	0	0
	2	7	0	0
	0	2	0	0
	2	2	0	0
	0	6	0	0
	0	1	0	0
	0	6	0	0
	0	9	0	0
	NB	SB	EB	WB
	6	39	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-010 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			Campus Dr			Campus Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 4	NR 0	SL 2	ST 3	SR 0	EL 2	ET 2	ER 1	WL 2	WT 2	WR 1	TOTAL
7:00 AM	6	160	14	40	274	21	7	23	1	11	25	18	600
7:15 AM	13	156	14	29	327	18	9	18	3	37	40	24	688
7:30 AM	19	200	21	35	328	33	17	34	2	52	62	28	831
7:45 AM	21	288	15	51	410	38	20	34	3	65	99	22	1066
8:00 AM	27	314	21	56	325	27	38	40	11	108	92	24	1083
8:15 AM	27	352	31	37	467	53	41	53	7	77	85	17	1247
8:30 AM	22	347	24	55	413	49	24	36	16	102	104	24	1216
8:45 AM	26	237	19	56	369	36	39	38	10	87	99	25	1041
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	161	2054	159	359	2913	275	195	276	53	539	606	182	7772
APPROACH %'s :	6.78%	86.52%	6.70%	10.12%	82.13%	7.75%	37.21%	52.67%	10.11%	40.62%	45.67%	13.72%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	97	1301	91	199	1615	167	123	163	37	352	380	87	4612
PEAK HR FACTOR :		0.908			0.889			0.800			0.890		0.925

UTURNS

NB	SB	EB	WB
0	0	0	0
1	0	0	0
2	2	0	0
2	1	0	0
2	2	0	0
5	0	0	0
2	1	0	0
2	0	0	0
NB	SB	EB	WB
16	6	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-010 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			Campus Dr			Campus Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 4	NR 0	SL 2	ST 3	SR 0	EL 2	ET 2	ER 1	WL 2	WT 2	WR 1	TOTAL
4:00 PM	4	401	33	25	268	19	50	54	20	25	55	42	996
4:15 PM	10	353	36	48	246	31	52	65	19	31	45	39	975
4:30 PM	5	336	38	49	294	36	51	87	25	22	54	55	1052
4:45 PM	9	400	51	45	317	27	54	101	25	25	45	37	1136
5:00 PM	10	384	72	61	300	33	83	182	49	35	59	61	1329
5:15 PM	7	468	97	48	406	51	71	145	45	38	62	41	1479
5:30 PM	11	453	55	33	355	34	76	140	32	21	58	39	1307
5:45 PM	8	365	51	45	390	42	54	106	33	42	67	50	1253
TOTAL VOLUMES :	64	3160	433	354	2576	273	491	880	248	239	445	364	9527
APPROACH %'s :	1.75%	86.41%	11.84%	11.05%	80.42%	8.52%	30.33%	54.35%	15.32%	22.81%	42.46%	34.73%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	36	1670	275	187	1451	160	284	573	159	136	246	191	5368
PEAK HR FACTOR :		0.866			0.890			0.809			0.901		0.907

UTURNS

	NB	SB	EB	WB
	1	0	0	0
	0	2	0	0
	0	2	0	0
	1	2	0	0
	0	1	0	0
	0	1	0	0
	1	2	0	0
	0	0	0	0
TOTAL VOLUMES :	3	10	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-011 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			Jamboree Rd			Jamboree Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 1	SL 2	ST 3	SR 1	EL 2	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL
7:00 AM	41	142	21	49	101	14	11	29	21	19	126	51	625
7:15 AM	44	184	22	70	130	13	12	38	30	25	129	49	746
7:30 AM	63	163	27	81	136	10	19	61	21	32	242	79	934
7:45 AM	107	296	42	74	114	21	25	63	17	43	319	119	1240
8:00 AM	96	273	45	83	134	30	14	54	34	32	298	143	1236
8:15 AM	87	245	44	74	151	28	18	83	37	49	370	142	1328
8:30 AM	122	234	65	96	140	24	17	65	33	50	307	113	1266
8:45 AM	79	185	52	81	171	32	21	103	34	42	341	128	1269
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	639	1722	318	608	1077	172	137	496	227	292	2132	824	8644
APPROACH %'s :	23.85%	64.28%	11.87%	32.74%	58.00%	9.26%	15.93%	57.67%	26.40%	8.99%	65.64%	25.37%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	384	937	206	334	596	114	70	305	138	173	1316	526	5099
PEAK HR FACTOR :		0.907			0.919			0.812			0.898		0.960

UTURNS

NB	SB	EB	WB
1	0	2	1
0	0	1	0
2	0	0	0
0	0	0	1
3	0	0	1
1	0	1	0
2	0	1	0
1	0	0	0
NB	SB	EB	WB
10	0	5	3

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-011 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	MacArthur Blvd			MacArthur Blvd			Jamboree Rd			Jamboree Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 1	SL 2	ST 3	SR 1	EL 2	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL
4:00 PM	48	179	8	96	153	32	54	172	83	39	116	93	1073
4:15 PM	53	178	8	121	168	27	27	187	92	28	83	83	1055
4:30 PM	51	156	9	112	192	25	50	253	102	65	97	80	1192
4:45 PM	45	209	16	142	202	30	41	229	88	52	71	71	1196
5:00 PM	53	195	12	170	246	49	39	341	110	68	120	86	1489
5:15 PM	61	254	8	134	241	48	47	368	108	69	121	99	1558
5:30 PM	68	263	10	147	254	33	42	329	118	77	123	99	1563
5:45 PM	42	179	20	149	240	35	38	358	89	55	140	79	1424
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	421	1613	91	1071	1696	279	338	2237	790	453	871	690	10550
APPROACH %'s :	19.81%	75.91%	4.28%	35.16%	55.68%	9.16%	10.04%	66.48%	23.48%	22.49%	43.25%	34.26%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	224	891	50	600	981	165	166	1396	425	269	504	363	6034
PEAK HR FACTOR :		0.854			0.939			0.950			0.950		0.965

UTURNS				
NB	SB	EB	WB	
3	0	1	2	
2	0	1	1	
5	0	1	2	
1	0	1	4	
3	0	0	7	
0	1	0	5	
4	0	0	6	
1	0	1	2	
NB	SB	EB	WB	
19	1	5	29	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-012 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			Bristol St North			Bristol St North			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	1.5	1.5	0	2.5	1.5	0	0	0	0	0	0	
7:00 AM	104	213	135	0	104	46	0	0	0	0	0	0	602
7:15 AM	121	242	156	0	130	46	0	0	0	0	0	0	695
7:30 AM	140	262	168	0	127	69	0	0	0	0	0	0	766
7:45 AM	172	437	190	0	111	56	0	0	0	0	0	0	966
8:00 AM	168	422	171	0	139	68	0	0	0	0	0	0	968
8:15 AM	172	369	174	0	140	89	0	0	0	0	0	0	944
8:30 AM	194	429	191	0	142	86	0	0	0	0	0	0	1042
8:45 AM	176	309	173	0	160	82	0	0	0	0	0	0	900
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1247	2683	1358	0	1053	542	0	0	0	0	0	0	6883
APPROACH %'s :	23.58%	50.74%	25.68%	0.00%	66.02%	33.98%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	706	1657	726	0	532	299	0	0	0	0	0	0	3920
PEAK HR FACTOR :		0.949			0.907			0.000			0.000		0.940

UTURNS				
NB	SB	EB	WB	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-012 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			Bristol St North			Bristol St North			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	1.5	1.5	0	2.5	1.5	0	0	0	0	0	0	
4:00 PM	198	245	303	0	170	113	0	0	0	0	0	0	1029
4:15 PM	187	230	253	0	168	113	0	0	0	0	0	0	951
4:30 PM	190	226	247	0	207	160	0	0	0	0	0	0	1030
4:45 PM	192	271	224	0	206	142	0	0	0	0	0	0	1035
5:00 PM	177	259	279	0	245	173	0	0	0	0	0	0	1133
5:15 PM	203	326	335	0	249	171	0	0	0	0	0	0	1284
5:30 PM	192	338	278	0	273	173	0	0	0	0	0	0	1254
5:45 PM	208	246	283	0	228	159	0	0	0	0	0	0	1124
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1547	2141	2202	0	1746	1204	0	0	0	0	0	0	8840
APPROACH %'s :	26.26%	36.35%	37.39%	0.00%	59.19%	40.81%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	780	1169	1175	0	995	676	0	0	0	0	0	0	4795
PEAK HR FACTOR :		0.904			0.937			0.000			0.000		0.934

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-013 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			Bristol St South			Bristol St South			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	4.5	0.5	0	3	0	1.5	1.5	2	0	0	0	
7:00 AM	0	281	7	0	107	0	178	55	232	0	0	0	860
7:15 AM	0	331	11	0	127	0	181	48	312	0	0	0	1010
7:30 AM	0	388	4	0	129	0	186	67	334	0	0	0	1108
7:45 AM	0	497	7	0	110	0	297	92	323	0	0	0	1326
8:00 AM	0	490	14	0	146	0	278	103	281	0	0	0	1312
8:15 AM	0	423	12	0	134	0	285	97	290	0	0	0	1241
8:30 AM	0	516	11	0	143	0	304	103	263	0	0	0	1340
8:45 AM	0	442	6	0	159	0	210	66	257	0	0	0	1140
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3368	72	0	1055	0	1919	631	2292	0	0	0	9337
APPROACH %'s :	0.00%	97.91%	2.09%	0.00%	100.00%	0.00%	39.63%	13.03%	47.34%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	0	1926	44	0	533	0	1164	395	1157	0	0	0	5219
PEAK HR FACTOR :		0.935			0.913			0.954			0.000		0.974

UTURNS			
NB	SB	EB	WB
NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-013 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			Bristol St South			Bristol St South			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	4.5	0.5	0	3	0	1.5	1.5	2	0	0	0	
4:00 PM	0	588	22	0	177	0	161	150	235	0	0	0	1333
4:15 PM	0	505	18	0	162	0	163	177	247	0	0	0	1272
4:30 PM	0	501	22	0	214	0	165	156	246	0	0	0	1304
4:45 PM	0	499	26	0	208	0	191	163	265	0	0	0	1352
5:00 PM	0	490	20	0	243	0	222	214	234	0	0	0	1423
5:15 PM	0	675	18	0	252	0	197	168	245	0	0	0	1555
5:30 PM	0	559	33	0	270	0	242	199	285	0	0	0	1588
5:45 PM	0	545	16	0	236	0	199	178	273	0	0	0	1447
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	4362	175	0	1762	0	1540	1405	2030	0	0	0	11274
APPROACH %'s :	0.00%	96.14%	3.86%	0.00%	100.00%	0.00%	30.95%	28.24%	40.80%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	2269	87	0	1001	0	860	759	1037	0	0	0	6013
PEAK HR FACTOR :		0.850			0.927			0.915			0.000		0.947

UTURNS				
NB	SB	EB	WB	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-014 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Von Karmen Ave			Von Karmen Ave			Michelson Dr			Michelson Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 1	TOTAL
7:00 AM	0	50	6	18	72	13	19	21	9	25	39	33	305
7:15 AM	4	75	16	19	93	24	18	37	11	28	61	37	423
7:30 AM	6	108	28	35	113	17	14	39	9	41	63	39	512
7:45 AM	7	154	26	49	166	31	14	37	6	37	80	65	672
8:00 AM	13	183	30	32	158	31	25	58	11	34	78	54	707
8:15 AM	18	182	30	46	187	28	18	44	7	37	92	58	747
8:30 AM	20	159	27	40	168	30	27	45	10	39	79	60	704
8:45 AM	12	159	25	34	158	42	18	42	12	35	91	55	683
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	80	1070	188	273	1115	216	153	323	75	276	583	401	4753
APPROACH %'s :	5.98%	79.97%	14.05%	17.02%	69.51%	13.47%	27.77%	58.62%	13.61%	21.90%	46.27%	31.83%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	63	683	112	152	671	131	88	189	40	145	340	227	2841
PEAK HR FACTOR :		0.933			0.914			0.843			0.952		0.951

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-014 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Von Karmen Ave			Von Karmen Ave			Michelson Dr			Michelson Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 1	TOTAL
4:00 PM	10	146	36	37	116	31	27	72	15	25	86	80	681
4:15 PM	15	124	19	29	89	16	27	58	9	34	68	70	558
4:30 PM	14	176	32	48	134	15	28	76	15	33	89	48	708
4:45 PM	7	167	24	41	142	23	40	80	10	27	86	66	713
5:00 PM	13	203	51	71	211	20	38	103	18	44	112	89	973
5:15 PM	14	169	39	55	182	33	37	102	14	45	99	75	864
5:30 PM	11	165	27	54	181	24	37	104	11	49	95	79	837
5:45 PM	13	143	30	51	176	32	37	118	22	39	110	71	842
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	97	1293	258	386	1231	194	271	713	114	296	745	578	6176
APPROACH %'s :	5.89%	78.46%	15.66%	21.31%	67.97%	10.71%	24.68%	64.94%	10.38%	18.28%	46.02%	35.70%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	51	680	147	231	750	109	149	427	65	177	416	314	3516
PEAK HR FACTOR :		0.822			0.902			0.905			0.926		0.903

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-015 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Airport Way			Airport Way			Campus Dr			Campus Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 0	NR 0	SL 0	ST 0	SR 2	EL 1	ET 3	ER 0	WL 0	WT 3	WR 0	TOTAL
7:00 AM	0	0	0	0	0	57	52	154	0	0	50	6	319
7:15 AM	0	0	0	0	0	39	40	212	0	0	63	4	358
7:30 AM	0	0	0	0	0	40	29	252	0	0	76	7	404
7:45 AM	0	0	0	0	0	34	64	398	0	0	92	6	594
8:00 AM	0	0	0	0	0	75	68	415	0	0	83	8	649
8:15 AM	0	0	0	0	0	43	56	451	0	0	105	14	669
8:30 AM	0	0	0	0	0	64	71	354	0	0	106	9	604
8:45 AM	0	0	0	0	0	73	65	344	0	0	118	18	618
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	425	445	2580	0	0	693	72	4215
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	14.71%	85.29%	0.00%	0.00%	90.59%	9.41%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	0	0	0	0	0	255	260	1564	0	0	412	49	2540
PEAK HR FACTOR :	0.000			0.850			0.899			0.847			0.949

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
NB	SB	EB	WB
1	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-015 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Airport Way			Airport Way			Campus Dr			Campus Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	0	2	1	3	0	0	3	0	
4:00 PM	0	0	0	0	0	99	81	156	0	0	242	30	608
4:15 PM	0	0	0	0	0	132	83	161	0	0	240	33	649
4:30 PM	0	0	0	0	0	147	67	152	0	0	353	30	749
4:45 PM	0	0	0	0	0	64	73	169	0	0	282	26	614
5:00 PM	0	0	0	0	0	70	118	201	0	0	389	45	823
5:15 PM	0	0	0	0	0	84	74	177	0	0	418	23	776
5:30 PM	0	0	0	0	0	61	65	200	0	0	439	26	791
5:45 PM	0	0	0	0	0	78	87	142	0	0	330	26	663
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	735	648	1358	0	0	2693	239	5673
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	32.30%	67.70%	0.00%	0.00%	91.85%	8.15%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	0	0	293	344	720	0	0	1576	120	3053
PEAK HR FACTOR :		0.000			0.872			0.834			0.912		0.927

UTURNS

NB	SB	EB	WB
2	0	0	0
1	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
1	0	0	0
NB	SB	EB	WB
6	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-016 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Campus Dr			Campus Dr			Quail St			Quail St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 0	ER 0	WL 1	WT 1	WR 0	TOTAL
7:00 AM	3	204	6	7	79	3	0	0	0	0	0	4	306
7:15 AM	6	285	18	8	76	0	1	0	0	0	0	3	397
7:30 AM	5	319	16	7	72	0	1	0	0	2	0	3	425
7:45 AM	5	510	21	7	105	2	1	0	2	2	0	5	660
8:00 AM	5	515	21	15	96	1	0	0	1	4	0	5	663
8:15 AM	11	556	28	20	105	0	1	0	0	4	0	3	728
8:30 AM	9	446	34	8	133	2	1	0	0	4	0	4	641
8:45 AM	6	452	34	27	116	2	1	0	1	10	1	8	658
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	50	3287	178	99	782	10	6	0	4	26	1	35	4478
APPROACH %'s :	1.42%	93.51%	5.06%	11.11%	87.77%	1.12%	60.00%	0.00%	40.00%	41.94%	1.61%	56.45%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	30	2027	104	50	439	5	3	0	3	14	0	17	2692
PEAK HR FACTOR :		0.908			0.864			0.500			0.861		0.924

UTURNS	NB	SB	EB	WB
	2	3	0	0
	3	4	0	0
	2	1	0	0
	0	3	0	0
	3	8	0	0
	4	12	0	0
	2	3	0	0
	3	15	0	0
	NB	SB	EB	WB
	19	49	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-016 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Campus Dr			Campus Dr			Quail St			Quail St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 0	ER 0	WL 1	WT 1	WR 0	TOTAL
4:00 PM	7	169	9	24	326	0	0	0	2	10	0	17	564
4:15 PM	4	144	10	26	355	1	6	0	2	21	0	11	580
4:30 PM	3	164	18	22	452	0	0	0	3	15	0	11	688
4:45 PM	6	194	15	13	375	2	1	0	4	14	0	8	632
5:00 PM	4	174	11	13	462	1	1	0	2	35	0	13	716
5:15 PM	3	180	15	15	504	1	2	1	1	18	0	11	751
5:30 PM	3	189	13	12	508	0	3	0	6	14	0	14	762
5:45 PM	3	162	21	16	421	1	0	0	3	9	0	6	642
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	33	1376	112	141	3403	6	13	1	23	136	0	91	5335
APPROACH %'s :	2.17%	90.47%	7.36%	3.97%	95.86%	0.17%	35.14%	2.70%	62.16%	59.91%	0.00%	40.09%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	13	705	60	56	1895	3	6	1	12	76	0	44	2871
PEAK HR FACTOR :		0.949			0.939			0.528			0.625		0.942

UTURNS	NB	SB	EB	WB
	4	16	0	0
	3	19	0	0
	2	17	0	0
	4	10	0	0
	4	11	0	0
	1	9	0	0
	2	8	0	0
	3	14	0	0
	NB	SB	EB	WB
	23	104	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-017 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Campus Dr			Campus Dr			Bristol St North			Bristol St North			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	3	0	0	4	2	0	0	0	1	3.5	0.5	
7:00 AM	75	197	0	0	50	35	0	0	0	24	93	23	497
7:15 AM	74	281	0	0	42	38	0	0	0	23	132	25	615
7:30 AM	136	318	0	0	38	38	0	0	0	30	204	30	794
7:45 AM	126	497	0	0	47	52	0	0	0	32	254	37	1045
8:00 AM	124	518	0	0	63	41	0	0	0	36	286	38	1106
8:15 AM	115	539	0	0	61	55	0	0	0	54	210	47	1081
8:30 AM	136	455	0	0	77	60	0	0	0	41	233	33	1035
8:45 AM	107	440	0	0	67	59	0	0	0	39	247	51	1010
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	893	3245	0	0	445	378	0	0	0	279	1659	284	7183
APPROACH %'s :	21.58%	78.42%	0.00%	0.00%	54.07%	45.93%	#DIV/0!	#DIV/0!	#DIV/0!	12.56%	74.66%	12.78%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	501	2009	0	0	248	208	0	0	0	163	983	155	4267
PEAK HR FACTOR :		0.959			0.832			0.000			0.903		0.965

UTURNS			
NB	SB	EB	WB
NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-017 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Campus Dr			Campus Dr			Bristol St North			Bristol St North			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 0	SL 0	ST 4	SR 2	EL 0	ET 0	ER 0	WL 1	WT 3.5	WR 0.5	TOTAL
4:00 PM	132	147	0	0	125	211	0	0	0	59	454	28	1156
4:15 PM	117	129	0	0	154	230	0	0	0	58	415	24	1127
4:30 PM	144	158	0	0	204	275	0	0	0	51	461	22	1315
4:45 PM	108	171	0	0	161	235	0	0	0	41	523	33	1272
5:00 PM	170	161	0	0	201	258	0	0	0	49	552	26	1417
5:15 PM	82	160	0	0	244	292	0	0	0	71	649	29	1527
5:30 PM	141	182	0	0	281	294	0	0	0	74	586	22	1580
5:45 PM	113	158	0	0	209	296	0	0	0	70	486	21	1353
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1007	1266	0	0	1579	2091	0	0	0	473	4126	205	10747
APPROACH %'s :	44.30%	55.70%	0.00%	0.00%	43.02%	56.98%	#DIV/0!	#DIV/0!	#DIV/0!	9.85%	85.89%	4.27%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	506	661	0	0	935	1140	0	0	0	264	2273	98	5877
PEAK HR FACTOR :		0.881			0.902			0.000			0.880		0.930

UTURNS	NB	SB	EB	WB
	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-018 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Campus Dr			Campus Dr			Bristol St South			Bristol St South			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	5	0	1	3	0	1.5	2.5	2	0	0	0	
7:00 AM	0	125	26	13	63	0	152	205	84	0	0	0	668
7:15 AM	0	132	24	13	49	0	218	261	88	0	0	0	785
7:30 AM	0	242	48	23	51	0	214	291	83	0	0	0	952
7:45 AM	0	267	60	10	63	0	354	405	115	0	0	0	1274
8:00 AM	0	287	70	27	80	0	361	410	112	0	0	0	1347
8:15 AM	0	315	46	20	87	0	333	416	122	0	0	0	1339
8:30 AM	0	251	51	27	100	0	348	370	108	0	0	0	1255
8:45 AM	0	249	49	22	75	0	291	389	112	0	0	0	1187
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1868	374	155	568	0	2271	2747	824	0	0	0	8807
APPROACH %'s :	0.00%	83.32%	16.68%	21.44%	78.56%	0.00%	38.87%	47.02%	14.10%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	0	1120	227	84	330	0	1396	1601	457	0	0	0	5215
PEAK HR FACTOR :		0.933			0.815			0.978			0.000		0.968

UTURNS			
NB	SB	EB	WB
NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-018 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Campus Dr			Campus Dr			Bristol St South			Bristol St South			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	5	0	1	3	0	1.5	2.5	2	0	0	0	
4:00 PM	0	183	52	49	139	0	102	211	130	0	0	0	866
4:15 PM	0	144	49	70	138	0	95	181	113	0	0	0	790
4:30 PM	0	192	61	69	190	0	116	209	134	0	0	0	971
4:45 PM	0	174	56	37	167	0	113	266	114	0	0	0	927
5:00 PM	0	210	46	21	227	0	113	278	134	0	0	0	1029
5:15 PM	0	145	62	31	288	0	104	251	159	0	0	0	1040
5:30 PM	0	202	65	38	313	0	113	211	148	0	0	0	1090
5:45 PM	0	173	52	48	237	0	101	219	149	0	0	0	979
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1423	443	363	1699	0	857	1826	1081	0	0	0	7692
APPROACH %'s :	0.00%	76.26%	23.74%	17.60%	82.40%	0.00%	22.77%	48.51%	28.72%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	730	225	138	1065	0	431	959	590	0	0	0	4138
PEAK HR FACTOR :		0.894			0.857			0.943			0.000		0.949

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-019 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Birch St			Birch St			Bristol St North			Bristol St North			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	2	0	0	1.5	2.5	0	0	0	1.5	3	0.5	
7:00 AM	13	83	0	0	21	10	0	0	0	38	116	20	301
7:15 AM	13	129	0	0	12	16	0	0	0	43	177	29	419
7:30 AM	15	161	0	0	12	7	0	0	0	65	253	37	550
7:45 AM	27	252	0	0	17	16	0	0	0	73	312	47	744
8:00 AM	19	253	0	0	23	28	0	0	0	60	288	47	718
8:15 AM	27	244	0	0	26	28	0	0	0	86	258	50	719
8:30 AM	20	249	0	0	23	32	0	0	0	80	262	52	718
8:45 AM	26	243	0	0	35	31	0	0	0	89	274	72	770
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	160	1614	0	0	169	168	0	0	0	534	1940	354	4939
APPROACH %'s :	9.02%	90.98%	0.00%	0.00%	50.15%	49.85%	#DIV/0!	#DIV/0!	#DIV/0!	18.88%	68.60%	12.52%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	92	989	0	0	107	119	0	0	0	315	1082	221	2925
PEAK HR FACTOR :		0.994			0.856			0.000			0.930		0.950

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-019 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Birch St			Birch St			Bristol St North			Bristol St North			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2	2	0	0	1.5	2.5	0	0	0	1.5	3	0.5	
4:00 PM	38	83	0	0	76	133	0	0	0	78	366	29	803
4:15 PM	29	64	0	0	71	119	0	0	0	80	335	34	732
4:30 PM	52	85	0	0	92	176	0	0	0	100	364	24	893
4:45 PM	34	72	0	0	87	177	0	0	0	84	353	26	833
5:00 PM	30	74	0	0	146	258	0	0	0	104	359	34	1005
5:15 PM	36	67	0	0	120	213	0	0	0	127	426	25	1014
5:30 PM	36	59	0	0	87	198	0	0	0	101	368	37	886
5:45 PM	30	73	0	0	73	169	0	0	0	114	336	28	823
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	285	577	0	0	752	1443	0	0	0	788	2907	237	6989
APPROACH %'s :	33.06%	66.94%	0.00%	0.00%	34.26%	65.74%	#DIV/0!	#DIV/0!	#DIV/0!	20.04%	73.93%	6.03%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	152	298	0	0	445	824	0	0	0	415	1502	109	3745
PEAK HR FACTOR :		0.821			0.785			0.000			0.876		0.923

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-020 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Birch St			Birch St			Bristol St South			Bristol St South			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2.5	1.5	2	2	0	1.5	3.5	0	0	0	0	
7:00 AM	0	21	23	22	43	0	82	127	18	0	0	0	336
7:15 AM	0	34	36	16	33	0	101	167	25	0	0	0	412
7:30 AM	0	42	54	24	60	0	137	184	40	0	0	0	541
7:45 AM	0	79	49	23	60	0	197	251	44	0	0	0	703
8:00 AM	0	75	69	20	71	0	201	275	37	0	0	0	748
8:15 AM	0	82	78	41	63	0	185	227	56	0	0	0	732
8:30 AM	0	77	51	32	77	0	200	230	54	0	0	0	721
8:45 AM	0	63	50	38	80	0	198	188	54	0	0	0	671
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	473	410	216	487	0	1301	1649	328	0	0	0	4864
APPROACH %'s :	0.00%	53.57%	46.43%	30.73%	69.27%	0.00%	39.69%	50.31%	10.01%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	0	313	247	116	271	0	783	983	191	0	0	0	2904
PEAK HR FACTOR :		0.875			0.888			0.954			0.000		0.971

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-020 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Birch St			Birch St			Bristol St South			Bristol St South			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2.5	1.5	2	2	0	1.5	3.5	0	0	0	0	
4:00 PM	0	51	47	70	88	0	78	245	18	0	0	0	597
4:15 PM	0	40	43	52	96	0	45	230	31	0	0	0	537
4:30 PM	0	61	44	66	129	0	85	263	27	0	0	0	675
4:45 PM	0	48	79	65	108	0	60	269	35	0	0	0	664
5:00 PM	0	35	69	60	186	0	67	246	27	0	0	0	690
5:15 PM	0	50	61	59	191	0	58	263	32	0	0	0	714
5:30 PM	0	45	65	58	127	0	45	257	29	0	0	0	626
5:45 PM	0	56	63	52	137	0	47	246	31	0	0	0	632
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	386	471	482	1062	0	485	2019	230	0	0	0	5135
APPROACH %'s :	0.00%	45.04%	54.96%	31.22%	68.78%	0.00%	17.74%	73.85%	8.41%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	194	253	250	614	0	270	1041	121	0	0	0	2743
PEAK HR FACTOR :		0.880			0.864			0.955			0.000		0.960

UTURNS				
NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-021 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Red Hill Ave			Red Hill Ave			MacArthur Blvd			MacArthur Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 0	SL 2	ST 3	SR 1	EL 2	ET 3	ER 0	WL 1	WT 3	WR 1	TOTAL
7:00 AM	19	70	2	53	95	63	199	143	25	6	41	99	815
7:15 AM	13	71	6	58	97	74	232	144	30	12	46	92	875
7:30 AM	13	108	4	65	137	108	239	160	24	13	77	93	1041
7:45 AM	22	194	4	58	162	98	273	239	29	17	84	188	1368
8:00 AM	28	194	3	87	176	116	200	198	28	16	91	187	1324
8:15 AM	22	153	5	81	155	121	228	200	46	9	76	108	1204
8:30 AM	14	103	1	91	204	94	225	204	45	6	80	92	1159
8:45 AM	20	97	1	76	165	96	233	200	44	9	75	86	1102
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	151	990	26	569	1191	770	1829	1488	271	88	570	945	8888
APPROACH %'s :	12.94%	84.83%	2.23%	22.49%	47.08%	30.43%	50.98%	41.47%	7.55%	5.49%	35.56%	58.95%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	86	644	13	317	697	429	926	841	148	48	331	575	5055
PEAK HR FACTOR :		0.826			0.927			0.885			0.811		0.924

UTURNS

NB	SB	EB	WB
0	0	1	1
0	0	0	4
0	0	0	1
1	0	0	4
2	0	0	2
1	1	1	1
0	0	0	0
4	0	0	2
NB	SB	EB	WB
8	1	2	15

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-021 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Red Hill Ave			Red Hill Ave			MacArthur Blvd			MacArthur Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 0	SL 2	ST 3	SR 1	EL 2	ET 3	ER 0	WL 1	WT 3	WR 1	TOTAL
4:00 PM	51	213	4	72	131	256	155	88	22	7	220	146	1365
4:15 PM	49	215	9	84	127	213	129	92	11	15	212	133	1289
4:30 PM	54	231	6	61	142	257	173	103	24	13	246	162	1472
4:45 PM	48	251	8	64	154	236	136	85	21	14	171	152	1340
5:00 PM	62	270	8	89	212	297	199	126	16	11	202	203	1695
5:15 PM	30	290	4	93	205	231	163	120	22	17	180	214	1569
5:30 PM	32	291	5	70	178	196	175	124	25	9	185	207	1497
5:45 PM	51	242	3	71	164	193	167	115	15	14	166	208	1409
TOTAL VOLUMES :	377	2003	47	604	1313	1879	1297	853	156	100	1582	1425	11636
APPROACH %'s :	15.53%	82.53%	1.94%	15.91%	34.59%	49.50%	56.24%	36.99%	6.76%	3.22%	50.92%	45.86%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	175	1093	20	323	759	917	704	485	78	51	733	832	6170
PEAK HR FACTOR :		0.947			0.836			0.929			0.971		0.910

UTURNS	NB	SB	EB	WB
	0	0	1	3
	4	0	2	3
	2	1	2	5
	1	0	2	2
	1	0	0	2
	0	2	0	5
	0	2	2	3
	0	1	0	2
TOTAL VOLUMES :	8	6	9	25

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-022 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Red Hill Ave			Red Hill Ave			Main St			Main St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 2	NR 1	SL 2	ST 2	SR 0	EL 2	ET 3	ER 0	WL 2	WT 3	WR 0	TOTAL
7:00 AM	16	40	9	8	129	33	9	44	29	14	36	8	375
7:15 AM	29	83	17	19	187	40	12	68	47	22	53	11	588
7:30 AM	47	72	12	28	210	34	26	114	65	13	49	17	687
7:45 AM	48	81	19	37	286	75	33	199	92	19	60	30	979
8:00 AM	49	87	16	28	263	47	58	173	91	21	83	21	937
8:15 AM	45	87	21	20	252	43	41	159	114	36	76	37	931
8:30 AM	60	86	10	25	199	35	30	93	68	27	73	36	742
8:45 AM	45	88	16	19	217	43	32	91	66	20	61	28	726
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	339	624	120	184	1743	350	241	941	572	172	491	188	5965
APPROACH %'s :	31.30%	57.62%	11.08%	8.08%	76.55%	15.37%	13.74%	53.65%	32.61%	20.21%	57.70%	22.09%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	202	341	66	110	1000	200	162	624	365	103	292	124	3589
PEAK HR FACTOR :		0.976			0.823			0.888			0.871		0.916

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
2	0	0	0
0	0	0	0
1	0	0	0
0	1	0	0
NB	SB	EB	WB
3	1	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-022 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Red Hill Ave			Red Hill Ave			Main St			Main St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 2	NR 1	SL 2	ST 2	SR 0	EL 2	ET 3	ER 0	WL 2	WT 3	WR 0	TOTAL
4:00 PM	58	217	31	25	102	26	58	192	43	10	86	43	891
4:15 PM	58	249	26	25	132	24	45	135	31	14	62	27	828
4:30 PM	41	247	23	24	123	31	64	218	55	23	112	41	1002
4:45 PM	72	265	22	30	140	39	45	146	55	12	112	49	987
5:00 PM	86	332	33	40	182	33	83	272	69	25	185	73	1413
5:15 PM	105	349	17	39	208	40	57	153	56	23	116	53	1216
5:30 PM	68	293	16	40	238	33	58	195	62	17	148	72	1240
5:45 PM	76	315	27	32	222	45	41	149	62	13	119	37	1138
TOTAL VOLUMES :	NL 564	NT 2267	NR 195	SL 255	ST 1347	SR 271	EL 451	ET 1460	ER 433	WL 137	WT 940	WR 395	TOTAL 8715
APPROACH %'s :	18.64%	74.92%	6.44%	13.61%	71.92%	14.47%	19.24%	62.29%	18.47%	9.31%	63.86%	26.83%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	335	1289	93	151	850	151	239	769	249	78	568	235	5007
PEAK HR FACTOR :		0.911			0.926			0.741			0.778		0.886

UTURNS	NB	SB	EB	WB
	0	0	1	0
	1	0	0	0
	0	3	0	0
	1	2	1	1
	1	0	0	0
	0	1	0	0
	0	1	0	0
	0	1	0	1
	NB 3	SB 8	EB 2	WB 2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-023 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Santa Ana Ave			Santa Ana Ave			Bristol St			Bristol St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 1.5	NR 1.5	SL 2	ST 2	SR 1	EL 2	ET 3	ER 1	WL 2	WT 2.5	WR 1.5	TOTAL
7:00 AM	8	46	15	26	15	12	47	97	11	12	61	22	372
7:15 AM	21	82	33	34	19	16	34	127	18	18	56	61	519
7:30 AM	21	97	33	42	27	15	71	114	14	13	81	120	648
7:45 AM	33	132	39	81	34	20	135	206	17	29	97	155	978
8:00 AM	20	144	27	68	49	17	115	216	16	19	100	177	968
8:15 AM	32	104	35	59	34	15	82	185	15	21	121	71	774
8:30 AM	33	86	44	40	31	12	56	154	23	19	110	107	715
8:45 AM	29	74	34	40	26	21	58	152	31	17	109	89	680
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	197	765	260	390	235	128	598	1251	145	148	735	802	5654
APPROACH %'s :	16.12%	62.60%	21.28%	51.79%	31.21%	17.00%	29.99%	62.74%	7.27%	8.78%	43.62%	47.60%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	118	466	145	248	148	64	388	761	71	88	428	510	3435
PEAK HR FACTOR :		0.893			0.852			0.852			0.867		0.878

UTURNS

NB	SB	EB	WB
0	5	0	5
0	5	0	11
0	3	0	7
0	3	0	14
0	3	0	9
0	1	0	9
0	3	0	13
0	4	2	11
NB	SB	EB	WB
0	27	2	79

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-023 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Santa Ana Ave			Santa Ana Ave			Bristol St			Bristol St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 1.5	NR 1.5	SL 2	ST 2	SR 1	EL 2	ET 3	ER 1	WL 2	WT 2.5	WR 1.5	TOTAL
4:00 PM	25	37	19	68	57	29	45	107	24	36	148	64	659
4:15 PM	24	51	17	65	78	36	34	105	30	33	163	62	698
4:30 PM	24	41	20	95	86	63	28	109	35	22	184	72	779
4:45 PM	36	55	21	104	78	50	36	139	40	40	228	64	891
5:00 PM	29	47	18	132	143	122	25	122	30	26	226	55	975
5:15 PM	27	26	18	104	115	64	37	123	42	32	296	61	945
5:30 PM	29	38	18	93	124	62	30	102	41	39	217	62	855
5:45 PM	31	43	21	69	102	50	38	116	36	36	224	58	824
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	225	338	152	730	783	476	273	923	278	264	1686	498	6626
APPROACH %'s :	31.47%	47.27%	21.26%	36.70%	39.37%	23.93%	18.52%	62.62%	18.86%	10.78%	68.87%	20.34%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	121	166	75	433	460	298	128	486	153	137	967	242	3666
PEAK HR FACTOR :		0.808			0.750			0.892			0.865		0.940

UTURNS

NB	SB	EB	WB
0	3	3	13
0	2	1	18
0	2	1	6
0	3	2	12
0	3	2	8
0	2	2	8
0	1	4	10
0	0	1	11
NB	SB	EB	WB
0	16	16	86

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-024 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Santa Ana Ave			Santa Ana Ave			Mesa Dr			Mesa Dr				UTURNS			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
LANES:	1	1	0	1	1	1	1	1	0	1	1	0					
7:00 AM	4	52	3	6	28	7	18	14	5	3	15	10	165				
7:15 AM	4	62	3	6	24	8	31	28	6	2	16	13	203				
7:30 AM	2	77	4	5	35	6	28	35	9	8	21	22	252				
7:45 AM	2	102	5	10	44	8	47	71	10	5	24	23	351				
8:00 AM	4	91	11	14	55	10	51	87	10	4	21	21	379				
8:15 AM	4	89	8	11	30	10	39	65	7	8	23	22	316				
8:30 AM	3	89	15	13	35	10	25	40	8	6	15	24	283				
8:45 AM	3	78	3	9	45	11	20	40	5	2	14	14	244				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
TOTAL VOLUMES :	26	640	52	74	296	70	259	380	60	38	149	149	2193	0	0	0	0
APPROACH %'s :	3.62%	89.14%	7.24%	16.82%	67.27%	15.91%	37.05%	54.36%	8.58%	11.31%	44.35%	44.35%					
PEAK HR START TIME :	745 AM												TOTAL				
PEAK HR VOL :	13	371	39	48	164	38	162	263	35	23	83	90	1329				
PEAK HR FACTOR :		0.970			0.791			0.777			0.925		0.877				

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-024 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Santa Ana Ave			Santa Ana Ave			Mesa Dr			Mesa Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 1	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
4:00 PM	1	48	5	15	65	12	17	35	12	7	41	18	276
4:15 PM	1	52	8	22	73	17	23	35	7	4	27	16	285
4:30 PM	2	35	9	19	83	19	12	24	5	9	40	21	278
4:45 PM	3	63	5	26	81	28	21	26	10	6	50	16	335
5:00 PM	6	48	11	31	92	42	19	40	13	6	81	15	404
5:15 PM	3	46	6	32	92	54	23	34	18	16	86	21	431
5:30 PM	4	38	5	29	106	29	27	35	13	14	79	20	399
5:45 PM	3	43	9	31	83	30	23	28	15	8	47	16	336
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	23	373	58	205	675	231	165	257	93	70	451	143	2744
APPROACH %'s :	5.07%	82.16%	12.78%	18.45%	60.76%	20.79%	32.04%	49.90%	18.06%	10.54%	67.92%	21.54%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	16	175	31	123	373	155	92	137	59	44	293	72	1570
PEAK HR FACTOR :		0.854			0.914			0.960			0.831		0.911

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-025 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Santa Ana Ave			Santa Ana Ave			Del Mar Ave			Del Mar Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	14	37	0	12	14	15	8	19	5	1	21	10	156
7:15 AM	7	45	6	11	19	11	7	23	10	0	28	13	180
7:30 AM	20	61	7	23	24	17	8	49	10	1	31	13	264
7:45 AM	15	69	6	20	38	14	23	67	12	1	34	16	315
8:00 AM	18	61	16	20	47	11	23	69	15	1	23	21	325
8:15 AM	16	71	11	17	29	16	13	76	16	2	34	21	322
8:30 AM	25	68	18	16	34	13	9	43	4	3	34	25	292
8:45 AM	10	49	5	17	28	12	13	42	5	1	30	21	233
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	125	461	69	136	233	109	104	388	77	10	235	140	2087
APPROACH %'s :	19.08%	70.38%	10.53%	28.45%	48.74%	22.80%	18.28%	68.19%	13.53%	2.60%	61.04%	36.36%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	74	269	51	73	148	54	68	255	47	7	125	83	1254
PEAK HR FACTOR :		0.887			0.881			0.864			0.867		0.965

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : 4-Way Stop

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-025 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Santa Ana Ave			Santa Ana Ave			Del Mar Ave			Del Mar Ave				UTURNS			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
LANES:	0	1	0	0	1	0	0	1	0	0	1	0					
4:00 PM	13	46	6	14	60	10	5	43	11	3	50	8	269				
4:15 PM	11	43	8	16	54	15	7	26	16	3	41	11	251				
4:30 PM	10	32	3	20	60	17	6	33	12	1	33	16	243				
4:45 PM	7	45	5	16	68	16	10	40	10	8	48	17	290				
5:00 PM	7	45	4	18	77	19	12	44	13	10	56	12	317				
5:15 PM	9	34	7	24	77	14	12	33	20	5	61	14	310				
5:30 PM	11	31	5	23	90	16	10	44	13	6	62	7	318				
5:45 PM	9	30	5	16	81	9	17	36	11	6	44	15	279				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
TOTAL VOLUMES :	77	306	43	147	567	116	79	299	106	42	395	100	2277	0	0	0	0
APPROACH %'s :	18.08%	71.83%	10.09%	17.71%	68.31%	13.98%	16.32%	61.78%	21.90%	7.82%	73.56%	18.62%					
PEAK HR START TIME :	445 PM												TOTAL				
PEAK HR VOL :	34	155	21	81	312	65	44	161	56	29	227	50	1235				
PEAK HR FACTOR :		0.921			0.888			0.946			0.956		0.971				

CONTROL : 4-Way Stop

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-026 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Irvine Ave			Irvine Ave			Mesa Dr			Mesa Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 1	SL 1	ST 3	SR 1	EL 1	ET 1.5	ER 0.5	WL 2	WT 1	WR 0	TOTAL
7:00 AM	5	127	27	2	87	10	13	15	10	18	4	0	318
7:15 AM	4	173	48	3	88	7	11	17	25	21	8	1	406
7:30 AM	15	279	70	1	75	7	26	22	25	24	8	1	553
7:45 AM	18	302	83	0	138	7	44	37	22	32	4	1	688
8:00 AM	22	324	93	2	120	7	37	54	36	29	7	2	733
8:15 AM	26	292	89	4	139	10	23	48	18	39	6	1	695
8:30 AM	19	260	83	1	149	8	19	21	20	27	5	0	612
8:45 AM	14	238	71	2	120	14	12	27	15	23	11	0	547
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	123	1995	564	15	916	70	185	241	171	213	53	6	4552
APPROACH %'s :	4.59%	74.38%	21.03%	1.50%	91.51%	6.99%	30.99%	40.37%	28.64%	78.31%	19.49%	2.21%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	85	1178	348	7	546	32	123	160	96	127	22	4	2728
PEAK HR FACTOR :		0.917			0.926			0.746			0.832		0.930

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	1
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	1
0	0	1	1
NB	SB	EB	WB
0	0	1	5

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-026 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Irvine Ave			Irvine Ave			Mesa Dr			Mesa Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 1	SL 1	ST 3	SR 1	EL 1	ET 1.5	ER 0.5	WL 2	WT 1	WR 0	TOTAL
4:00 PM	16	158	30	0	225	29	12	15	27	58	25	5	600
4:15 PM	14	131	32	1	213	18	4	16	30	71	11	1	542
4:30 PM	20	149	28	6	277	33	10	6	32	87	35	2	685
4:45 PM	11	165	46	5	241	31	9	12	29	87	35	2	673
5:00 PM	12	141	49	2	331	52	7	14	40	136	51	7	842
5:15 PM	16	140	56	4	355	67	8	17	30	163	43	2	901
5:30 PM	18	150	57	1	343	64	8	14	38	105	29	0	827
5:45 PM	16	150	26	3	351	31	15	13	38	93	28	1	765
TOTAL VOLUMES :	123	1184	324	22	2336	325	73	107	264	800	257	20	5835
APPROACH %'s :	7.54%	72.59%	19.87%	0.82%	87.07%	12.11%	16.44%	24.10%	59.46%	74.28%	23.86%	1.86%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	62	581	188	10	1380	214	38	58	146	497	151	10	3335
PEAK HR FACTOR :		0.923			0.941			0.917			0.791		0.925

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	0	
0	0	1	2	
0	0	0	2	
0	0	0	1	
0	0	0	1	
0	0	0	1	
0	0	0	0	
NB	SB	EB	WB	
0	0	1	7	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-027 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Irvine Ave			Irvine Ave			University Dr			University Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL
7:00 AM	16	151	8	6	89	13	9	4	20	12	4	9	341
7:15 AM	19	232	8	9	108	13	25	7	30	5	4	9	469
7:30 AM	29	342	8	12	122	11	36	12	38	7	3	7	627
7:45 AM	28	346	8	19	153	16	59	13	18	0	8	6	674
8:00 AM	17	387	11	14	175	23	54	14	39	6	6	4	750
8:15 AM	33	349	10	19	148	29	46	18	21	4	4	7	688
8:30 AM	20	302	8	20	127	25	46	16	33	12	12	10	631
8:45 AM	19	234	7	12	135	16	26	19	20	9	9	13	519
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	181	2343	68	111	1057	146	301	103	219	55	50	65	4699
APPROACH %'s :	6.98%	90.39%	2.62%	8.45%	80.44%	11.11%	48.31%	16.53%	35.15%	32.35%	29.41%	38.24%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	98	1384	37	72	603	93	205	61	111	22	30	27	2743
PEAK HR FACTOR :		0.915			0.906			0.881			0.581		0.914

UTURNS

NB	SB	EB	WB
0	1	0	0
0	0	0	0
0	0	0	0
0	2	0	0
0	0	0	0
1	3	0	0
0	0	0	0
1	1	0	0
NB	SB	EB	WB
2	7	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-027 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Irvine Ave			Irvine Ave			University Dr			University Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL
4:00 PM	30	159	9	10	301	27	17	10	36	6	10	12	627
4:15 PM	25	173	3	9	284	17	15	6	26	8	7	6	579
4:30 PM	14	163	11	12	342	34	17	12	23	8	6	5	647
4:45 PM	22	185	16	10	336	37	25	13	31	18	19	16	728
5:00 PM	31	172	9	14	453	42	24	8	22	10	13	5	803
5:15 PM	18	166	8	15	481	48	25	16	25	11	9	14	836
5:30 PM	18	198	6	9	433	34	25	4	36	7	11	6	787
5:45 PM	17	154	11	9	421	41	20	9	21	9	9	12	733
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	175	1370	73	88	3051	280	168	78	220	77	84	76	5740
APPROACH %'s :	10.82%	84.67%	4.51%	2.57%	89.24%	8.19%	36.05%	16.74%	47.21%	32.49%	35.44%	32.07%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	84	690	34	47	1788	165	94	37	104	37	42	37	3159
PEAK HR FACTOR :		0.910			0.919			0.890			0.853		0.945

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	1	0	0
	1	0	0	0
	1	1	0	0
	NB	SB	EB	WB
	2	2	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-028 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Irvine Ave			Irvine Ave			22nd St			22nd St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0.5	0.5	1	0	1	0	
7:00 AM	3	119	2	15	95	6	10	9	6	1	11	15	292
7:15 AM	4	156	0	8	123	1	17	8	17	1	9	37	381
7:30 AM	13	277	0	16	238	9	29	12	36	6	17	35	688
7:45 AM	11	323	2	14	171	11	21	14	27	1	8	26	629
8:00 AM	14	343	2	17	179	6	37	12	30	1	13	37	691
8:15 AM	12	281	2	16	227	9	34	12	10	9	11	27	650
8:30 AM	8	310	1	21	165	14	32	17	16	4	6	41	635
8:45 AM	10	238	2	14	162	6	15	4	22	5	10	23	511
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	75	2047	11	121	1360	62	195	88	164	28	85	241	4477
APPROACH %'s :	3.52%	95.97%	0.52%	7.84%	88.14%	4.02%	43.62%	19.69%	36.69%	7.91%	24.01%	68.08%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	50	1224	6	63	815	35	121	50	103	17	49	125	2658
PEAK HR FACTOR :		0.891			0.868			0.867			0.823		0.962

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-028 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Irvine Ave			Irvine Ave			22nd St			22nd St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0.5	ET 0.5	ER 1	WL 0	WT 1	WR 0	TOTAL
4:00 PM	17	186	7	18	253	14	5	10	22	3	12	17	564
4:15 PM	20	173	4	17	282	15	6	11	22	7	9	24	590
4:30 PM	16	183	9	22	328	18	10	7	19	6	19	14	651
4:45 PM	14	175	3	15	318	20	8	9	30	10	6	30	638
5:00 PM	17	220	2	24	374	26	16	8	14	2	7	17	727
5:15 PM	15	210	2	22	451	21	11	13	22	7	9	11	794
5:30 PM	26	177	2	29	409	20	5	13	24	6	19	25	755
5:45 PM	24	194	3	31	391	13	10	16	29	3	17	13	744
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	149	1518	32	178	2806	147	71	87	182	44	98	151	5463
APPROACH %'s :	8.77%	89.35%	1.88%	5.69%	89.62%	4.69%	20.88%	25.59%	53.53%	15.02%	33.45%	51.54%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	82	801	9	106	1625	80	42	50	89	18	52	66	3020
PEAK HR FACTOR :		0.933			0.916			0.823			0.680		0.951

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-029 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Irvine Ave			Irvine Ave			20th St			20th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	2	110	2	3	106	0	7	1	8	3	2	11	255
7:15 AM	5	133	1	7	127	2	7	5	11	5	7	16	326
7:30 AM	8	263	0	6	276	6	10	3	25	6	2	20	625
7:45 AM	15	293	3	8	185	7	23	11	33	2	16	18	614
8:00 AM	17	298	2	5	177	7	15	5	25	5	9	19	584
8:15 AM	12	242	3	8	212	9	13	3	23	2	11	26	564
8:30 AM	7	266	5	9	169	3	16	4	25	4	6	24	538
8:45 AM	5	204	3	8	195	4	8	3	20	4	6	20	480
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	71	1809	19	54	1447	38	99	35	170	31	59	154	3986
APPROACH %'s :	3.74%	95.26%	1.00%	3.51%	94.02%	2.47%	32.57%	11.51%	55.92%	12.70%	24.18%	63.11%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	52	1096	8	27	850	29	61	22	106	15	38	83	2387
PEAK HR FACTOR :		0.912			0.786			0.705			0.872		0.955

UTURNS

NB	SB	EB	WB
0	0	0	0
1	1	0	0
1	0	0	0
0	0	0	0
0	0	0	0
4	1	0	0
0	0	0	0
0	1	0	0
NB	SB	EB	WB
6	3	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-029 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Irvine Ave			Irvine Ave			20th St			20th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
4:00 PM	18	210	4	11	241	9	6	5	10	5	12	11	542
4:15 PM	10	192	6	9	281	12	7	6	11	3	5	13	555
4:30 PM	9	206	3	11	321	9	5	7	11	7	6	15	610
4:45 PM	21	190	1	11	325	15	11	3	8	6	6	10	607
5:00 PM	17	232	7	10	327	16	8	10	12	7	9	11	666
5:15 PM	17	224	1	17	397	13	16	5	14	7	12	16	739
5:30 PM	20	224	6	8	391	15	1	3	14	3	9	10	704
5:45 PM	20	225	4	12	387	22	6	4	14	7	4	14	719
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	132	1703	32	89	2670	111	60	43	94	45	63	100	5142
APPROACH %'s :	7.07%	91.22%	1.71%	3.10%	93.03%	3.87%	30.46%	21.83%	47.72%	21.63%	30.29%	48.08%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	74	905	18	47	1502	66	31	22	54	24	34	51	2828
PEAK HR FACTOR :		0.974			0.946			0.764			0.779		0.957

UTURNS

	NB	SB	EB	WB
4:00 PM	2	0	0	0
4:15 PM	0	0	0	0
4:30 PM	1	1	0	0
4:45 PM	2	0	0	0
5:00 PM	2	0	0	0
5:15 PM	2	0	0	0
5:30 PM	2	0	0	0
5:45 PM	1	0	0	0
TOTAL VOLUMES :	12	1	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-030 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Irvine Ave			Irvine Ave			19th St			19th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 0.5	ER 0.5	WL 1	WT 1	WR 1	TOTAL
7:00 AM	7	99	2	13	95	5	8	12	3	2	7	14	267
7:15 AM	7	111	3	15	134	3	6	22	3	3	15	24	346
7:30 AM	17	202	3	38	258	8	9	34	6	2	12	51	640
7:45 AM	15	211	4	41	194	5	19	20	11	6	30	82	638
8:00 AM	9	252	1	20	183	4	25	19	12	3	18	45	591
8:15 AM	10	200	4	31	202	6	13	28	12	1	9	33	549
8:30 AM	17	215	4	21	186	11	16	26	10	2	20	44	572
8:45 AM	11	148	4	17	194	12	17	30	13	4	19	38	507
TOTAL VOLUMES :	NL 93	NT 1438	NR 25	SL 196	ST 1446	SR 54	EL 113	ET 191	ER 70	WL 23	WT 130	WR 331	TOTAL 4110
APPROACH %'s :	5.98%	92.42%	1.61%	11.56%	85.26%	3.18%	30.21%	51.07%	18.72%	4.75%	26.86%	68.39%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	51	865	12	130	837	23	66	101	41	12	69	211	2418
PEAK HR FACTOR :		0.885			0.814			0.929			0.619		0.945

UTURNS

	NB	SB	EB	WB
7:00 AM	0	1	0	0
7:15 AM	0	2	0	0
7:30 AM	0	2	0	0
7:45 AM	1	2	0	0
8:00 AM	0	1	0	0
8:15 AM	0	0	0	0
8:30 AM	1	1	0	0
8:45 AM	1	0	0	0
TOTAL VOLUMES :	NB 3	SB 9	EB 0	WB 0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-030 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Irvine Ave			Irvine Ave			19th St			19th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 0.5	ER 0.5	WL 1	WT 1	WR 1	TOTAL
4:00 PM	21	156	8	34	216	12	12	21	13	5	51	71	620
4:15 PM	11	131	12	29	257	10	11	18	15	7	33	58	592
4:30 PM	22	162	8	19	287	25	11	16	15	3	42	52	662
4:45 PM	21	166	7	35	285	19	12	16	17	4	48	45	675
5:00 PM	18	180	5	28	293	16	16	26	10	3	43	51	689
5:15 PM	26	169	8	35	359	22	16	27	12	10	46	72	802
5:30 PM	19	189	4	30	309	21	12	18	19	9	50	59	739
5:45 PM	15	183	9	33	323	24	11	19	18	2	35	61	733
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	153	1336	61	243	2329	149	101	161	119	43	348	469	5512
APPROACH %'s :	9.87%	86.19%	3.94%	8.93%	85.59%	5.48%	26.51%	42.26%	31.23%	5.00%	40.47%	54.53%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	78	721	26	126	1284	83	55	90	59	24	174	243	2963
PEAK HR FACTOR :		0.973			0.897			0.927			0.861		0.924

UTURNS

NB	SB	EB	WB
3	2	0	0
2	0	0	0
0	1	0	0
1	1	0	0
0	1	0	0
2	1	0	0
1	0	0	0
1	0	0	0
NB	SB	EB	WB
10	6	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-031 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	Irvine Ave			Irvine Ave			17th St			17th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 2	NR 0	SL 2	ST 2	SR 0	EL 2	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	63	58	5	19	53	24	21	81	29	1	30	2	386
7:15 AM	71	80	1	26	81	31	26	72	53	5	49	2	497
7:30 AM	102	148	6	75	141	31	53	99	64	9	67	13	808
7:45 AM	117	134	7	86	138	43	74	150	47	8	88	19	911
8:00 AM	95	151	6	45	65	49	77	155	21	4	107	16	791
8:15 AM	60	108	3	45	75	46	71	129	38	10	101	13	699
8:30 AM	66	87	3	43	78	71	65	116	36	12	125	17	719
8:45 AM	55	84	7	53	98	52	54	121	37	6	122	10	699
TOTAL VOLUMES :	629	850	38	392	729	347	441	923	325	55	689	92	5510
APPROACH %'s :	41.46%	56.03%	2.50%	26.70%	49.66%	23.64%	26.11%	54.65%	19.24%	6.58%	82.42%	11.00%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	374	541	22	251	419	169	275	533	170	31	363	61	3209
PEAK HR FACTOR :		0.908			0.786			0.902			0.896		0.881

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
1	4	0	0
0	0	0	0
0	3	0	0
0	0	0	0
0	1	0	0
1	1	0	0
2	9	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-031 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	Irvine Ave			Irvine Ave			17th St			17th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 2	NR 0	SL 2	ST 2	SR 0	EL 2	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	78	86	16	44	101	71	71	143	46	18	198	13	885
4:15 PM	68	82	6	56	122	85	68	154	34	26	156	19	876
4:30 PM	61	118	8	64	128	93	53	139	46	14	158	21	903
4:45 PM	66	106	15	55	141	89	63	135	45	22	170	21	928
5:00 PM	73	128	12	54	143	84	76	143	60	18	163	21	975
5:15 PM	76	125	13	55	175	99	68	129	47	21	155	29	992
5:30 PM	68	108	13	44	163	93	57	142	64	31	156	19	958
5:45 PM	67	103	14	56	171	93	49	125	61	25	140	12	916
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	557	856	97	428	1144	707	505	1110	403	175	1296	155	7433
APPROACH %'s :	36.89%	56.69%	6.42%	18.78%	50.20%	31.02%	25.02%	55.00%	19.97%	10.76%	79.70%	9.53%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	283	467	53	208	622	365	264	549	216	92	644	90	3853
PEAK HR FACTOR :		0.938			0.908			0.922			0.969		0.971

UTURNS

NB	SB	EB	WB
0	4	1	0
1	2	0	0
0	2	0	0
0	1	0	0
3	1	0	0
0	5	0	0
0	1	0	0
0	1	0	0
NB	SB	EB	WB
4	17	1	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-032 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	N Newport Blvd			N Newport Blvd			Mesa Dr			Mesa Dr				UTURNS			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
LANES:	0	0	0	1	4	1	0	1	1	1	1	0					
7:00 AM	0	0	0	34	206	0	0	1	0	13	0	0	254				
7:15 AM	0	0	0	32	246	0	0	0	0	17	0	0	295				
7:30 AM	0	0	0	52	319	0	0	0	0	18	0	0	389				
7:45 AM	0	0	0	52	306	1	0	0	1	20	0	0	380				
8:00 AM	0	0	0	64	253	0	0	0	0	22	0	0	339				
8:15 AM	0	0	0	45	241	0	0	0	0	14	0	0	300				
8:30 AM	0	0	0	52	238	3	0	2	0	23	0	0	318				
8:45 AM	0	0	0	52	265	1	0	2	0	21	0	0	341				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
TOTAL VOLUMES :	0	0	0	383	2074	5	0	5	1	148	0	0	2616	0	0	0	0
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	15.56%	84.24%	0.20%	0.00%	83.33%	16.67%	100.00%	0.00%	0.00%					
PEAK HR START TIME :	730 AM												TOTAL				
PEAK HR VOL :	0	0	0	213	1119	1	0	0	1	74	0	0	1408				
PEAK HR FACTOR :	0.000			0.898			0.250			0.841			0.905				

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-032 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	N Newport Blvd			N Newport Blvd			Mesa Dr			Mesa Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1	4	1	0	1	1	1	1	0	
4:00 PM	0	0	0	69	498	0	0	0	1	37	0	0	605
4:15 PM	0	0	0	69	456	0	0	0	0	24	0	0	549
4:30 PM	0	0	0	70	482	0	0	0	0	43	0	0	595
4:45 PM	0	0	0	57	518	0	0	0	1	59	0	0	635
5:00 PM	0	0	0	52	669	0	0	1	3	76	2	0	803
5:15 PM	0	0	0	63	661	0	0	0	0	80	0	0	804
5:30 PM	0	0	0	62	605	0	0	0	0	71	0	0	738
5:45 PM	0	0	0	64	552	0	0	1	2	45	0	0	664
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	506	4441	0	0	2	7	435	2	0	5393
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	10.23%	89.77%	0.00%	0.00%	22.22%	77.78%	99.54%	0.46%	0.00%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	241	2487	0	0	2	5	272	2	0	3009
PEAK HR FACTOR :	0.000			0.942			0.438			0.856			0.936

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-033 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	S Newport Blvd			S Newport Blvd			Mesa Dr			Mesa Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	0	0	2	1	0	0	0	0	
7:00 AM	4	68	27	0	0	0	10	26	0	0	10	8	153
7:15 AM	3	67	26	0	0	0	9	25	0	0	14	13	157
7:30 AM	1	202	45	0	0	0	19	28	0	0	19	8	322
7:45 AM	3	284	77	0	0	0	19	34	0	0	17	18	452
8:00 AM	2	239	72	0	0	0	25	41	0	0	19	10	408
8:15 AM	4	128	42	0	0	0	18	26	0	0	10	16	244
8:30 AM	6	104	25	0	0	0	23	29	0	0	15	9	211
8:45 AM	3	82	27	0	0	0	18	29	0	0	17	11	187
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	26	1174	341	0	0	0	141	238	0	0	121	93	2134
APPROACH %'s :	1.69%	76.18%	22.13%	#DIV/0!	#DIV/0!	#DIV/0!	37.20%	62.80%	0.00%	0.00%	56.54%	43.46%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	10	853	236	0	0	0	81	129	0	0	65	52	1426
PEAK HR FACTOR :		0.755			0.000			0.795			0.836		0.789

UTURNS				
NB	SB	EB	WB	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-033 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	S Newport Blvd			S Newport Blvd			Mesa Dr			Mesa Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	0	0	0	2	1	0	0	0	0	
4:00 PM	8	80	22	0	0	0	13	53	0	0	27	14	217
4:15 PM	4	90	25	0	0	0	17	51	0	0	23	8	218
4:30 PM	3	86	21	0	0	0	24	42	0	0	46	13	235
4:45 PM	6	91	22	0	0	0	18	38	0	0	47	10	232
5:00 PM	16	117	30	0	0	0	11	44	0	0	71	19	308
5:15 PM	6	103	33	0	0	0	17	38	0	0	70	9	276
5:30 PM	6	79	28	0	0	0	12	52	0	0	61	12	250
5:45 PM	2	91	26	0	0	0	15	47	0	0	47	13	241
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	51	737	207	0	0	0	127	365	0	0	392	98	1977
APPROACH %'s :	5.13%	74.07%	20.80%	#DIV/0!	#DIV/0!	#DIV/0!	25.81%	74.19%	0.00%	0.00%	80.00%	20.00%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	30	390	117	0	0	0	55	181	0	0	249	53	1075
PEAK HR FACTOR :		0.824			0.000			0.922			0.839		0.873

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-034 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	N Newport Blvd			N Newport Blvd			Del Mar Ave			Del Mar Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1	3	1	0	3.5	0.5	1	2	0	
7:00 AM	0	0	0	36	80	103	0	178	4	11	35	0	447
7:15 AM	0	0	0	39	92	135	0	221	8	23	49	0	567
7:30 AM	0	0	0	43	116	182	0	258	13	20	77	0	709
7:45 AM	0	0	0	55	134	132	0	186	11	25	77	0	620
8:00 AM	0	0	0	51	126	90	0	204	6	23	47	0	547
8:15 AM	0	0	0	43	110	94	0	206	9	30	60	0	552
8:30 AM	0	0	0	33	135	97	0	178	9	23	53	0	528
8:45 AM	0	0	0	43	123	124	0	133	11	16	58	0	508
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	343	916	957	0	1564	71	171	456	0	4478
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	15.48%	41.34%	43.19%	0.00%	95.66%	4.34%	27.27%	72.73%	0.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	0	188	468	539	0	869	38	91	250	0	2443
PEAK HR FACTOR :		0.000			0.876			0.837			0.836		0.861

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-034 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	N Newport Blvd			N Newport Blvd			Del Mar Ave			Del Mar Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1	3	1	0	3.5	0.5	1	2	0	
4:00 PM	0	0	0	66	229	242	0	153	11	12	67	0	780
4:15 PM	0	0	0	68	232	187	0	128	20	22	66	0	723
4:30 PM	0	0	0	82	247	206	0	134	10	19	68	0	766
4:45 PM	0	0	0	84	268	224	0	138	17	21	82	0	834
5:00 PM	0	0	0	90	337	324	0	169	8	21	93	0	1042
5:15 PM	0	0	0	82	341	311	0	165	14	22	90	0	1025
5:30 PM	0	0	0	92	315	280	0	129	26	27	94	0	963
5:45 PM	0	0	0	67	286	252	0	139	25	19	61	0	849
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	631	2255	2026	0	1155	131	163	621	0	6982
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	12.85%	45.91%	41.25%	0.00%	89.81%	10.19%	20.79%	79.21%	0.00%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	331	1279	1167	0	602	73	89	338	0	3879
PEAK HR FACTOR :		0.000			0.924			0.943			0.882		0.931

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-035 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	S Newport Blvd			S Newport Blvd			Del Mar Ave			Del Mar Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0.5	2.5	0	0	0	0	2	2	0	0	2	1	
7:00 AM	17	294	14	0	0	0	169	35	0	0	24	86	639
7:15 AM	20	310	7	0	0	0	206	51	0	0	50	94	738
7:30 AM	24	369	19	0	0	0	218	83	0	0	73	92	878
7:45 AM	55	446	46	0	0	0	176	74	0	0	47	81	925
8:00 AM	35	446	48	0	0	0	170	86	0	0	37	66	888
8:15 AM	28	313	29	0	0	0	183	63	0	0	57	87	760
8:30 AM	21	300	13	0	0	0	162	53	0	0	49	79	677
8:45 AM	37	231	10	0	0	0	115	68	0	0	45	65	571
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	237	2709	186	0	0	0	1399	513	0	0	382	650	6076
APPROACH %'s :	7.57%	86.49%	5.94%	#DIV/0!	#DIV/0!	#DIV/0!	73.17%	26.83%	0.00%	0.00%	37.02%	62.98%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	142	1574	142	0	0	0	747	306	0	0	214	326	3451
PEAK HR FACTOR :		0.849			0.000			0.875			0.818		0.933

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1221-035 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	S Newport Blvd			S Newport Blvd			Del Mar Ave			Del Mar Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0.5	2.5	0	0	0	0	2	2	0	0	2	1	
4:00 PM	24	186	23	0	0	0	136	90	0	0	52	31	542
4:15 PM	31	180	27	0	0	0	111	73	0	0	55	48	525
4:30 PM	33	197	30	0	0	0	134	90	0	0	57	43	584
4:45 PM	42	186	16	0	0	0	121	92	0	0	65	52	574
5:00 PM	36	212	31	0	0	0	139	121	0	0	86	33	658
5:15 PM	32	162	38	0	0	0	153	102	0	0	81	66	634
5:30 PM	39	163	27	0	0	0	121	110	0	0	85	36	581
5:45 PM	31	171	17	0	0	0	120	90	0	0	53	42	524
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	268	1457	209	0	0	0	1035	768	0	0	534	351	4622
APPROACH %'s :	13.86%	75.34%	10.81%	#DIV/0!	#DIV/0!	#DIV/0!	57.40%	42.60%	0.00%	0.00%	60.34%	39.66%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	143	757	115	0	0	0	547	405	0	0	289	194	2450
PEAK HR FACTOR :		0.909			0.000			0.915			0.821		0.931

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: MACARTHUR BOULEVARD
E-W Direction: VON KARMAN AVENUE

File Name : H1302032
Site Code : 00000557
Start Date : 4/9/2013

Groups Printed- Turning Movements

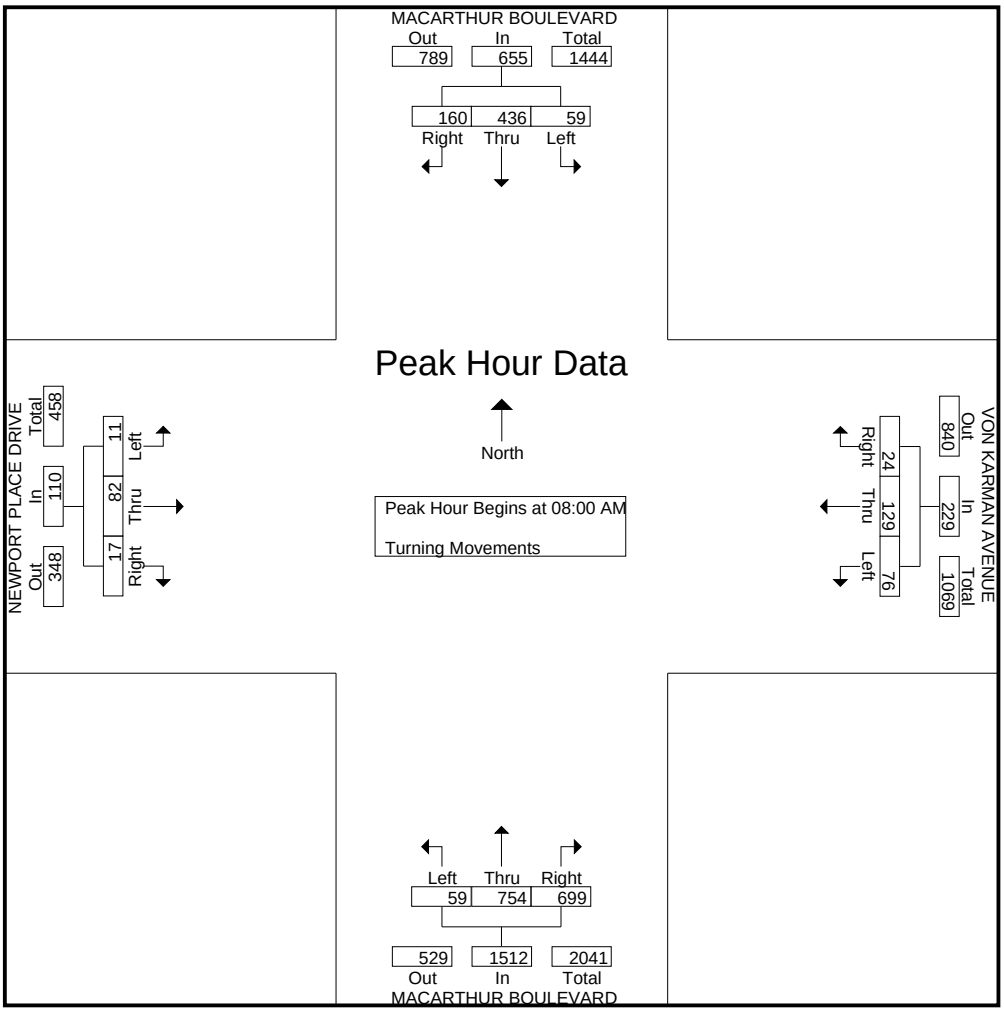
	MACARTHUR BOULEVARD Southbound			VON KARMAN AVENUE Westbound			MACARTHUR BOULEVARD Northbound			NEWPORT PLACE DRIVE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	22	65	1	1	11	6	55	90	5	2	6	1	265
07:15 AM	21	80	6	3	12	12	57	102	5	1	7	3	309
07:30 AM	29	74	5	4	21	11	85	115	5	3	8	4	364
07:45 AM	33	106	12	0	21	18	132	196	12	3	10	7	550
Total	105	325	24	8	65	47	329	503	27	9	31	15	1488
08:00 AM	34	90	10	3	31	19	181	171	18	2	19	5	583
08:15 AM	44	122	19	7	34	18	187	205	14	6	21	3	680
08:30 AM	44	116	15	4	29	16	166	185	15	6	19	2	617
08:45 AM	38	108	15	10	35	23	165	193	12	3	23	1	626
Total	160	436	59	24	129	76	699	754	59	17	82	11	2506
*** BREAK ***													
04:30 PM	12	118	4	15	19	60	25	181	8	26	54	21	543
04:45 PM	19	142	5	17	27	89	23	190	6	40	37	15	610
Total	31	260	9	32	46	149	48	371	14	66	91	36	1153
05:00 PM	18	208	5	18	25	100	25	138	12	49	48	30	676
05:15 PM	22	278	3	33	22	170	31	165	5	36	57	26	848
05:30 PM	15	296	6	25	24	151	34	138	12	43	37	22	803
05:45 PM	8	298	13	22	26	170	25	137	11	44	32	23	809
Total	63	1080	27	98	97	591	115	578	40	172	174	101	3136
06:00 PM	9	216	11	26	25	158	22	118	7	41	24	15	672
06:15 PM	5	158	7	22	17	110	33	106	5	24	38	27	552
Grand Total	373	2475	137	210	379	1131	1246	2430	152	329	440	205	9507
Apprch %	12.5	82.9	4.6	12.2	22	65.8	32.5	63.5	4	33.8	45.2	21	
Total %	3.9	26	1.4	2.2	4	11.9	13.1	25.6	1.6	3.5	4.6	2.2	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: MACARTHUR BOULEVARD
E-W Direction: VON KARMAN AVENUE

File Name : H1302032
Site Code : 00000557
Start Date : 4/9/2013

	MACARTHUR BOULEVARD Southbound				VON KARMAN AVENUE Westbound				MACARTHUR BOULEVARD Northbound				NEWPORT PLACE DRIVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	34	90	10	134	3	31	19	53	181	171	**18**	370	2	19	**5**	26	583
08:15 AM	**44**	**122**	**19**	**185**	7	34	18	59	**187**	**205**	14	**406**	**6**	21	3	**30**	**680**
08:30 AM	44	116	15	175	4	29	16	49	166	185	15	366	6	19	2	27	617
08:45 AM	38	108	15	161	**10**	**35**	**23**	**68**	165	193	12	370	3	**23**	1	27	626
Total Volume	160	436	59	655	24	129	76	229	699	754	59	1512	17	82	11	110	2506
% App. Total	24.4	66.6	9		10.5	56.3	33.2		46.2	49.9	3.9		15.5	74.5	10		
PHF	.909	.893	.776	.885	.600	.921	.826	.842	.934	.920	.819	.931	.708	.891	.550	.917	.921

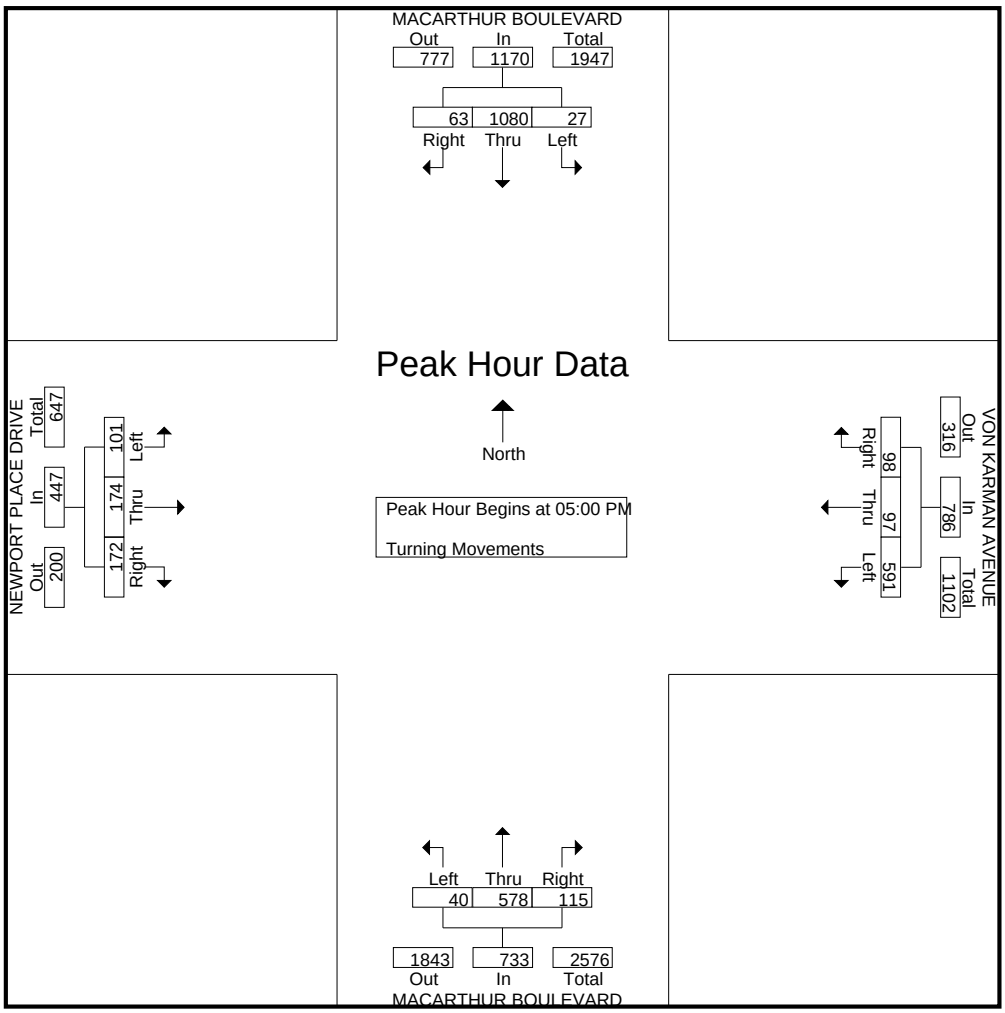


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: MACARTHUR BOULEVARD
E-W Direction: VON KARMAN AVENUE

File Name : H1302032
Site Code : 00000557
Start Date : 4/9/2013

	MACARTHUR BOULEVARD Southbound				VON KARMAN AVENUE Westbound				MACARTHUR BOULEVARD Northbound				NEWPORT PLACE DRIVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	18	208	5	231	18	25	100	143	25	138	**12**	175	**49**	48	**30**	**127**	676
05:15 PM	**22**	278	3	303	**33**	22	**170**	**225**	31	**165**	5	**201**	36	**57**	26	119	**848**
05:30 PM	15	296	6	317	25	24	151	200	**34**	138	12	184	43	37	22	102	803
05:45 PM	8	**298**	**13**	**319**	22	**26**	170	218	25	137	11	173	44	32	23	99	809
Total Volume	63	1080	27	1170	98	97	591	786	115	578	40	733	172	174	101	447	3136
% App. Total	5.4	92.3	2.3		12.5	12.3	75.2		15.7	78.9	5.5		38.5	38.9	22.6		
PHF	.716	.906	.519	.917	.742	.933	.869	.873	.846	.876	.833	.912	.878	.763	.842	.880	.925



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: VON KARMAN AVENUE
E-W Direction: CAMPUS DRIVE

File Name : H1302013
Site Code : 00005060
Start Date : 3/14/2013

Groups Printed- Turning Movements

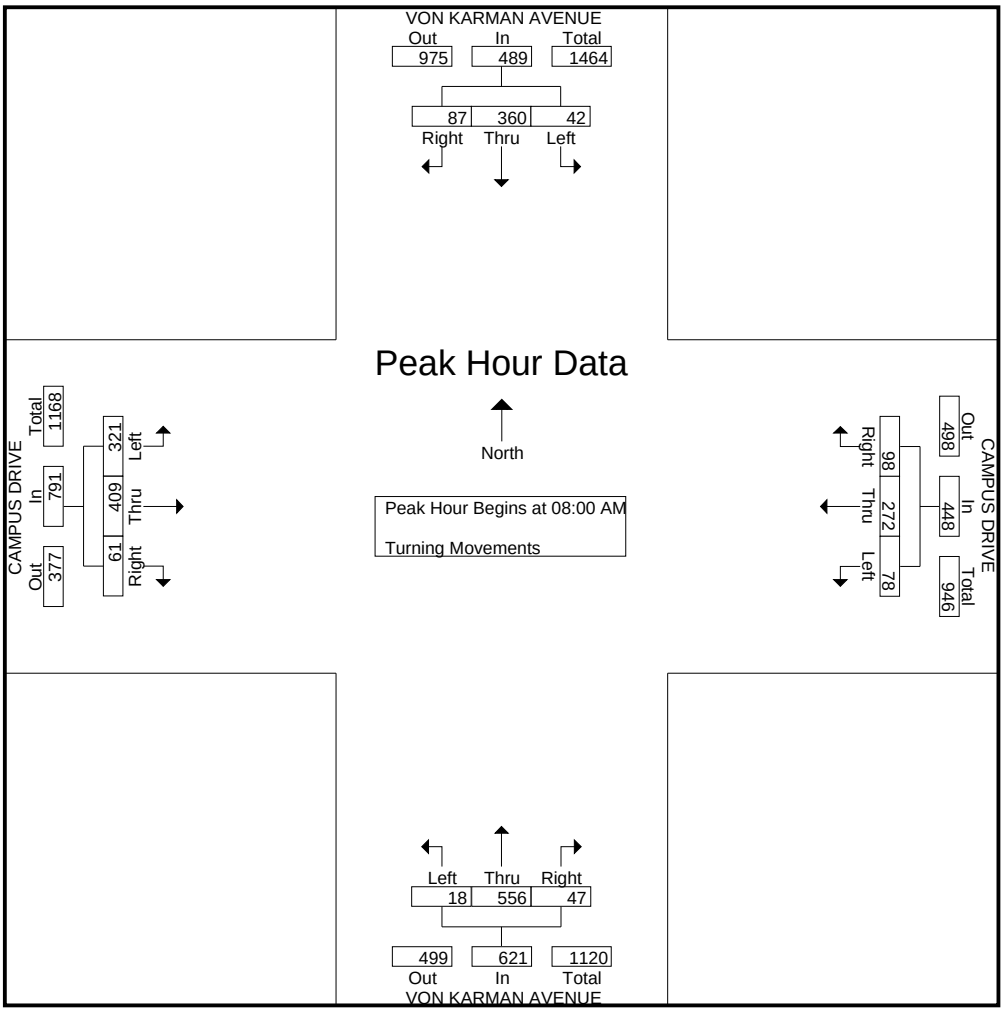
	VON KARMAN AVENUE Southbound			CAMPUS DRIVE Westbound			VON KARMAN AVENUE Northbound			CAMPUS DRIVE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	5	25	3	7	32	2	4	38	1	9	31	31	188
07:15 AM	11	48	10	6	27	4	4	51	0	4	47	30	242
07:30 AM	18	61	5	8	49	7	7	85	2	11	69	44	366
07:45 AM	16	84	7	9	49	9	8	103	3	8	90	52	438
Total	50	218	25	30	157	22	23	277	6	32	237	157	1234
08:00 AM	21	91	13	21	67	16	11	141	3	18	105	93	600
08:15 AM	23	94	8	20	87	21	11	153	4	17	102	80	620
08:30 AM	17	94	13	29	53	14	14	132	4	10	100	81	561
08:45 AM	26	81	8	28	65	27	11	130	7	16	102	67	568
Total	87	360	42	98	272	78	47	556	18	61	409	321	2349
*** BREAK ***													
04:30 PM	79	90	10	19	132	7	18	81	5	4	94	28	567
04:45 PM	81	112	15	10	131	10	13	88	5	11	114	43	633
Total	160	202	25	29	263	17	31	169	10	15	208	71	1200
05:00 PM	88	129	28	21	166	12	17	128	16	9	93	26	733
05:15 PM	94	191	31	22	173	18	29	132	14	3	141	31	879
05:30 PM	95	181	29	13	157	9	19	91	7	10	118	50	779
05:45 PM	92	181	32	20	189	11	17	109	9	6	126	31	823
Total	369	682	120	76	685	50	82	460	46	28	478	138	3214
06:00 PM	58	124	20	13	184	11	16	80	12	10	130	38	696
06:15 PM	67	106	19	16	132	6	15	80	7	13	95	23	579
Grand Total	791	1692	251	262	1693	184	214	1622	99	159	1557	748	9272
Apprch %	28.9	61.9	9.2	12.2	79.1	8.6	11.1	83.8	5.1	6.5	63.2	30.4	
Total %	8.5	18.2	2.7	2.8	18.3	2	2.3	17.5	1.1	1.7	16.8	8.1	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: VON KARMAN AVENUE
E-W Direction: CAMPUS DRIVE

File Name : H1302013
Site Code : 00005060
Start Date : 3/14/2013

	VON KARMAN AVENUE Southbound				CAMPUS DRIVE Westbound				VON KARMAN AVENUE Northbound				CAMPUS DRIVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	21	91	**13**	**125**	21	67	16	104	11	141	3	155	**18**	**105**	**93**	**216**	600
08:15 AM	23	**94**	8	125	20	**87**	21	**128**	11	**153**	4	**168**	17	102	80	199	**620**
08:30 AM	17	94	13	124	**29**	53	14	96	**14**	132	4	150	10	100	81	191	561
08:45 AM	**26**	81	8	115	28	65	**27**	120	11	130	**7**	148	16	102	67	185	568
Total Volume	87	360	42	489	98	272	78	448	47	556	18	621	61	409	321	791	2349
% App. Total	17.8	73.6	8.6		21.9	60.7	17.4		7.6	89.5	2.9		7.7	51.7	40.6		
PHF	.837	.957	.808	.978	.845	.782	.722	.875	.839	.908	.643	.924	.847	.974	.863	.916	.947

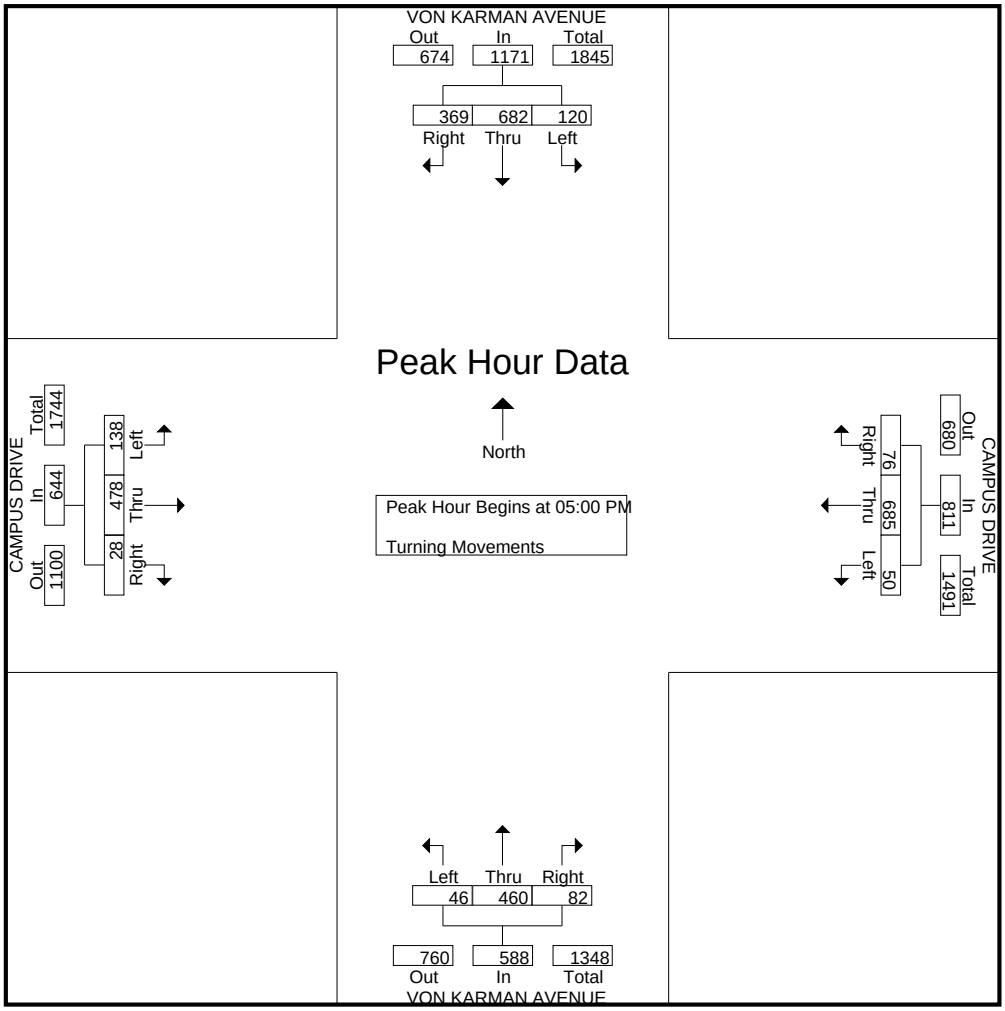


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: VON KARMAN AVENUE
E-W Direction: CAMPUS DRIVE

File Name : H1302013
Site Code : 00005060
Start Date : 3/14/2013

	VON KARMAN AVENUE Southbound				CAMPUS DRIVE Westbound				VON KARMAN AVENUE Northbound				CAMPUS DRIVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	88	129	28	245	21	166	12	199	17	128	**16**	161	9	93	26	128	733
05:15 PM	94	**191**	31	**316**	**22**	173	**18**	213	**29**	**132**	14	**175**	3	**141**	31	175	**879**
05:30 PM	**95**	181	29	305	13	157	9	179	19	91	7	117	**10**	118	**50**	**178**	779
05:45 PM	92	181	**32**	305	20	**189**	11	**220**	17	109	9	135	6	126	31	163	823
Total Volume	369	682	120	1171	76	685	50	811	82	460	46	588	28	478	138	644	3214
% App. Total	31.5	58.2	10.2		9.4	84.5	6.2		13.9	78.2	7.8		4.3	74.2	21.4		
PHF	.971	.893	.938	.926	.864	.906	.694	.922	.707	.871	.719	.840	.700	.848	.690	.904	.914



TRAFFIC DATA SERVICES, INC.
(949) 679-3703
Summary of Vehicular Turning Movements

N/S ST : MACARTHUR BLVD
E/W ST: FORD RD/BONITA CANYON DR
CITY: NEWPORT BEACH

FILENAME: 02120405
DATE: 3/8/12
DAY: THURSDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:	2	4	1	2	4	1	2	2	1	2	2	1	
7:00 AM	3	336	20	127	460	4	3	36	8	64	32	139	1232
15 AM	10	399	11	110	478	6	8	37	9	83	60	187	1398
30 AM	9	468	13	97	498	4	11	62	14	97	61	224	1558
45 AM	10	437	15	119	576	3	7	65	25	165	91	246	1759
8:00 AM	26	507	29	153	563	4	8	46	21	168	157	262	1944
15 AM	37	530	27	147	566	6	11	49	17	121	115	205	1831
30 AM	32	527	28	143	570	3	13	80	18	130	160	249	1953
45 AM	36	435	35	131	569	5	13	112	22	166	131	202	1857
PEAK HOUR BEGINS AT: 800 AM													PHF: 0.97
VOLUMES =	131	1999	119	574	2268	18	45	287	78	585	563	918	7585

FILENAME: 02120405P
DATE: 3/8/12
DAY: THURSDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM	16	495	119	176	501	11	11	64	11	43	55	156	1658
15 PM	36	561	143	217	554	6	8	80	9	42	93	180	1929
30 PM	26	537	139	262	578	12	11	96	15	58	56	179	1969
45 PM	16	462	121	235	441	16	5	66	11	52	81	179	1685
5:00 PM	19	450	138	269	534	5	7	67	12	40	60	121	1722
15 PM	27	568	131	350	748	13	7	114	8	74	79	170	2289
30 PM	17	516	137	164	436	11	2	67	10	66	91	157	1674
45 PM	13	405	139	257	559	4	2	54	7	74	70	111	1695
PEAK HOUR BEGINS AT: 1630 PM													PHF: 0.84
VOLUMES =	88	2017	529	1116	2301	46	30	343	46	224	276	649	7665

COMMENTS:

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: MACARTHUR BOULEVARD
E-W Direction: BISON AVENUE

File Name : H1204032
Site Code : 00000562
Start Date : 4/24/2012

Groups Printed- Turning Movements

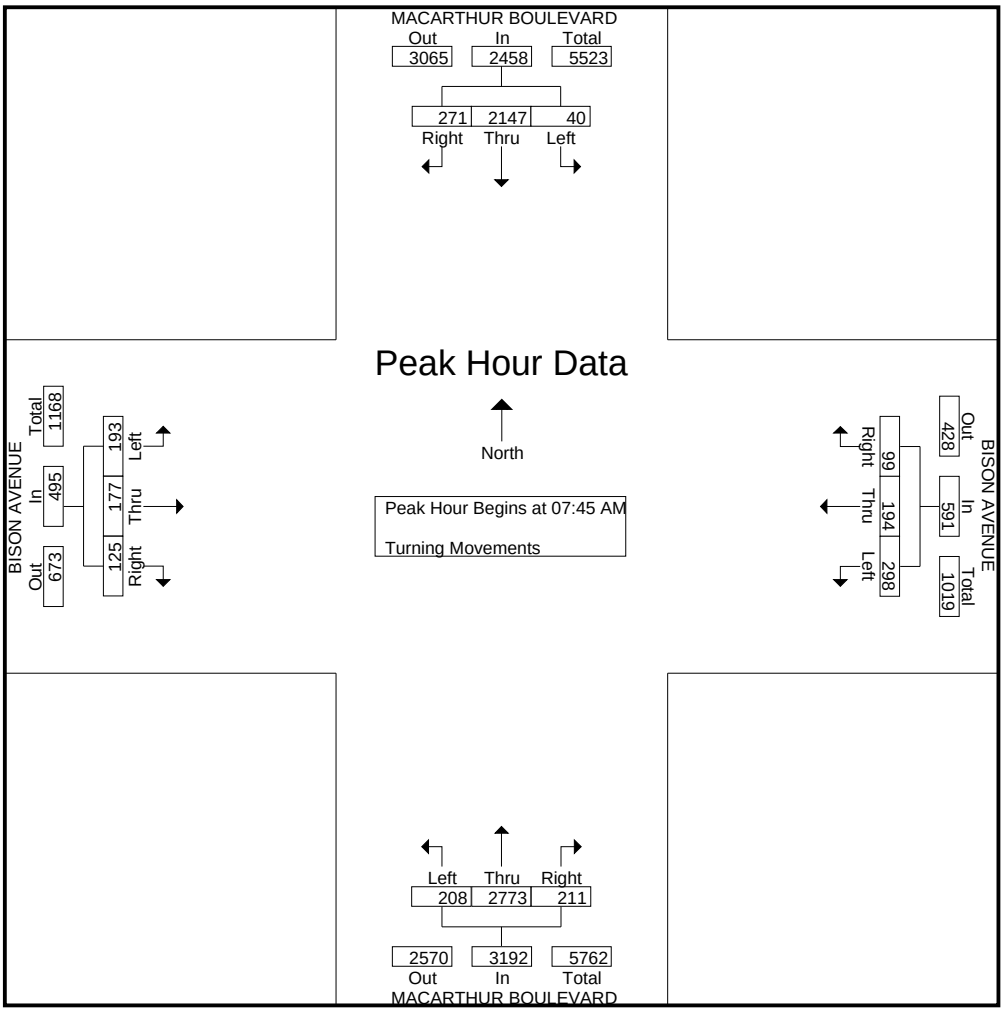
	MACARTHUR BOULEVARD Southbound			BISON AVENUE Westbound			MACARTHUR BOULEVARD Northbound			BISON AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	64	384	7	16	31	34	19	349	18	21	22	28	993
07:15 AM	55	481	2	20	27	29	22	487	14	15	24	39	1215
07:30 AM	59	522	6	22	31	53	34	590	66	21	47	39	1490
07:45 AM	64	575	7	23	59	114	39	607	52	48	50	34	1672
Total	242	1962	22	81	148	230	114	2033	150	105	143	140	5370
08:00 AM	65	498	13	26	51	57	45	709	32	33	41	54	1624
08:15 AM	67	543	11	28	47	74	58	790	69	19	46	54	1806
08:30 AM	75	531	9	22	37	53	69	667	55	25	40	51	1634
08:45 AM	45	518	21	38	39	108	40	620	68	25	50	52	1624
Total	252	2090	54	114	174	292	212	2786	224	102	177	211	6688
*** BREAK ***													
04:30 PM	64	562	24	23	34	45	32	599	36	34	31	66	1550
04:45 PM	96	581	29	23	54	60	27	535	35	31	40	57	1568
Total	160	1143	53	46	88	105	59	1134	71	65	71	123	3118
05:00 PM	47	573	26	32	54	54	33	549	25	33	48	55	1529
05:15 PM	54	568	39	33	62	92	42	646	40	24	55	77	1732
05:30 PM	63	676	32	42	62	72	35	598	44	21	59	40	1744
05:45 PM	48	634	36	30	40	87	52	549	31	21	54	49	1631
Total	212	2451	133	137	218	305	162	2342	140	99	216	221	6636
06:00 PM	61	586	48	27	50	69	38	447	33	25	45	50	1479
06:15 PM	57	628	37	36	39	54	51	557	43	24	37	37	1600
Grand Total	984	8860	347	441	717	1055	636	9299	661	420	689	782	24891
Apprch %	9.7	86.9	3.4	19.9	32.4	47.7	6	87.8	6.2	22.2	36.4	41.4	
Total %	4	35.6	1.4	1.8	2.9	4.2	2.6	37.4	2.7	1.7	2.8	3.1	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: MACARTHUR BOULEVARD
E-W Direction: BISON AVENUE

File Name : H1204032
Site Code : 00000562
Start Date : 4/24/2012

	MACARTHUR BOULEVARD Southbound				BISON AVENUE Westbound				MACARTHUR BOULEVARD Northbound				BISON AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	64	**575**	7	**646**	23	**59**	**114**	**196**	39	607	52	698	**48**	**50**	34	**132**	1672
08:00 AM	65	498	**13**	576	26	51	57	134	45	709	32	786	33	41	**54**	128	1624
08:15 AM	67	543	11	621	**28**	47	74	149	58	**790**	**69**	**917**	19	46	54	119	**1806**
08:30 AM	**75**	531	9	615	22	37	53	112	**69**	667	55	791	25	40	51	116	1634
Total Volume	271	2147	40	2458	99	194	298	591	211	2773	208	3192	125	177	193	495	6736
% App. Total	11	87.3	1.6		16.8	32.8	50.4		6.6	86.9	6.5		25.3	35.8	39		
PHF	.903	.933	.769	.951	.884	.822	.654	.754	.764	.878	.754	.870	.651	.885	.894	.938	.932

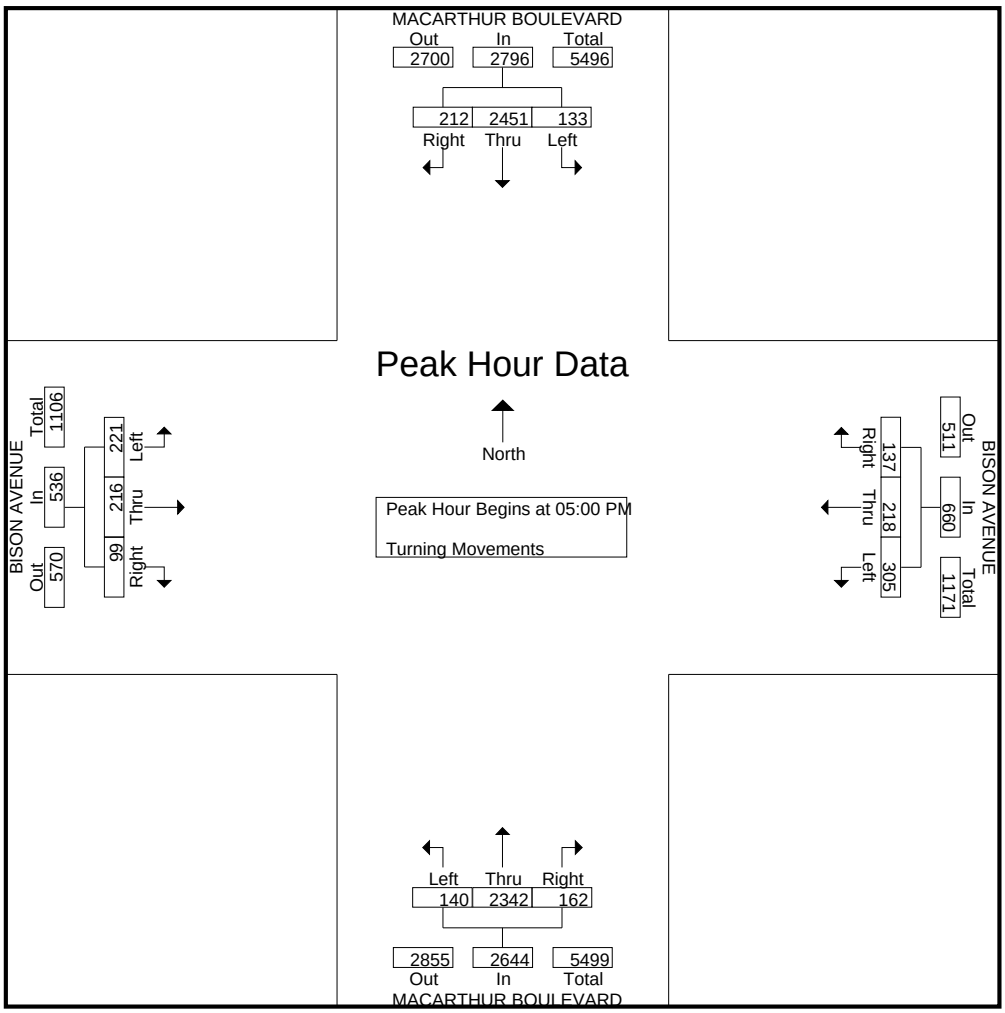


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: MACARTHUR BOULEVARD
E-W Direction: BISON AVENUE

File Name : H1204032
Site Code : 00000562
Start Date : 4/24/2012

	MACARTHUR BOULEVARD Southbound				BISON AVENUE Westbound				MACARTHUR BOULEVARD Northbound				BISON AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	47	573	26	646	32	54	54	140	33	549	25	607	**33**	48	55	136	1529
05:15 PM	54	568	**39**	661	33	**62**	**92**	**187**	42	**646**	40	**728**	24	55	**77**	**156**	1732
05:30 PM	**63**	**676**	32	**771**	**42**	62	72	176	35	598	**44**	677	21	**59**	40	120	**1744**
05:45 PM	48	634	36	718	30	40	87	157	**52**	549	31	632	21	54	49	124	1631
Total Volume	212	2451	133	2796	137	218	305	660	162	2342	140	2644	99	216	221	536	6636
% App. Total	7.6	87.7	4.8		20.8	33	46.2		6.1	88.6	5.3		18.5	40.3	41.2		
PHF	.841	.906	.853	.907	.815	.879	.829	.882	.779	.906	.795	.908	.750	.915	.718	.859	.951



TRAFFIC DATA SERVICES, INC.
(949) 679-3703
Summary of Vehicular Turning Movements

N/S ST : JAMBOREE RD
E/W ST: FORD RD
CITY: NEWPORT BEACH

FILENAME: 02120401
DATE: 3/7/12
DAY: WEDNESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:	2	3	0	1	3	1	1.5	1.5	1	1.5	1.5	1	
7:00 AM	54	216	12	7	278	16	35	24	54	26	50	4	776
15 AM	125	245	34	10	311	21	32	34	60	31	166	7	1076
30 AM	149	294	12	7	320	79	56	107	98	37	202	18	1379
45 AM	104	376	30	46	424	38	67	109	172	50	97	10	1523
8:00 AM	41	281	17	10	403	5	27	34	60	42	20	5	945
15 AM	49	307	15	13	368	12	9	10	56	51	24	7	921
30 AM	46	294	12	9	374	7	14	12	51	58	22	11	910
45 AM	49	317	10	10	361	9	11	13	47	66	21	10	924
PEAK HOUR BEGINS AT: 715 AM													PHF: 0.81
VOLUMES =	419	1196	93	73	1458	143	182	284	390	160	485	40	4923

FILENAME: 02120401P
DATE: 3/7/12
DAY: WEDNESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM	64	421	43	14	315	10	10	31	45	15	54	5	1027
15 PM	76	382	36	13	338	30	29	66	105	14	58	8	1155
30 PM	72	385	41	12	335	17	25	58	93	15	57	7	1117
45 PM	88	380	52	6	277	13	15	40	74	21	49	5	1020
5:00 PM	86	483	73	8	356	18	28	52	78	38	63	6	1289
15 PM	78	439	86	9	351	22	28	56	71	39	38	6	1223
30 PM	81	452	81	6	348	19	26	60	67	44	41	7	1232
45 PM	83	443	74	8	351	16	21	66	56	43	47	8	1216
PEAK HOUR BEGINS AT: 1700 PM													PHF: 0.96
VOLUMES =	328	1817	314	31	1406	75	103	234	272	164	189	27	4960

COMMENTS:

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: JAMBOREE ROAD
E-W Direction: BISON AVENUE

File Name : H1204031
Site Code : 00000554
Start Date : 4/24/2012

Groups Printed- Turning Movements

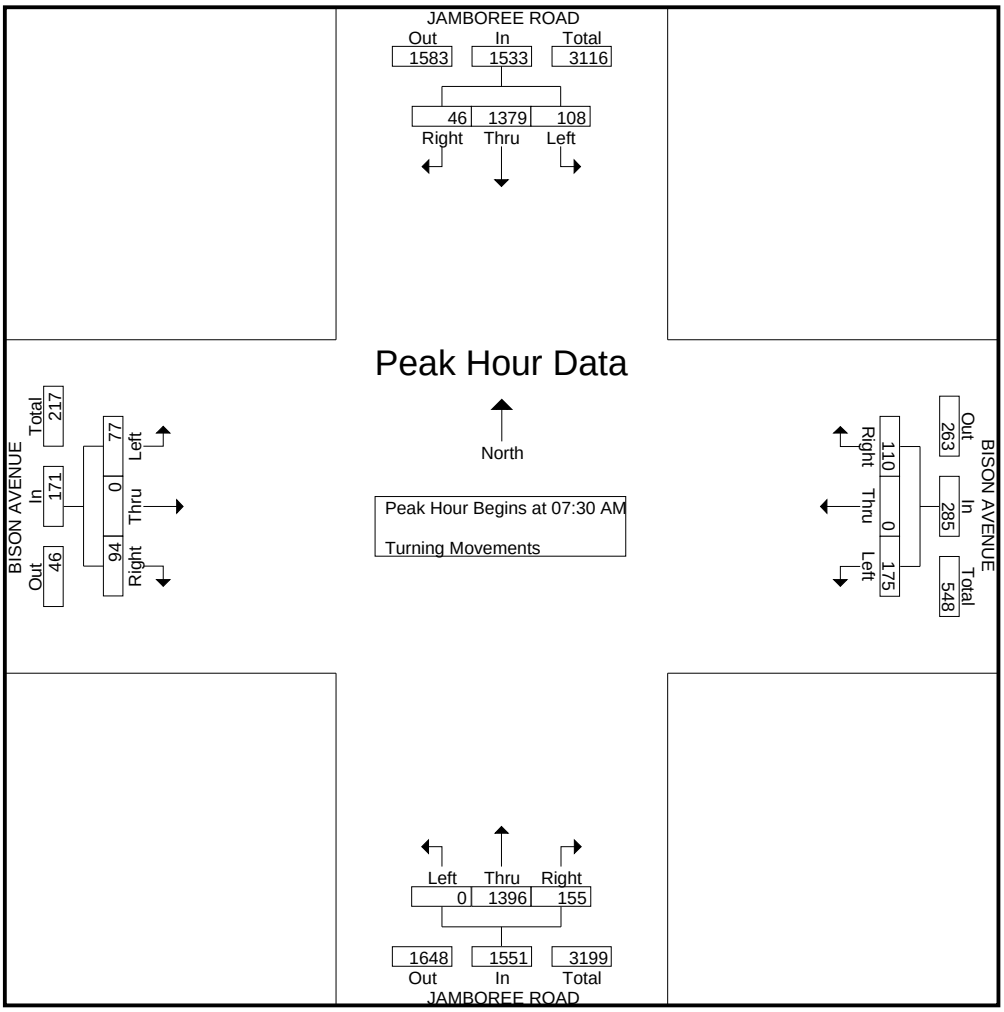
	JAMBOREE ROAD Southbound			BISON AVENUE Westbound			JAMBOREE ROAD Northbound			BISON AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	8	266	12	13	0	7	12	82	0	3	0	13	416
07:15 AM	5	293	11	18	0	16	22	279	0	6	0	21	671
07:30 AM	11	325	17	29	0	73	38	339	0	28	0	20	880
07:45 AM	16	353	38	30	0	50	47	383	0	46	0	26	989
Total	40	1237	78	90	0	146	119	1083	0	83	0	80	2956
08:00 AM	5	350	27	27	0	33	38	326	0	12	0	15	833
08:15 AM	14	351	26	24	0	19	32	348	0	8	0	16	838
08:30 AM	11	356	22	26	0	35	32	281	0	3	0	14	780
08:45 AM	13	391	21	27	0	42	39	267	0	9	0	12	821
Total	43	1448	96	104	0	129	141	1222	0	32	0	57	3272
*** BREAK ***													
04:30 PM	14	306	15	31	0	51	38	387	0	9	0	8	859
04:45 PM	18	335	15	27	0	44	38	365	0	7	0	12	861
Total	32	641	30	58	0	95	76	752	0	16	0	20	1720
05:00 PM	25	350	27	35	0	52	44	403	0	5	0	11	952
05:15 PM	25	417	16	27	0	58	48	495	0	2	0	10	1098
05:30 PM	9	371	30	36	0	55	54	365	0	4	0	8	932
05:45 PM	20	381	26	28	0	45	39	367	0	3	0	8	917
Total	79	1519	99	126	0	210	185	1630	0	14	0	37	3899
06:00 PM	17	379	22	34	0	49	43	332	0	7	0	3	886
06:15 PM	14	326	21	28	0	36	36	330	0	1	0	17	809
Grand Total	225	5550	346	440	0	665	600	5349	0	153	0	214	13542
Apprch %	3.7	90.7	5.7	39.8	0	60.2	10.1	89.9	0	41.7	0	58.3	
Total %	1.7	41	2.6	3.2	0	4.9	4.4	39.5	0	1.1	0	1.6	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: JAMBOREE ROAD
E-W Direction: BISON AVENUE

File Name : H1204031
Site Code : 00000554
Start Date : 4/24/2012

	JAMBOREE ROAD Southbound				BISON AVENUE Westbound				JAMBOREE ROAD Northbound				BISON AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	11	325	17	353	29	0	**73**	**102**	38	339	0	377	28	0	20	48	880
07:45 AM	**16**	**353**	**38**	**407**	**30**	0	50	80	**47**	**383**	0	**430**	**46**	0	**26**	**72**	**989**
08:00 AM	5	350	27	382	27	0	33	60	38	326	0	364	12	0	15	27	833
08:15 AM	14	351	26	391	24	0	19	43	32	348	0	380	8	0	16	24	838
Total Volume	46	1379	108	1533	110	0	175	285	155	1396	0	1551	94	0	77	171	3540
% App. Total	3	90	7		38.6	0	61.4		10	90	0		55	0	45		
PHF	.719	.977	.711	.942	.917	.000	.599	.699	.824	.911	.000	.902	.511	.000	.740	.594	.895

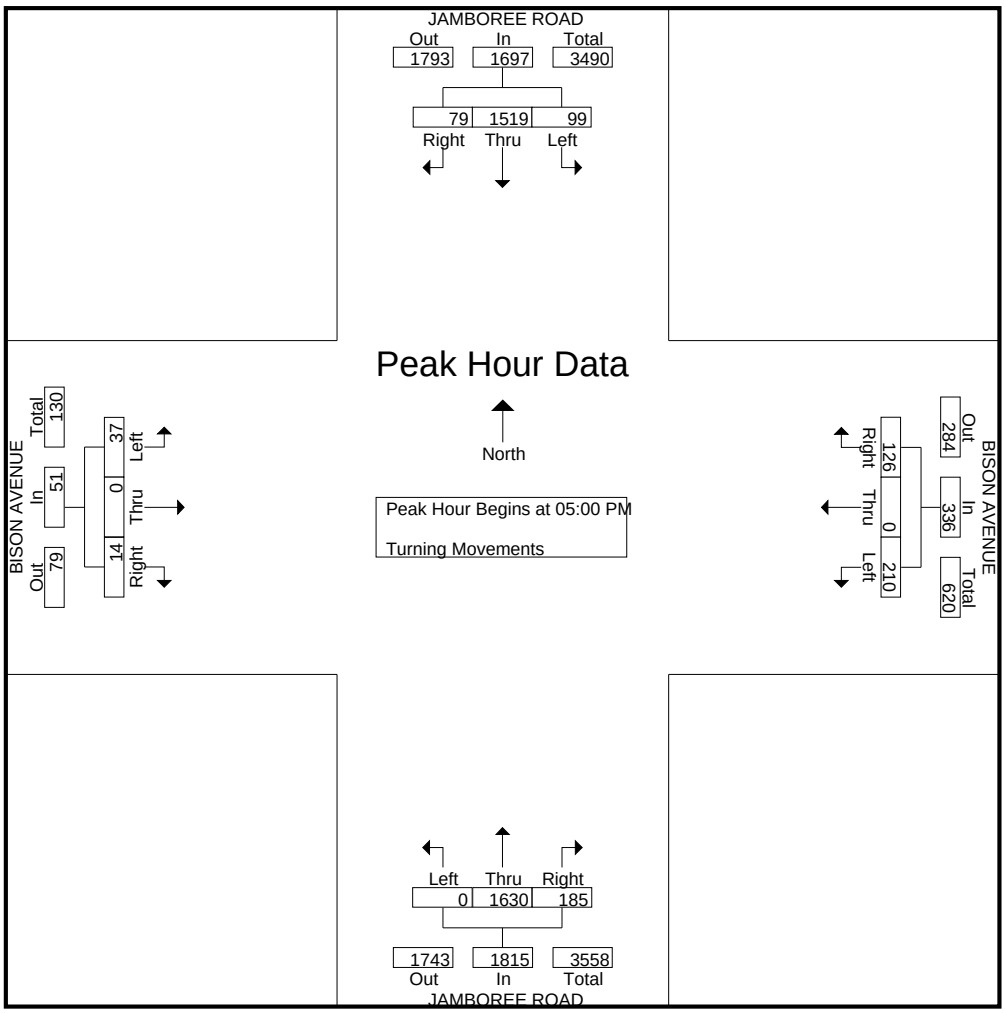


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: JAMBOREE ROAD
E-W Direction: BISON AVENUE

File Name : H1204031
Site Code : 00000554
Start Date : 4/24/2012

	JAMBOREE ROAD Southbound				BISON AVENUE Westbound				JAMBOREE ROAD Northbound				BISON AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**25**	350	27	402	35	0	52	87	44	403	0	447	**5**	0	**11**	**16**	952
05:15 PM	25	**417**	16	**458**	27	0	**58**	85	48	**495**	0	**543**	2	0	10	12	**1098**
05:30 PM	9	371	**30**	410	**36**	0	55	**91**	**54**	365	0	419	4	0	8	12	932
05:45 PM	20	381	26	427	28	0	45	73	39	367	0	406	3	0	8	11	917
Total Volume	79	1519	99	1697	126	0	210	336	185	1630	0	1815	14	0	37	51	3899
% App. Total	4.7	89.5	5.8		37.5	0	62.5		10.2	89.8	0		27.5	0	72.5		
PHF	.790	.911	.825	.926	.875	.000	.905	.923	.856	.823	.000	.836	.700	.000	.841	.797	.888



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: JAMBOREE ROAD
E-W Direction: UNIVERSITY DR / EASTBLUFF

File Name : h1302029
Site Code : 00005163
Start Date : 4/11/2013

Groups Printed- Turning Movements

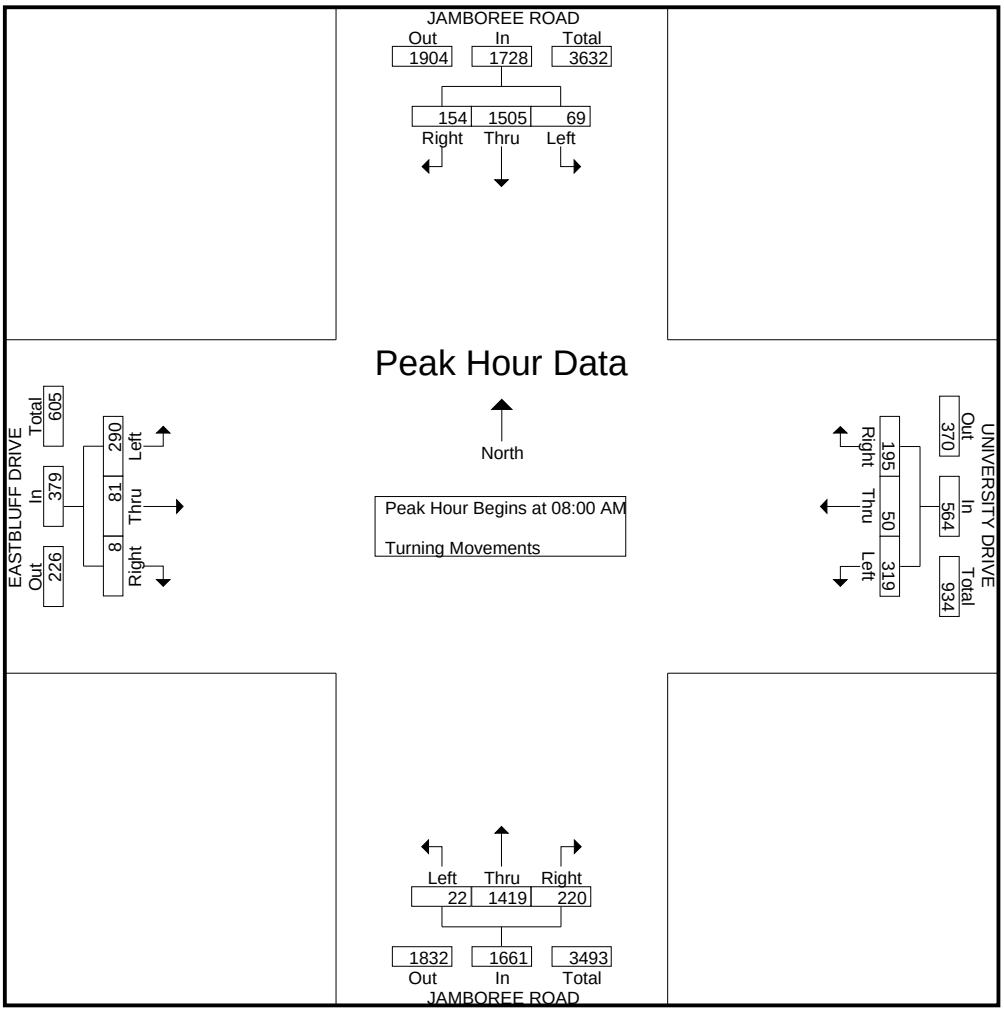
	JAMBOREE ROAD Southbound			UNIVERSITY DRIVE Westbound			JAMBOREE ROAD Northbound			EASTBLUFF DRIVE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	31	249	5	26	5	49	18	204	0	0	5	30	622
07:15 AM	22	268	10	26	3	40	36	221	6	0	19	52	703
07:30 AM	58	239	10	26	21	64	39	281	8	3	12	63	824
07:45 AM	42	294	9	47	22	63	69	370	13	3	19	98	1049
Total	153	1050	34	125	51	216	162	1076	27	6	55	243	3198
08:00 AM	35	373	15	47	12	67	53	351	4	2	15	80	1054
08:15 AM	38	377	16	66	13	79	52	345	6	2	18	70	1082
08:30 AM	41	379	21	48	14	86	46	357	6	3	26	76	1103
08:45 AM	40	376	17	34	11	87	69	366	6	1	22	64	1093
Total	154	1505	69	195	50	319	220	1419	22	8	81	290	4332
*** BREAK ***													
04:30 PM	68	235	22	27	21	44	48	401	8	3	29	56	962
04:45 PM	86	311	44	26	31	46	77	429	13	3	18	45	1129
Total	154	546	66	53	52	90	125	830	21	6	47	101	2091
05:00 PM	83	370	28	18	22	45	100	438	15	2	25	57	1203
05:15 PM	89	420	50	25	26	80	77	464	9	3	19	45	1307
05:30 PM	95	432	41	25	38	61	72	360	5	7	16	45	1197
05:45 PM	91	418	34	27	29	62	79	384	10	0	21	46	1201
Total	358	1640	153	95	115	248	328	1646	39	12	81	193	4908
06:00 PM	79	307	30	38	37	64	68	339	4	5	15	47	1033
06:15 PM	91	312	38	19	26	60	55	370	4	2	19	42	1038
Grand Total	989	5360	390	525	331	997	958	5680	117	39	298	916	16600
Apprch %	14.7	79.5	5.8	28.3	17.9	53.8	14.2	84.1	1.7	3.1	23.8	73.1	
Total %	6	32.3	2.3	3.2	2	6	5.8	34.2	0.7	0.2	1.8	5.5	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: JAMBOREE ROAD
E-W Direction: UNIVERSITY DR / EASTBLUFF

File Name : h1302029
Site Code : 00005163
Start Date : 4/11/2013

	JAMBOREE ROAD Southbound				UNIVERSITY DRIVE Westbound				JAMBOREE ROAD Northbound				EASTBLUFF DRIVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	35	373	15	423	47	12	67	126	53	351	4	408	2	15	**80**	97	1054
08:15 AM	38	377	16	431	**66**	13	79	**158**	52	345	**6**	403	2	18	70	90	1082
08:30 AM	**41**	**379**	**21**	**441**	48	**14**	86	148	46	357	6	409	**3**	**26**	76	**105**	**1103**
08:45 AM	40	376	17	433	34	11	**87**	132	**69**	**366**	6	**441**	1	22	64	87	1093
Total Volume	154	1505	69	1728	195	50	319	564	220	1419	22	1661	8	81	290	379	4332
% App. Total	8.9	87.1	4		34.6	8.9	56.6		13.2	85.4	1.3		2.1	21.4	76.5		
PHF	.939	.993	.821	.980	.739	.893	.917	.892	.797	.969	.917	.942	.667	.779	.906	.902	.982

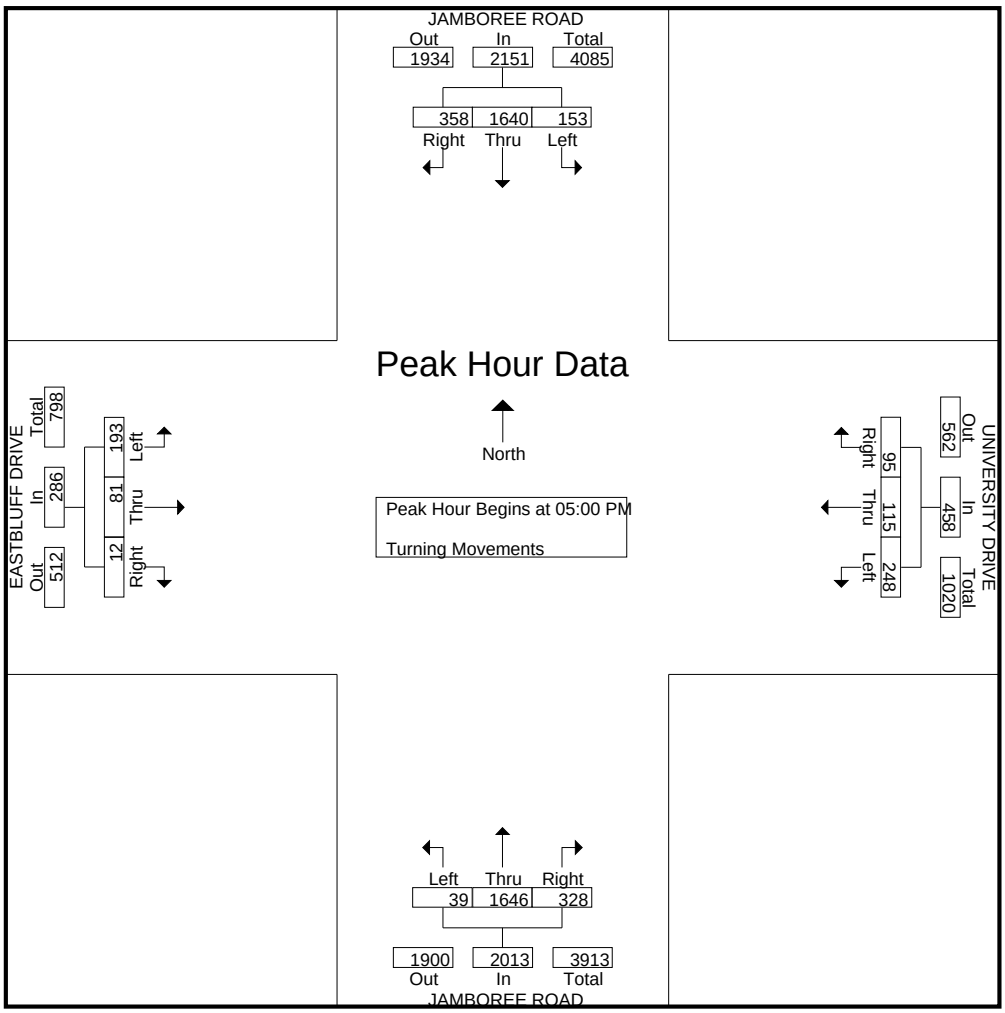


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: JAMBOREE ROAD
E-W Direction: UNIVERSITY DR / EASTBLUFF

File Name : h1302029
Site Code : 00005163
Start Date : 4/11/2013

	JAMBOREE ROAD Southbound				UNIVERSITY DRIVE Westbound				JAMBOREE ROAD Northbound				EASTBLUFF DRIVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	83	370	28	481	18	22	45	85	**100**	438	**15**	**553**	2	**25**	**57**	**84**	1203
05:15 PM	89	420	**50**	559	25	26	**80**	**131**	77	**464**	9	550	3	19	45	67	**1307**
05:30 PM	**95**	**432**	41	**568**	25	**38**	61	124	72	360	5	437	**7**	16	45	68	1197
05:45 PM	91	418	34	543	**27**	29	62	118	79	384	10	473	0	21	46	67	1201
Total Volume	358	1640	153	2151	95	115	248	458	328	1646	39	2013	12	81	193	286	4908
% App. Total	16.6	76.2	7.1		20.7	25.1	54.1		16.3	81.8	1.9		4.2	28.3	67.5		
PHF	.942	.949	.765	.947	.880	.757	.775	.874	.820	.887	.650	.910	.429	.810	.846	.851	.939



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: JAMBOREE ROAD
E-W Direction: BAYVIEW WAY

File Name : H1302023
Site Code : 00005423
Start Date : 3/14/2013

Groups Printed- Turning Movements

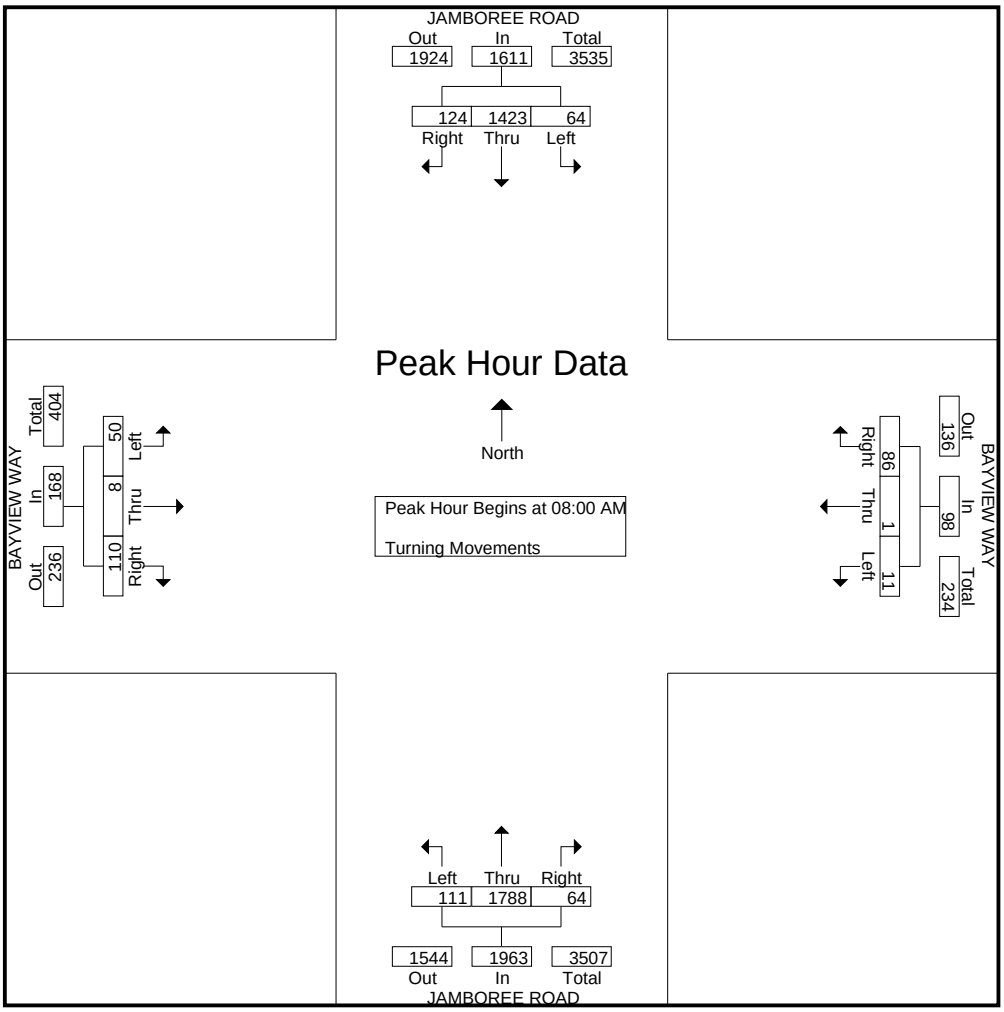
	JAMBOREE ROAD Southbound			BAYVIEW WAY Westbound			JAMBOREE ROAD Northbound			BAYVIEW WAY Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	19	240	8	4	0	3	3	227	4	8	2	4	522
07:15 AM	11	311	9	13	0	0	9	299	8	12	0	2	674
07:30 AM	24	347	10	8	0	3	7	324	13	8	4	5	753
07:45 AM	28	339	11	7	0	1	16	478	13	26	0	13	932
Total	82	1237	38	32	0	7	35	1328	38	54	6	24	2881
08:00 AM	29	354	13	17	1	3	9	482	27	17	2	12	966
08:15 AM	32	364	5	22	0	1	9	419	31	22	2	14	921
08:30 AM	28	345	19	15	0	2	20	455	25	46	1	17	973
08:45 AM	35	360	27	32	0	5	26	432	28	25	3	7	980
Total	124	1423	64	86	1	11	64	1788	111	110	8	50	3840
*** BREAK ***													
04:30 PM	13	359	18	23	1	4	16	460	9	19	3	8	933
04:45 PM	15	392	20	29	0	9	9	472	16	31	3	26	1022
Total	28	751	38	52	1	13	25	932	25	50	6	34	1955
05:00 PM	19	387	12	21	1	7	11	441	18	32	2	28	979
05:15 PM	13	449	15	27	0	6	13	449	12	37	0	23	1044
05:30 PM	12	463	9	20	0	4	16	444	9	40	1	17	1035
05:45 PM	13	460	8	26	0	6	12	462	18	30	2	11	1048
Total	57	1759	44	94	1	23	52	1796	57	139	5	79	4106
06:00 PM	13	472	8	18	1	4	11	385	18	37	1	22	990
06:15 PM	8	440	14	21	1	6	20	392	15	32	3	22	974
Grand Total	312	6082	206	303	5	64	207	6621	264	422	29	231	14746
Apprch %	4.7	92.2	3.1	81.5	1.3	17.2	2.9	93.4	3.7	61.9	4.3	33.9	
Total %	2.1	41.2	1.4	2.1	0	0.4	1.4	44.9	1.8	2.9	0.2	1.6	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: JAMBOREE ROAD
E-W Direction: BAYVIEW WAY

File Name : H1302023
Site Code : 00005423
Start Date : 3/14/2013

	JAMBOREE ROAD Southbound				BAYVIEW WAY Westbound				JAMBOREE ROAD Northbound				BAYVIEW WAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	29	354	13	396	17	**1**	3	21	9	**482**	27	**518**	17	2	12	31	966
08:15 AM	32	**364**	5	401	22	0	1	23	9	419	**31**	459	22	2	14	38	921
08:30 AM	28	345	19	392	15	0	2	17	20	455	25	500	**46**	1	**17**	**64**	973
08:45 AM	**35**	360	**27**	**422**	**32**	0	**5**	**37**	**26**	432	28	486	25	**3**	7	35	**980**
Total Volume	124	1423	64	1611	86	1	11	98	64	1788	111	1963	110	8	50	168	3840
% App. Total	7.7	88.3	4		87.8	1	11.2		3.3	91.1	5.7		65.5	4.8	29.8		
PHF	.886	.977	.593	.954	.672	.250	.550	.662	.615	.927	.895	.947	.598	.667	.735	.656	.980

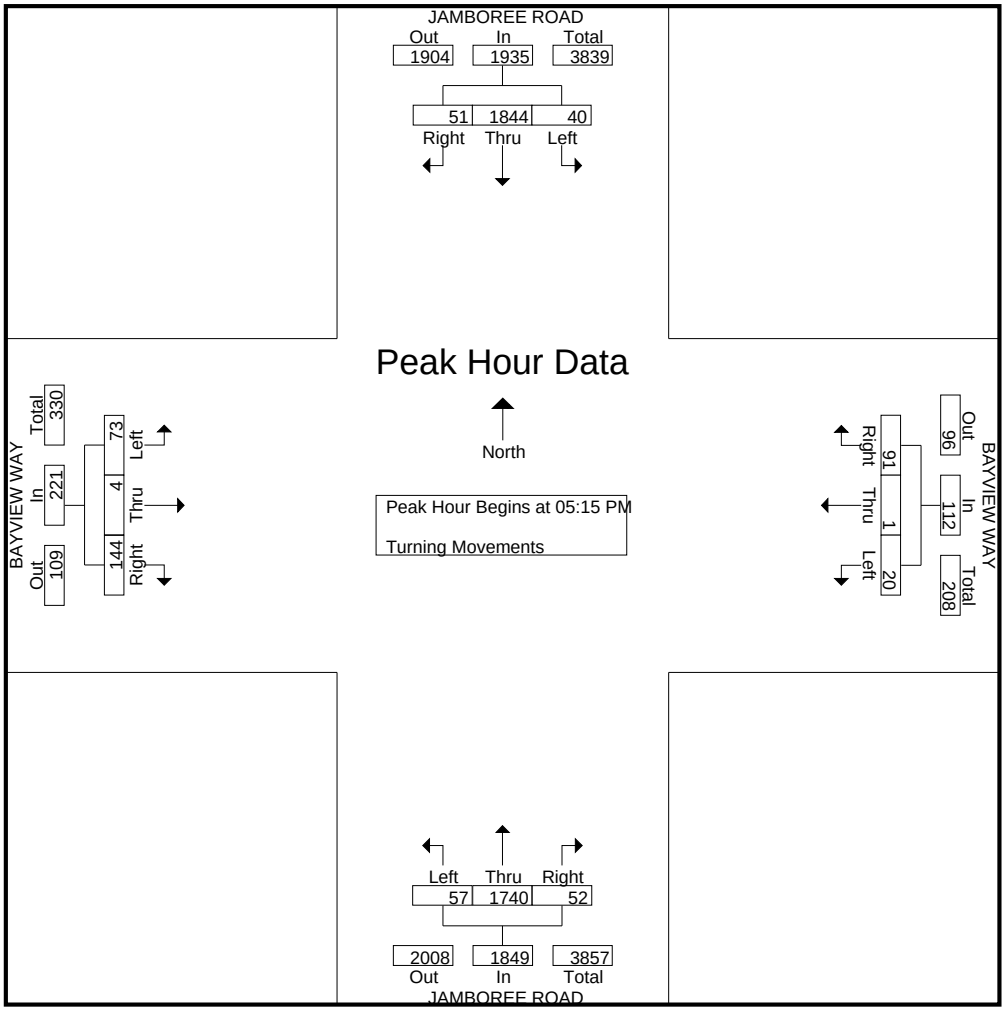


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: JAMBOREE ROAD
E-W Direction: BAYVIEW WAY

File Name : H1302023
Site Code : 00005423
Start Date : 3/14/2013

	JAMBOREE ROAD Southbound				BAYVIEW WAY Westbound				JAMBOREE ROAD Northbound				BAYVIEW WAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:15 PM																	
05:15 PM	**13**	449	**15**	477	**27**	0	**6**	**33**	13	449	12	474	37	0	**23**	**60**	1044
05:30 PM	12	463	9	484	20	0	4	24	**16**	444	9	469	**40**	1	17	58	1035
05:45 PM	13	460	8	481	26	0	6	32	12	**462**	**18**	**492**	30	**2**	11	43	**1048**
06:00 PM	13	**472**	8	**493**	18	**1**	4	23	11	385	18	414	37	1	22	60	990
Total Volume	51	1844	40	1935	91	1	20	112	52	1740	57	1849	144	4	73	221	4117
% App. Total	2.6	95.3	2.1		81.2	0.9	17.9		2.8	94.1	3.1		65.2	1.8	33		
PHF	.981	.977	.667	.981	.843	.250	.833	.848	.813	.942	.792	.940	.900	.500	.793	.921	.982



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: JAMBOREE ROAD
E-W Direction: BIRCH STREET

File Name : H1302024
Site Code : 00003873
Start Date : 3/14/2013

Groups Printed- Turning Movements

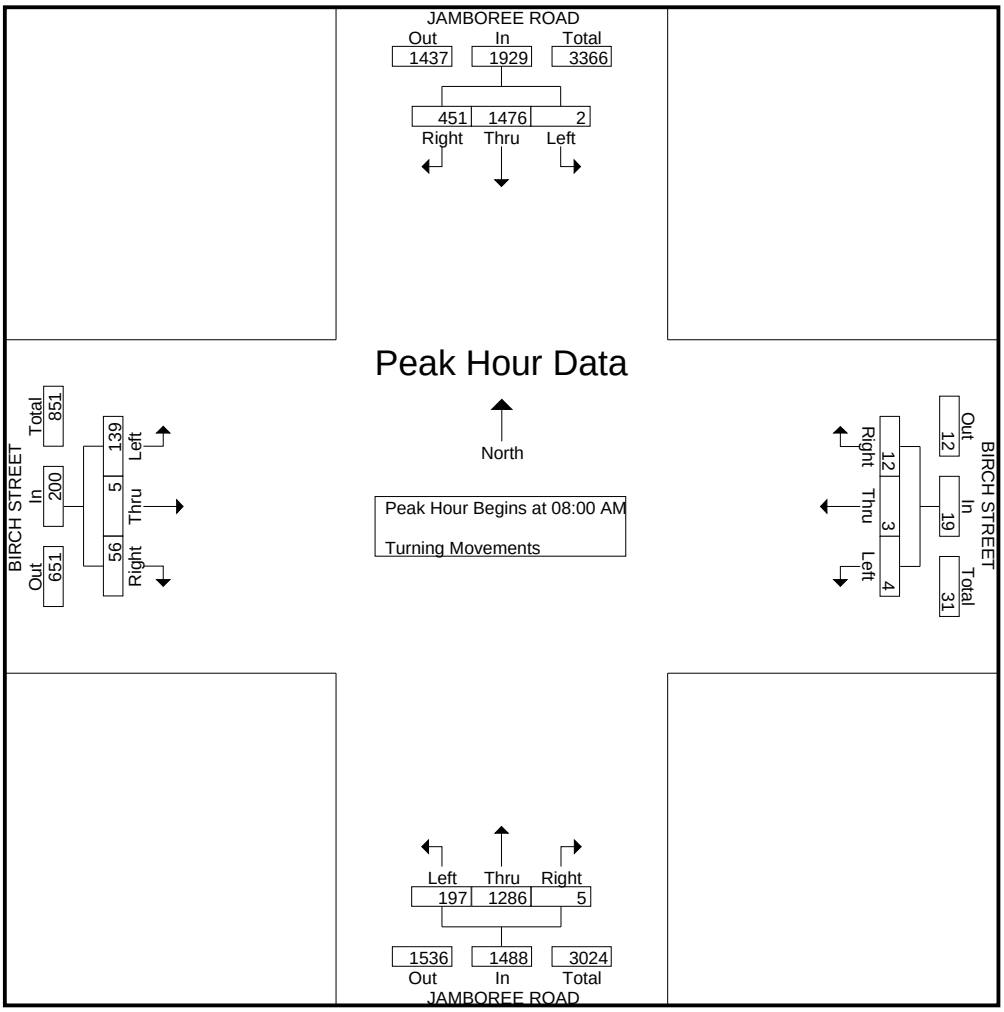
	JAMBOREE ROAD Southbound			BIRCH STREET Westbound			JAMBOREE ROAD Northbound			BIRCH STREET Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	46	194	1	2	0	1	2	110	11	8	0	14	389
07:15 AM	55	152	0	2	0	1	0	165	16	6	1	18	416
07:30 AM	83	156	0	3	0	0	0	206	15	6	0	16	485
07:45 AM	77	159	1	0	0	0	1	277	26	11	0	19	571
Total	261	661	2	7	0	2	3	758	68	31	1	67	1861
08:00 AM	91	360	1	3	1	1	1	302	37	10	2	23	832
08:15 AM	108	355	1	6	0	0	3	307	52	16	0	43	891
08:30 AM	156	366	0	2	0	1	1	363	45	10	1	37	982
08:45 AM	96	395	0	1	2	2	0	314	63	20	2	36	931
Total	451	1476	2	12	3	4	5	1286	197	56	5	139	3636
*** BREAK ***													
04:30 PM	27	296	0	0	0	0	0	280	7	33	0	51	694
04:45 PM	30	373	0	0	0	0	0	363	8	19	0	52	845
Total	57	669	0	0	0	0	0	643	15	52	0	103	1539
05:00 PM	17	381	0	0	0	0	0	366	9	24	0	60	857
05:15 PM	33	468	0	0	0	0	0	406	4	27	0	62	1000
05:30 PM	15	442	0	0	0	0	0	362	9	38	0	55	921
05:45 PM	18	425	0	0	0	0	0	395	7	34	0	82	961
Total	83	1716	0	0	0	0	0	1529	29	123	0	259	3739
06:00 PM	16	561	0	0	0	0	0	366	13	25	0	52	1033
06:15 PM	26	464	0	0	0	0	0	323	7	27	0	58	905
Grand Total	894	5547	4	19	3	6	8	4905	329	314	6	678	12713
Apprch %	13.9	86.1	0.1	67.9	10.7	21.4	0.2	93.6	6.3	31.5	0.6	67.9	
Total %	7	43.6	0	0.1	0	0	0.1	38.6	2.6	2.5	0	5.3	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: JAMBOREE ROAD
E-W Direction: BIRCH STREET

File Name : H1302024
Site Code : 00003873
Start Date : 3/14/2013

	JAMBOREE ROAD Southbound				BIRCH STREET Westbound				JAMBOREE ROAD Northbound				BIRCH STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	91	360	**1**	452	3	1	1	5	1	302	37	340	10	**2**	23	35	832
08:15 AM	108	355	1	464	**6**	0	0	**6**	**3**	307	52	362	16	0	**43**	**59**	891
08:30 AM	**156**	366	0	**522**	2	0	1	3	1	**363**	45	**409**	10	1	37	48	**982**
08:45 AM	96	**395**	0	491	1	**2**	**2**	5	0	314	**63**	377	**20**	2	36	58	931
Total Volume	451	1476	2	1929	12	3	4	19	5	1286	197	1488	56	5	139	200	3636
% App. Total	23.4	76.5	0.1		63.2	15.8	21.1		0.3	86.4	13.2		28	2.5	69.5		
PHF	.723	.934	.500	.924	.500	.375	.500	.792	.417	.886	.782	.910	.700	.625	.808	.847	.926

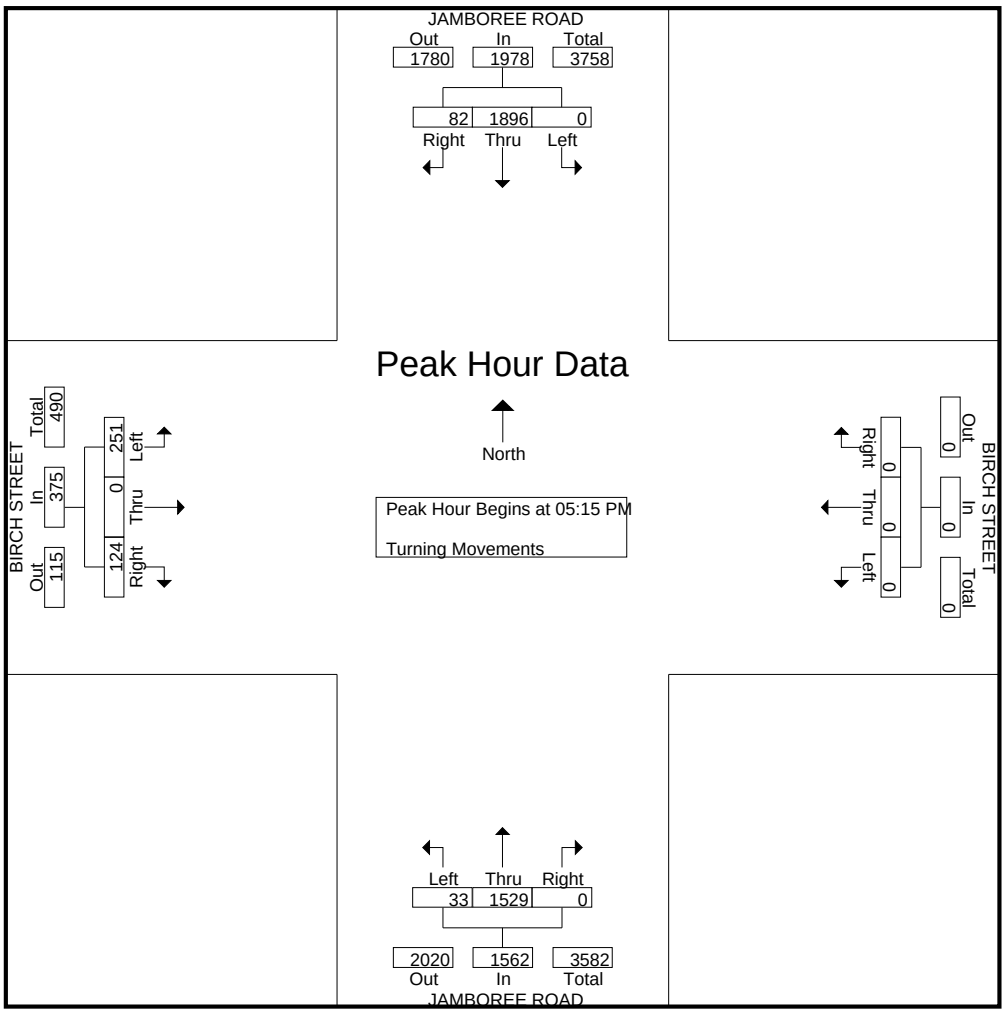


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: JAMBOREE ROAD
E-W Direction: BIRCH STREET

File Name : H1302024
Site Code : 00003873
Start Date : 3/14/2013

	JAMBOREE ROAD Southbound				BIRCH STREET Westbound				JAMBOREE ROAD Northbound				BIRCH STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:15 PM																	
05:15 PM	**33**	468	0	501	0	0	0	0	0	**406**	4	**410**	27	0	62	89	1000
05:30 PM	15	442	0	457	0	0	0	0	0	362	9	371	**38**	0	55	93	921
05:45 PM	18	425	0	443	0	0	0	0	0	395	7	402	34	0	**82**	**116**	961
06:00 PM	16	**561**	0	**577**	0	0	0	0	0	366	**13**	379	25	0	52	77	**1033**
Total Volume	82	1896	0	1978	0	0	0	0	0	1529	33	1562	124	0	251	375	3915
% App. Total	4.1	95.9	0		0	0	0		0	97.9	2.1		33.1	0	66.9		
PHF	.621	.845	.000	.857	.000	.000	.000	.000	.000	.942	.635	.952	.816	.000	.765	.808	.947



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: BAYVIEW PLACE
E-W Direction: BRISTOL STREET

File Name : H1302008
Site Code : 00005060
Start Date : 3/13/2013

Groups Printed- Turning Movements

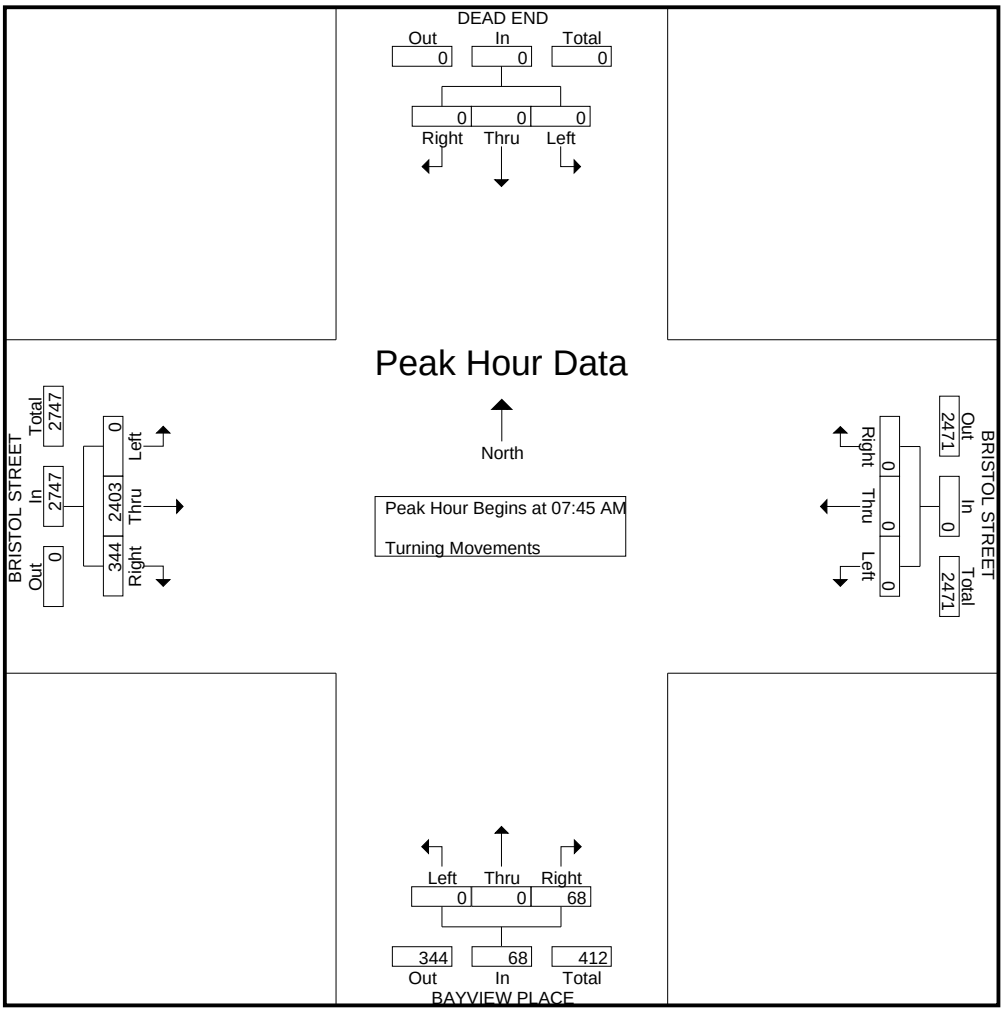
	DEAD END Southbound			BRISTOL STREET Westbound			BAYVIEW PLACE Northbound			BRISTOL STREET Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	0	0	0	0	0	0	8	0	0	40	415	0	463
07:15 AM	0	0	0	0	0	0	13	0	0	37	468	0	518
07:30 AM	0	0	0	0	0	0	12	0	0	68	560	0	640
07:45 AM	0	0	0	0	0	0	17	0	0	90	633	0	740
Total	0	0	0	0	0	0	50	0	0	235	2076	0	2361
08:00 AM	0	0	0	0	0	0	26	0	0	95	578	0	699
08:15 AM	0	0	0	0	0	0	12	0	0	79	590	0	681
08:30 AM	0	0	0	0	0	0	13	0	0	80	602	0	695
08:45 AM	0	0	0	0	0	0	24	0	0	70	604	0	698
Total	0	0	0	0	0	0	75	0	0	324	2374	0	2773
*** BREAK ***													
04:30 PM	0	0	0	0	0	0	59	0	0	29	428	0	516
04:45 PM	0	0	0	0	0	0	40	0	0	35	461	0	536
Total	0	0	0	0	0	0	99	0	0	64	889	0	1052
05:00 PM	0	0	0	0	0	0	74	0	0	34	439	0	547
05:15 PM	0	0	0	0	0	0	76	0	0	32	507	0	615
05:30 PM	0	0	0	0	0	0	57	0	0	59	463	0	579
05:45 PM	0	0	0	0	0	0	70	0	0	26	563	0	659
Total	0	0	0	0	0	0	277	0	0	151	1972	0	2400
06:00 PM	0	0	0	0	0	0	50	0	0	37	562	0	649
06:15 PM	0	0	0	0	0	0	51	0	0	28	602	0	681
Grand Total	0	0	0	0	0	0	602	0	0	839	8475	0	9916
Apprch %	0	0	0	0	0	0	100	0	0	9	91	0	
Total %	0	0	0	0	0	0	6.1	0	0	8.5	85.5	0	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: BAYVIEW PLACE
E-W Direction: BRISTOL STREET

File Name : H1302008
Site Code : 00005060
Start Date : 3/13/2013

	DEAD END Southbound				BRISTOL STREET Westbound				BAYVIEW PLACE Northbound				BRISTOL STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	17	0	0	17	90	**633**	0	**723**	**740**
08:00 AM	0	0	0	0	0	0	0	0	**26**	0	0	**26**	**95**	578	0	673	699
08:15 AM	0	0	0	0	0	0	0	0	12	0	0	12	79	590	0	669	681
08:30 AM	0	0	0	0	0	0	0	0	13	0	0	13	80	602	0	682	695
Total Volume	0	0	0	0	0	0	0	0	68	0	0	68	344	2403	0	2747	2815
% App. Total	0	0	0		0	0	0		100	0	0		12.5	87.5	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.654	.000	.000	.654	.905	.949	.000	.950	.951

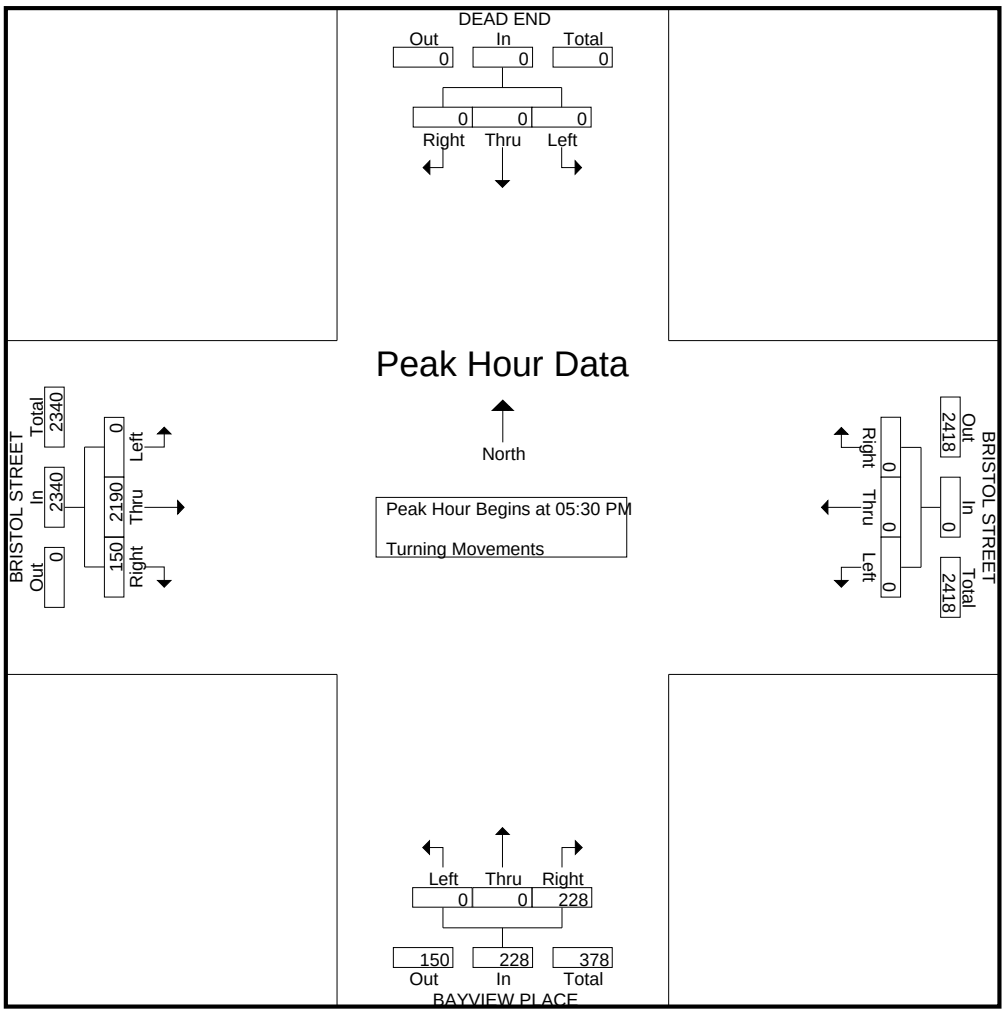


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: BAYVIEW PLACE
E-W Direction: BRISTOL STREET

File Name : H1302008
Site Code : 00005060
Start Date : 3/13/2013
Page No : 3

	DEAD END Southbound				BRISTOL STREET Westbound				BAYVIEW PLACE Northbound				BRISTOL STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:30 PM																	
05:30 PM	0	0	0	0	0	0	0	0	57	0	0	57	**59**	463	0	522	579
05:45 PM	0	0	0	0	0	0	0	0	**70**	0	0	**70**	26	563	0	589	659
06:00 PM	0	0	0	0	0	0	0	0	50	0	0	50	37	562	0	599	649
06:15 PM	0	0	0	0	0	0	0	0	51	0	0	51	28	**602**	0	**630**	**681**
Total Volume	0	0	0	0	0	0	0	0	228	0	0	228	150	2190	0	2340	2568
% App. Total	0	0	0		0	0	0		100	0	0		6.4	93.6	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.814	.000	.000	.814	.636	.909	.000	.929	.943



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1241-001 **Day:** Tuesday

City: Irvine **Date:** 9/24/2013

AM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			SR-73 NB Loop On-Ramp			SR-73 NB Loop On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2.5	1.5	0	0	0	0	0	0	0	0	0	
7:00 AM	0	277	119	0	0	0	0	0	0	0	0	0	396
7:15 AM	0	242	158	0	0	0	0	0	0	0	0	0	400
7:30 AM	0	306	187	0	0	0	0	0	0	0	0	0	493
7:45 AM	0	445	194	0	0	0	0	0	0	0	0	0	639
8:00 AM	0	363	176	0	0	0	0	0	0	0	0	0	539
8:15 AM	0	413	170	0	0	0	0	0	0	0	0	0	583
8:30 AM	0	394	161	0	0	0	0	0	0	0	0	0	555
8:45 AM	0	381	177	0	0	0	0	0	0	0	0	0	558
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2821	1342	0	0	0	0	0	0	0	0	0	4163
APPROACH %'s :	0.00%	67.76%	32.24%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	0	1615	701	0	0	0	0	0	0	0	0	0	2316
PEAK HR FACTOR :		0.906			0.000			0.000			0.000		0.906

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1241-001 **Day:** Tuesday

City: Irvine **Date:** 9/24/2013

PM

NS/EW Streets:	Jamboree Rd			Jamboree Rd			SR-73 NB Loop On-Ramp			SR-73 NB Loop On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2.5	1.5	0	0	0	0	0	0	0	0	0	
4:00 PM	0	192	207	0	0	0	0	0	0	0	0	0	399
4:15 PM	0	197	214	0	0	0	0	0	0	0	0	0	411
4:30 PM	0	225	213	0	0	0	0	0	0	0	0	0	438
4:45 PM	0	247	203	0	0	0	0	0	0	0	0	0	450
5:00 PM	0	248	234	0	0	0	0	0	0	0	0	0	482
5:15 PM	0	300	250	0	0	0	0	0	0	0	0	0	550
5:30 PM	0	292	204	0	0	0	0	0	0	0	0	0	496
5:45 PM	0	288	198	0	0	0	0	0	0	0	0	0	486
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1989	1723	0	0	0	0	0	0	0	0	0	3712
APPROACH %'s :	0.00%	53.58%	46.42%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	1128	886	0	0	0	0	0	0	0	0	0	2014
PEAK HR FACTOR :		0.915			0.000			0.000			0.000		0.915

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-005 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	I-405 NB On-Ramp			I-405 NB On-Ramp			Jamboree Rd			Jamboree Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	1	0	0	0	0	0	0	
7:00 AM	0	0	0	0	302	223	0	0	0	0	0	0	525
7:15 AM	0	0	0	0	360	293	0	0	0	0	0	0	653
7:30 AM	0	0	0	0	473	308	0	0	0	0	0	0	781
7:45 AM	0	0	0	0	494	310	0	0	0	0	0	0	804
8:00 AM	0	0	0	0	497	299	0	0	0	0	0	0	796
8:15 AM	0	0	0	0	501	266	0	0	0	0	0	0	767
8:30 AM	0	0	0	0	521	311	0	0	0	0	0	0	832
8:45 AM	0	0	0	0	475	313	0	0	0	0	0	0	788
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	3623	2323	0	0	0	0	0	0	5946
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	60.93%	39.07%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	0	0	0	0	2013	1186	0	0	0	0	0	0	3199
PEAK HR FACTOR :	0.000			0.961			0.000			0.000			0.961

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-005 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	I-405 NB On-Ramp			I-405 NB On-Ramp			Jamboree Rd			Jamboree Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	1	0	0	0	0	0	0	
4:00 PM	0	0	0	0	377	267	0	0	0	0	0	0	644
4:15 PM	0	0	0	0	342	222	0	0	0	0	0	0	564
4:30 PM	0	0	0	0	437	274	0	0	0	0	0	0	711
4:45 PM	0	0	0	0	381	250	0	0	0	0	0	0	631
5:00 PM	0	0	0	0	460	325	0	0	0	0	0	0	785
5:15 PM	0	0	0	0	477	270	0	0	0	0	0	0	747
5:30 PM	0	0	0	0	454	227	0	0	0	0	0	0	681
5:45 PM	0	0	0	0	429	198	0	0	0	0	0	0	627
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	3357	2033	0	0	0	0	0	0	5390
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	62.28%	37.72%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	0	0	0	1755	1119	0	0	0	0	0	0	2874
PEAK HR FACTOR :	0.000			0.915			0.000			0.000			0.915

UTURNS				
NB	SB	EB	WB	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-006 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	I-405 NB On-Ramp			I-405 NB On-Ramp			Jamboree Rd			Jamboree Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	1	0	0	0	0	0	0	0	0	0	
7:00 AM	0	330	81	0	0	0	0	0	0	0	0	0	411
7:15 AM	0	389	92	0	0	0	0	0	0	0	0	0	481
7:30 AM	0	368	130	0	0	0	0	0	0	0	0	0	498
7:45 AM	0	480	128	0	0	0	0	0	0	0	0	0	608
8:00 AM	0	485	108	0	0	0	0	0	0	0	0	0	593
8:15 AM	0	563	88	0	0	0	0	0	0	0	0	0	651
8:30 AM	0	491	108	0	0	0	0	0	0	0	0	0	599
8:45 AM	0	490	98	0	0	0	0	0	0	0	0	0	588
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3596	833	0	0	0	0	0	0	0	0	0	4429
APPROACH %'s :	0.00%	81.19%	18.81%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	0	2019	432	0	0	0	0	0	0	0	0	0	2451
PEAK HR FACTOR :		0.941			0.000			0.000			0.000		0.941

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-006 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	I-405 NB On-Ramp			I-405 NB On-Ramp			Jamboree Rd			Jamboree Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	1	0	0	0	0	0	0	0	0	0	
4:00 PM	0	658	254	0	0	0	0	0	0	0	0	0	912
4:15 PM	0	677	192	0	0	0	0	0	0	0	0	0	869
4:30 PM	0	735	218	0	0	0	0	0	0	0	0	0	953
4:45 PM	0	696	187	0	0	0	0	0	0	0	0	0	883
5:00 PM	0	729	207	0	0	0	0	0	0	0	0	0	936
5:15 PM	0	787	174	0	0	0	0	0	0	0	0	0	961
5:30 PM	0	817	169	0	0	0	0	0	0	0	0	0	986
5:45 PM	0	814	166	0	0	0	0	0	0	0	0	0	980
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	5913	1567	0	0	0	0	0	0	0	0	0	7480
APPROACH %'s :	0.00%	79.05%	20.95%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	3147	716	0	0	0	0	0	0	0	0	0	3863
PEAK HR FACTOR :		0.979			0.000			0.000			0.000		0.979

UTURNS				
NB	SB	EB	WB	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-007 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	I-405 SB On-Ramp			I-405 SB On-Ramp			Jamboree Rd			Jamboree Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	1	0	0	0	0	0	0	0	0	0	
7:00 AM	0	179	76	0	0	0	0	0	0	0	0	0	255
7:15 AM	0	234	100	0	0	0	0	0	0	0	0	0	334
7:30 AM	0	282	103	0	0	0	0	0	0	0	0	0	385
7:45 AM	0	283	115	0	0	0	0	0	0	0	0	0	398
8:00 AM	0	310	137	0	0	0	0	0	0	0	0	0	447
8:15 AM	0	344	143	0	0	0	0	0	0	0	0	0	487
8:30 AM	0	308	117	0	0	0	0	0	0	0	0	0	425
8:45 AM	0	305	119	0	0	0	0	0	0	0	0	0	424
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2245	910	0	0	0	0	0	0	0	0	0	3155
APPROACH %'s :	0.00%	71.16%	28.84%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	0	1267	516	0	0	0	0	0	0	0	0	0	1783
PEAK HR FACTOR :		0.915			0.000			0.000			0.000		0.915

UTURNS				
NB	SB	EB	WB	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-007 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	I-405 SB On-Ramp			I-405 SB On-Ramp			Jamboree Rd			Jamboree Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	1	0	0	0	0	0	0	0	0	0	
4:00 PM	0	624	264	0	0	0	0	0	0	0	0	0	888
4:15 PM	0	581	267	0	0	0	0	0	0	0	0	0	848
4:30 PM	0	643	266	0	0	0	0	0	0	0	0	0	909
4:45 PM	0	585	246	0	0	0	0	0	0	0	0	0	831
5:00 PM	0	672	278	0	0	0	0	0	0	0	0	0	950
5:15 PM	0	670	271	0	0	0	0	0	0	0	0	0	941
5:30 PM	0	677	244	0	0	0	0	0	0	0	0	0	921
5:45 PM	0	686	275	0	0	0	0	0	0	0	0	0	961
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	5138	2111	0	0	0	0	0	0	0	0	0	7249
APPROACH %'s :	0.00%	70.88%	29.12%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	2705	1068	0	0	0	0	0	0	0	0	0	3773
PEAK HR FACTOR :		0.982			0.000			0.000			0.000		0.982

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-008 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	I-405 SB On-Ramp			I-405 SB On-Ramp			Jamboree Rd			Jamboree Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	1	0	0	0	0	0	0	
7:00 AM	0	0	0	0	527	51	0	0	0	0	0	0	578
7:15 AM	0	0	0	0	601	56	0	0	0	0	0	0	657
7:30 AM	0	0	0	0	693	66	0	0	0	0	0	0	759
7:45 AM	0	0	0	0	753	64	0	0	0	0	0	0	817
8:00 AM	0	0	0	0	725	66	0	0	0	0	0	0	791
8:15 AM	0	0	0	0	782	33	0	0	0	0	0	0	815
8:30 AM	0	0	0	0	708	69	0	0	0	0	0	0	777
8:45 AM	0	0	0	0	712	49	0	0	0	0	0	0	761
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	5501	454	0	0	0	0	0	0	5955
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	92.38%	7.62%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	0	0	0	0	2968	232	0	0	0	0	0	0	3200
PEAK HR FACTOR :	0.000			0.979			0.000			0.000			0.979

UTURNS	NB	SB	EB	WB
TOTAL	0	0	0	0

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-008 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	I-405 SB On-Ramp			I-405 SB On-Ramp			Jamboree Rd			Jamboree Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	1	0	0	0	0	0	0	
4:00 PM	0	0	0	0	312	177	0	0	0	0	0	0	489
4:15 PM	0	0	0	0	359	131	0	0	0	0	0	0	490
4:30 PM	0	0	0	0	369	196	0	0	0	0	0	0	565
4:45 PM	0	0	0	0	350	127	0	0	0	0	0	0	477
5:00 PM	0	0	0	0	379	211	0	0	0	0	0	0	590
5:15 PM	0	0	0	0	463	145	0	0	0	0	0	0	608
5:30 PM	0	0	0	0	470	149	0	0	0	0	0	0	619
5:45 PM	0	0	0	0	522	117	0	0	0	0	0	0	639
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	3224	1253	0	0	0	0	0	0	4477
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	72.01%	27.99%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	0	1834	622	0	0	0	0	0	0	2456
PEAK HR FACTOR :	0.000			0.961			0.000			0.000			0.961

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-013 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	SR-73 NB On-Ramp			SR-73 NB On-Ramp			Campus Dr/Irvine Ave			Campus Dr/Irvine Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	0	0	0	0	0	0	0	0	0	
7:00 AM	105	99	0	0	0	0	0	0	0	0	0	0	204
7:15 AM	110	135	0	0	0	0	0	0	0	0	0	0	245
7:30 AM	158	222	0	0	0	0	0	0	0	0	0	0	380
7:45 AM	160	268	0	0	0	0	0	0	0	0	0	0	428
8:00 AM	196	257	0	0	0	0	0	0	0	0	0	0	453
8:15 AM	139	236	0	0	0	0	0	0	0	0	0	0	375
8:30 AM	179	253	0	0	0	0	0	0	0	0	0	0	432
8:45 AM	196	219	0	0	0	0	0	0	0	0	0	0	415
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1243	1689	0	0	0	0	0	0	0	0	0	0	2932
APPROACH %'s :	42.39%	57.61%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	674	1014	0	0	0	0	0	0	0	0	0	0	1688
PEAK HR FACTOR :		0.932			0.000			0.000			0.000		0.932

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-013 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	SR-73 NB On-Ramp			SR-73 NB On-Ramp			Campus Dr/Irvine Ave			Campus Dr/Irvine Ave				UTURNS			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
LANES:	1	1	0	0	0	0	0	0	0	0	0	0					
4:00 PM	480	314	0	0	0	0	0	0	0	0	0	0	794				
4:15 PM	486	278	0	0	0	0	0	0	0	0	0	0	764				
4:30 PM	550	331	0	0	0	0	0	0	0	0	0	0	881				
4:45 PM	540	325	0	0	0	0	0	0	0	0	0	0	865				
5:00 PM	610	368	0	0	0	0	0	0	0	0	0	0	978				
5:15 PM	602	415	0	0	0	0	0	0	0	0	0	0	1017				
5:30 PM	600	415	0	0	0	0	0	0	0	0	0	0	1015				
5:45 PM	559	341	0	0	0	0	0	0	0	0	0	0	900				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
TOTAL VOLUMES :	4427	2787	0	0	0	0	0	0	0	0	0	0	7214	0	0	0	0
APPROACH %'s :	61.37%	38.63%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!					
PEAK HR START TIME :	500 PM												TOTAL				
PEAK HR VOL :	2371	1539	0	0	0	0	0	0	0	0	0	0	3910				
PEAK HR FACTOR :		0.961			0.000			0.000			0.000		0.961				

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-014 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	SR-73 SB Off-Ramp			SR-73 SB Off-Ramp			Campus Dr/Irvine Ave			Campus Dr/Irvine Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1	1	0	0	0	0	0	0	0	
7:00 AM	0	0	0	296	143	0	0	0	0	0	0	0	439
7:15 AM	0	0	0	383	183	0	0	0	0	0	0	0	566
7:30 AM	0	0	0	400	187	0	0	0	0	0	0	0	587
7:45 AM	0	0	0	570	306	0	0	0	0	0	0	0	876
8:00 AM	0	0	0	564	320	0	0	0	0	0	0	0	884
8:15 AM	0	0	0	590	285	0	0	0	0	0	0	0	875
8:30 AM	0	0	0	580	241	0	0	0	0	0	0	0	821
8:45 AM	0	0	0	557	233	0	0	0	0	0	0	0	790
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	3940	1898	0	0	0	0	0	0	0	5838
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	67.49%	32.51%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	0	0	0	2304	1152	0	0	0	0	0	0	0	3456
PEAK HR FACTOR :	0.000			0.977			0.000			0.000			0.977

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-014 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	SR-73 SB Off-Ramp			SR-73 SB Off-Ramp			Campus Dr/Irvine Ave			Campus Dr/Irvine Ave				UTURNS			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
LANES:	0	0	0	1	1	0	0	0	0	0	0	0					
4:00 PM	0	0	0	230	210	0	0	0	0	0	0	0	440				
4:15 PM	0	0	0	208	186	0	0	0	0	0	0	0	394				
4:30 PM	0	0	0	230	227	0	0	0	0	0	0	0	457				
4:45 PM	0	0	0	233	261	0	0	0	0	0	0	0	494				
5:00 PM	0	0	0	243	279	0	0	0	0	0	0	0	522				
5:15 PM	0	0	0	253	260	0	0	0	0	0	0	0	513				
5:30 PM	0	0	0	243	232	0	0	0	0	0	0	0	475				
5:45 PM	0	0	0	258	214	0	0	0	0	0	0	0	472				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
TOTAL VOLUMES :	0	0	0	1898	1869	0	0	0	0	0	0	0	3767	0	0	0	0
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	50.38%	49.62%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!					
PEAK HR START TIME :	445 PM												TOTAL				
PEAK HR VOL :	0	0	0	972	1032	0	0	0	0	0	0	0	2004				
PEAK HR FACTOR :	0.000			0.960			0.000			0.000			0.960				

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-015 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	SR-55 NB On-Ramp			SR-55 NB On-Ramp			John Wayne Airport			John Wayne Airport			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	0	0	0	0	0	0	0	0	0	
7:00 AM	30	79	0	0	0	0	0	0	0	0	0	0	109
7:15 AM	22	64	0	0	0	0	0	0	0	0	0	0	86
7:30 AM	38	65	0	0	0	0	0	0	0	0	0	0	103
7:45 AM	37	100	0	0	0	0	0	0	0	0	0	0	137
8:00 AM	39	97	0	0	0	0	0	0	0	0	0	0	136
8:15 AM	43	88	0	0	0	0	0	0	0	0	0	0	131
8:30 AM	54	118	0	0	0	0	0	0	0	0	0	0	172
8:45 AM	50	149	0	0	0	0	0	0	0	0	0	0	199
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	313	760	0	0	0	0	0	0	0	0	0	0	1073
APPROACH %'s :	29.17%	70.83%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	186	452	0	0	0	0	0	0	0	0	0	0	638
PEAK HR FACTOR :		0.802			0.000			0.000			0.000		0.802

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-015 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	SR-55 NB On-Ramp			SR-55 NB On-Ramp			John Wayne Airport			John Wayne Airport			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	0	0	0	0	0	0	0	0	0	
4:00 PM	93	171	0	0	0	0	0	0	0	0	0	0	264
4:15 PM	104	175	0	0	0	0	0	0	0	0	0	0	279
4:30 PM	87	99	0	0	0	0	0	0	0	0	0	0	186
4:45 PM	63	79	0	0	0	0	0	0	0	0	0	0	142
5:00 PM	94	103	0	0	0	0	0	0	0	0	0	0	197
5:15 PM	66	101	0	0	0	0	0	0	0	0	0	0	167
5:30 PM	72	79	0	0	0	0	0	0	0	0	0	0	151
5:45 PM	79	107	0	0	0	0	0	0	0	0	0	0	186
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	658	914	0	0	0	0	0	0	0	0	0	0	1572
APPROACH %'s :	41.86%	58.14%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	347	524	0	0	0	0	0	0	0	0	0	0	871
PEAK HR FACTOR :		0.780			0.000			0.000			0.000		0.780

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-016 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

AM

NS/EW Streets:	SR-55 SB Off-Ramp			SR-55 SB Off-Ramp			John Wayne Airport			John Wayne Airport			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	1	0	0	0	0	0	0	
7:00 AM	0	0	0	0	26	21	0	0	0	0	0	0	47
7:15 AM	0	0	0	0	17	21	0	0	0	0	0	0	38
7:30 AM	0	0	0	0	14	33	0	0	0	0	0	0	47
7:45 AM	0	0	0	0	14	22	0	0	0	0	0	0	36
8:00 AM	0	0	0	0	15	28	0	0	0	0	0	0	43
8:15 AM	0	0	0	0	19	44	0	0	0	0	0	0	63
8:30 AM	0	0	0	0	14	53	0	0	0	0	0	0	67
8:45 AM	0	0	0	0	27	41	0	0	0	0	0	0	68
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	146	263	0	0	0	0	0	0	409
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	35.70%	64.30%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	0	0	0	0	75	166	0	0	0	0	0	0	241
PEAK HR FACTOR :	0.000			0.886			0.000			0.000			0.886

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-1222-016 **Day:** Tuesday

City: Newport Beach **Date:** 9/17/2013

PM

NS/EW Streets:	SR-55 SB Off-Ramp			SR-55 SB Off-Ramp			John Wayne Airport			John Wayne Airport			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	1	0	0	0	0	0	0	
4:00 PM	0	0	0	0	24	22	0	0	0	0	0	0	46
4:15 PM	0	0	0	0	28	21	0	0	0	0	0	0	49
4:30 PM	0	0	0	0	26	25	0	0	0	0	0	0	51
4:45 PM	0	0	0	0	19	22	0	0	0	0	0	0	41
5:00 PM	0	0	0	0	18	25	0	0	0	0	0	0	43
5:15 PM	0	0	0	0	18	15	0	0	0	0	0	0	33
5:30 PM	0	0	0	0	24	19	0	0	0	0	0	0	43
5:45 PM	0	0	0	0	19	17	0	0	0	0	0	0	36
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	176	166	0	0	0	0	0	0	342
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	51.46%	48.54%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	0	0	0	0	97	90	0	0	0	0	0	0	187
PEAK HR FACTOR :		0.000			0.917			0.000			0.000		0.917

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : No Control

Prepared by NDS/ATD

VOLUME

Rental Car Ramp B2

Day: Tuesday
Date: 10/29/2013

City: Irvine
Project #: CA13_1282_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	1,538	0	0	1,538

AM Period	NB	SB		EB	WB	TOTAL		PM Period	NB	SB		EB	WB	TOTAL	
00:00	0	0				0		**12:00**	0	34				34	
00:15	0	0				0		**12:15**	0	40				40	
00:30	0	4				4		**12:30**	0	31				31	
00:45	0	1	5			1	5	**12:45**	0	19	124			19	124
01:00	0	1				1		**13:00**	0	20				20	
01:15	0	0				0		**13:15**	0	25				25	
01:30	0	1				1		**13:30**	0	18				18	
01:45	0	2	4			2	4	**13:45**	0	34	97			34	97
02:00	0	1				1		**14:00**	0	29				29	
02:15	0	0				0		**14:15**	0	26				26	
02:30	0	1				1		**14:30**	0	27				27	
02:45	0	1	3			1	3	**14:45**	0	27	109			27	109
03:00	0	1				1		**15:00**	0	26				26	
03:15	0	0				0		**15:15**	0	13				13	
03:30	0	0				0		**15:30**	0	23				23	
03:45	0	0	1			0	1	**15:45**	0	22	84			22	84
04:00	0	0				0		**16:00**	0	30				30	
04:15	0	0				0		**16:15**	0	40				40	
04:30	0	0				0		**16:30**	0	35				35	
04:45	0	0				0		**16:45**	0	34	139			34	139
05:00	0	2				2		**17:00**	0	31				31	
05:15	0	2				2		**17:15**	0	26				26	
05:30	0	0				0		**17:30**	0	18				18	
05:45	0	14	18			14	18	**17:45**	0	22	97			22	97
06:00	0	2				2		**18:00**	0	30				30	
06:15	0	5				5		**18:15**	0	27				27	
06:30	0	8				8		**18:30**	0	25				25	
06:45	0	11	26			11	26	**18:45**	0	21	103			21	103
07:00	0	12				12		**19:00**	0	32				32	
07:15	0	16				16		**19:15**	0	12				12	
07:30	0	6				6		**19:30**	0	13				13	
07:45	0	13	47			13	47	**19:45**	0	22	79			22	79
08:00	0	13				13		**20:00**	0	15				15	
08:15	0	26				26		**20:15**	0	12				12	
08:30	0	16				16		**20:30**	0	12				12	
08:45	0	31	86			31	86	**20:45**	0	20	59			20	59
09:00	0	14				14		**21:00**	0	17				17	
09:15	0	40				40		**21:15**	0	19				19	
09:30	0	24				24		**21:30**	0	13				13	
09:45	0	18	96			18	96	**21:45**	0	12	61			12	61
10:00	0	29				29		**22:00**	0	15				15	
10:15	0	30				30		**22:15**	0	20				20	
10:30	0	26				26		**22:30**	0	9				9	
10:45	0	29	114			29	114	**22:45**	0	12	56			12	56
11:00	0	24				24		**23:00**	0	6				6	
11:15	0	31				31		**23:15**	0	10				10	
11:30	0	32				32		**23:30**	0	2				2	
11:45	0	25	112			25	112	**23:45**	0	0	18			0	18
TOTALS		512					**512**	**TOTALS**		1026					**1026**
SPLIT %		100.0%					**33.3%**	**SPLIT %**		100.0%					**66.7%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	1,538	0	0	1,538

AM Peak Hour		11:30			**11:30**	**PM Peak Hour**		16:15			**16:15**
AM Pk Volume		131			**131**	**PM Pk Volume**		140			**140**
Pk Hr Factor		0.819			**0.819**	**Pk Hr Factor**		0.875			**0.875**
7 - 9 Volume	0	133	0	0	**133**	**4 - 6 Volume**	0	236	0	0	**236**
7 - 9 Peak Hour		08:00			**08:00**	**4 - 6 Peak Hour**		16:15			**16:15**
7 - 9 Pk Volume	0	86	0	0	**86**	**4 - 6 Pk Volume**	0	140	0	0	**140**
Pk Hr Factor	0.000	0.694	0.000	0.000	**0.694**	**Pk Hr Factor**	0.000	0.875	0.000	0.000	**0.875**

Prepared by NDS/ATD

VOLUME

Rental Car Ramp A2

Day: Tuesday
Date: 10/29/2013

City: Irvine
Project #: CA13_1282_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	2,811	0	0	2,811

AM Period	NB	SB		EB	WB		TOTAL		PM Period	NB	SB		EB	WB		TOTAL	
00:00	0	1					1		**12:00**	0	77					77	
00:15	0	2					2		**12:15**	0	61					61	
00:30	0	0					0		**12:30**	0	46					46	
00:45	0	0	3				0	3	**12:45**	0	48	232				48	232
01:00	0	0					0		**13:00**	0	56					56	
01:15	0	1					1		**13:15**	0	47					47	
01:30	0	1					1		**13:30**	0	45					45	
01:45	0	1	3				1	3	**13:45**	0	39	187				39	187
02:00	0	1					1		**14:00**	0	46					46	
02:15	0	0					0		**14:15**	0	55					55	
02:30	0	0					0		**14:30**	0	57					57	
02:45	0	0	1				0	1	**14:45**	0	56	214				56	214
03:00	0	0					0		**15:00**	0	43					43	
03:15	0	0					0		**15:15**	0	28					28	
03:30	0	0					0		**15:30**	0	36					36	
03:45	0	0					0		**15:45**	0	45	152				45	152
04:00	0	1					1		**16:00**	0	51					51	
04:15	0	0					0		**16:15**	0	57					57	
04:30	0	0					0		**16:30**	0	41					41	
04:45	0	0	1				0	1	**16:45**	0	39	188				39	188
05:00	0	3					3		**17:00**	0	71					71	
05:15	0	7					7		**17:15**	0	31					31	
05:30	0	7					7		**17:30**	0	41					41	
05:45	0	16	33				16	33	**17:45**	0	36	179				36	179
06:00	0	26					26		**18:00**	0	41					41	
06:15	0	13					13		**18:15**	0	30					30	
06:30	0	28					28		**18:30**	0	43					43	
06:45	0	10	77				10	77	**18:45**	0	32	146				32	146
07:00	0	22					22		**19:00**	0	35					35	
07:15	0	38					38		**19:15**	0	42					42	
07:30	0	14					14		**19:30**	0	22					22	
07:45	0	31	105				31	105	**19:45**	0	30	129				30	129
08:00	0	41					41		**20:00**	0	33					33	
08:15	0	41					41		**20:15**	0	43					43	
08:30	0	31					31		**20:30**	0	40					40	
08:45	0	39	152				39	152	**20:45**	0	28	144				28	144
09:00	0	55					55		**21:00**	0	47					47	
09:15	0	42					42		**21:15**	0	21					21	
09:30	0	39					39		**21:30**	0	21					21	
09:45	0	70	206				70	206	**21:45**	0	20	109				20	109
10:00	0	53					53		**22:00**	0	19					19	
10:15	0	49					49		**22:15**	0	17					17	
10:30	0	51					51		**22:30**	0	6					6	
10:45	0	68	221				68	221	**22:45**	0	12	54				12	54
11:00	0	71					71		**23:00**	0	8					8	
11:15	0	72					72		**23:15**	0	5					5	
11:30	0	62					62		**23:30**	0	1					1	
11:45	0	55	260				55	260	**23:45**	0	1	15				1	15
TOTALS		1062						**1062**	**TOTALS**		1749						**1749**
SPLIT %		100.0%						**37.8%**	**SPLIT %**		100.0%						**62.2%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	2,811	0	0	2,811

AM Peak Hour		10:45						**10:45**	**PM Peak Hour**		12:00							**12:00**
AM Pk Volume		273						**273**	**PM Pk Volume**		232							**232**
Pk Hr Factor		0.948						**0.948**	**Pk Hr Factor**		0.753							**0.753**
7 - 9 Volume	0	257		0	0			**257**	**4 - 6 Volume**	0	367		0	0				**367**
7 - 9 Peak Hour		08:00						**08:00**	**4 - 6 Peak Hour**		16:15							**16:15**
7 - 9 Pk Volume	0	152		0	0			**152**	**4 - 6 Pk Volume**	0	208		0	0				**208**
Pk Hr Factor	0.000	0.927		0.000	0.000			**0.927**	**Pk Hr Factor**	0.000	0.732		0.000	0.000				**0.732**

APPENDIX B: EXISTING LOS RESULTS

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Scenario Report

Scenario:	EX-AM
Command:	EX-AM
Volume:	EX-AM
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	EX-AM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	A	xxxxx	0.558	A	xxxxx	0.558	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.676	B	xxxxx	0.676	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	A	xxxxx	0.593	A	xxxxx	0.593	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	B	xxxxx	0.682	B	xxxxx	0.682	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	A	xxxxx	0.544	A	xxxxx	0.544	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.374	A	xxxxx	0.374	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	B	xxxxx	0.678	B	xxxxx	0.678	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	D	xxxxx	0.882	D	xxxxx	0.882	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	B	xxxxx	0.656	B	xxxxx	0.656	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	A	xxxxx	0.579	A	xxxxx	0.579	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	B	xxxxx	0.650	B	xxxxx	0.650	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.496	A	xxxxx	0.496	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.610	B	xxxxx	0.610	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	A	xxxxx	0.493	A	xxxxx	0.493	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	A	xxxxx	0.338	A	xxxxx	0.338	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.484	A	xxxxx	0.484	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	A	xxxxx	0.596	A	xxxxx	0.596	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	B	xxxxx	0.689	B	xxxxx	0.689	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	A	xxxxx	0.581	A	xxxxx	0.581	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.400	A	xxxxx	0.400	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	B	xxxxx	0.609	B	xxxxx	0.609	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.707	C	xxxxx	0.707	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.504	A	xxxxx	0.504	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.496	A	xxxxx	0.496	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	C	18.7	0.719	C	18.7	0.719	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.369	A	xxxxx	0.369	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	B	xxxxx	0.641	B	xxxxx	0.641	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	B	xxxxx	0.619	B	xxxxx	0.619	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	A	xxxxx	0.485	A	xxxxx	0.485	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	A	xxxxx	0.528	A	xxxxx	0.528	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	A	xxxxx	0.540	A	xxxxx	0.540	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	A	xxxxx	0.221	A	xxxxx	0.221	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.439	A	xxxxx	0.439	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.316	A	xxxxx	0.316	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	D	xxxxx	0.824	D	xxxxx	0.824	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	A	xxxxx	0.531	A	xxxxx	0.531	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	A	xxxxx	0.576	A	xxxxx	0.576	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.397	A	xxxxx	0.397	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.488	A	xxxxx	0.488	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.441	A	xxxxx	0.441	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	A	xxxxx	0.535	A	xxxxx	0.535	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.470	A	xxxxx	0.470	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	D	xxxxx	0.830	D	xxxxx	0.830	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	A	xxxxx	0.594	A	xxxxx	0.594	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	C	xxxxx	0.764	C	xxxxx	0.764	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	A	xxxxx	0.540	A	xxxxx	0.540	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	A	xxxxx	0.423	A	xxxxx	0.423	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	C	xxxxx	0.761	C	xxxxx	0.761	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 49 RED HILL AVE/DYER RD	A	xxxxx	0.517	A	xxxxx	0.517	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	A	xxxxx	0.520	A	xxxxx	0.520	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	A	xxxxx	0.451	A	xxxxx	0.451	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	C	xxxxx	0.704	C	xxxxx	0.704	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	C	xxxxx	0.760	C	xxxxx	0.760	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	B	xxxxx	0.604	B	xxxxx	0.604	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	C	xxxxx	0.733	C	xxxxx	0.733	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	C	xxxxx	0.781	C	xxxxx	0.781	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	B	xxxxx	0.642	B	xxxxx	0.642	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	C	xxxxx	0.765	C	xxxxx	0.765	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	B	xxxxx	0.648	B	xxxxx	0.648	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.558
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	667	963	1253	458	533	63	53	854	424	225	553	191
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	667	963	1253	458	533	63	53	854	424	225	553	191
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	667	963	0	458	533	63	53	854	424	225	553	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	667	963	0	458	533	63	53	854	424	225	553	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	667	963	0	458	533	63	53	854	424	225	553	0
OvlAdjVol:									91			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.20	0.14	0.00	0.13	0.08	0.04	0.03	0.17	0.25	0.07	0.11	0.00
OvlAdjV/S:									0.05			
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0 0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1891	299	149	1006	0	0	0	0	793	0	988
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1891	299	149	1006	0	0	0	0	793	0	988
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.52
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1891	299	149	1006	0	0	0	0	793	0	518
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1891	299	149	1006	0	0	0	0	793	0	518
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1891	299	149	1006	0	0	0	0	793	0	518
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.09	0.04	0.15	0.00	0.00	0.00	0.00	0.23	0.00	0.30
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.593
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	1157	332	142	1385	274	0	0	0	1126	134	1053
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1157	332	142	1385	274	0	0	0	1126	134	1053
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	1157	332	142	1385	274	0	0	0	1126	134	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1157	332	142	1385	274	0	0	0	1126	134	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	1157	332	142	1385	274	0	0	0	1126	134	0
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.20	0.04	0.20	0.16	0.00	0.00	0.00	0.33	0.08	0.00
OvlAdjV/S:			0.00									
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.682
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	141	973	254	1038	1446	11	274	74	66	70	59	164
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	973	254	1038	1446	11	274	74	66	70	59	164
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	141	973	254	1038	1446	11	274	74	66	70	59	164
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	973	254	1038	1446	11	274	74	66	70	59	164
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	973	254	1038	1446	11	274	74	66	70	59	164
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.97	0.03	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6749	51	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.08	0.14	0.15	0.31	0.21	0.21	0.08	0.04	0.04	0.02	0.03	0.10
Crit Moves:			****	****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.544
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	1 0	4 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	42	737	60	273	884	230	582	1008	82	40	190	66
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	737	60	273	884	230	582	1008	82	40	190	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	42	737	60	273	884	230	582	1008	82	40	190	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	737	60	273	884	230	582	1008	82	40	190	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	42	737	60	273	884	230	582	1008	82	40	190	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	1.00	4.00	1.00	2.00	2.77	0.23	2.00	3.00	1.00
Final Sat.:	1700	6800	1700	1700	6800	1700	3400	4716	384	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.02	0.11	0.04	0.16	0.13	0.14	0.17	0.21	0.21	0.01	0.04	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.374
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	39	722	102	96	653	208	119	319	54	27	143	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	722	102	96	653	208	119	319	54	27	143	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	39	722	102	96	653	208	119	319	54	27	143	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	722	102	96	653	208	119	319	54	27	143	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	39	722	102	96	653	208	119	319	54	27	143	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.03	0.97	1.00	1.67	0.33	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	4854	1546	1600	2676	524	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.06	0.06	0.13	0.13	0.07	0.12	0.10	0.02	0.04	0.00
Crit Moves:		****		****				****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 2	0	0 0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	2019	0	0	2013	1186	0	0	0	1186	0	657
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2019	0	0	2013	1186	0	0	0	1186	0	657
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2019	0	0	2013	0	0	0	0	1186	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2019	0	0	2013	0	0	0	0	1186	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2019	0	0	2013	0	0	0	0	1186	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.23	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.882
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	77	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	4	0 1	1 0	1!	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	813	0	0	2968	232	1206	0	1484	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	813	0	0	2968	232	1206	0	1484	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	813	0	0	2968	0	1206	0	1484	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	813	0	0	2968	0	1206	0	1484	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	813	0	0	2968	0	1206	0	1484	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	1.79	0.00	2.21	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	3049	0	3751	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.00	0.00	0.44	0.00	0.40	0.00	0.40	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.656
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Ignore				Include				Ignore			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 4	0	1	2	0 4	0	1	2	0 1	1	0	2	0 2	0	1
Volume Module:																
Base Vol:	197	1281	270		954	2089	1363		121	112	27		182	344	381	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	197	1281	270		954	2089	1363		121	112	27		182	344	381	
User Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Volume:	197	1281	270		954	2089	0		121	112	27		182	344	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	197	1281	270		954	2089	0		121	112	27		182	344	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
FinalVolume:	197	1281	270		954	2089	0		121	112	27		182	344	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	4.00	1.00		2.00	4.00	1.00		2.00	1.61	0.39		2.00	2.00	1.00	
Final Sat.:	1700	6800	1700		3400	6800	1700		3400	2740	660		3400	3400	1700	
Capacity Analysis Module:																
Vol/Sat:	0.12	0.19	0.16		0.28	0.31	0.00		0.04	0.04	0.04		0.05	0.10	0.00	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.579
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	97	1301	91	199	1615	167	123	163	37	352	380	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	97	1301	91	199	1615	167	123	163	37	352	380	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	97	1301	91	199	1615	167	123	163	0	352	380	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	1301	91	199	1615	167	123	163	0	352	380	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	97	1301	91	199	1615	167	123	163	0	352	380	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.74	0.26	2.00	2.72	0.28	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	6355	445	3400	4622	478	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.20	0.06	0.35	0.35	0.04	0.05	0.00	0.10	0.11	0.05
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.650
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	70	305	138	173	1316	526	334	596	114	384	937	206
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	305	138	173	1316	526	334	596	114	384	937	206
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	70	305	138	173	1316	526	334	596	0	384	937	206
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	305	138	173	1316	526	334	596	0	384	937	206
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	70	305	138	173	1316	526	334	596	0	384	937	206
OvlAdjVol:												148
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.06	0.09	0.04	0.27	0.33	0.10	0.12	0.00	0.12	0.20	0.13
OvlAdjV/S:												0.09
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.496
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 3	1 1	0	0 0	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	706	2383	0	0	532	299	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	706	2383	0	0	532	299	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	706	2383	0	0	532	299	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	706	2383	0	0	532	299	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	706	2383	0	0	532	299	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.20	1.80	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	5122	2878	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.50	0.00	0.00	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.610
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 1	0	0 0	4 0	0	1 1	1 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	1926	44	0	533	0	1164	395	1157	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1926	44	0	533	0	1164	395	1157	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1926	44	0	533	0	1164	395	1157	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1926	44	0	533	0	1164	395	1157	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1926	44	0	533	0	1164	395	1157	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.89	0.11	0.00	4.00	0.00	2.00	1.00	2.00	0.00	0.00	0.00
Final Sat.:	0	7821	179	0	6400	0	3200	1600	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.00	0.08	0.00	0.36	0.25	0.36	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.493
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	63	683	112	152	671	131	88	189	40	145	340	227
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	683	112	152	671	131	88	189	40	145	340	227
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	63	683	112	152	671	131	88	189	40	145	340	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	683	112	152	671	131	88	189	40	145	340	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	63	683	112	152	671	131	88	189	40	145	340	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.67	0.33	1.00	1.65	0.35	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2845	555	1700	2806	594	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.20	0.07	0.09	0.24	0.24	0.05	0.07	0.07	0.09	0.10	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.338
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	260	1564	0	0	412	49	0	0	255	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	1564	0	0	412	49	0	0	255	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	0	0	0	412	49	0	0	255	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	0	0	0	412	49	0	0	255	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	260	0	0	0	412	49	0	0	255	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.68	0.32	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4290	510	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.08	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.484
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	0	0 1!	0	0	1	0 0	1	0
Volume Module:																
Base Vol:	30	2027	104		50	439	5		3	0	3		14	0	17	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	30	2027	104		50	439	5		3	0	3		14	0	17	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	30	2027	104		50	439	5		3	0	3		14	0	17	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	30	2027	104		50	439	5		3	0	3		14	0	17	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	30	2027	104		50	439	5		3	0	3		14	0	17	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.85	0.15		1.00	2.97	0.03		0.50	0.00	0.50		1.00	0.00	1.00	
Final Sat.:	1600	4566	234		1600	4746	54		800	0	800		1600	0	1600	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.44	0.44		0.03	0.09	0.09		0.00	0.00	0.00		0.01	0.00	0.01	
Crit Moves:		****				****					****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.596
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	4 0	2	0 0	0 0	0	1 0	3 1	0
Volume Module:												
Base Vol:	501	2009	0	0	248	208	0	0	0	163	983	155
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	501	2009	0	0	248	208	0	0	0	163	983	155
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	501	2009	0	0	248	208	0	0	0	163	983	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	501	2009	0	0	248	208	0	0	0	163	983	155
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	501	2009	0	0	248	208	0	0	0	163	983	155
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	1.00	3.46	0.54
Final Sat.:	3200	4800	0	0	6400	3200	0	0	0	1600	5528	872
Capacity Analysis Module:												
Vol/Sat:	0.16	0.42	0.00	0.00	0.04	0.07	0.00	0.00	0.00	0.10	0.18	0.18
Crit Moves:		****									****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 1	0	1 0	3 0	0	1 1	2 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	1120	227	84	330	0	1396	1601	457	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1120	227	84	330	0	1396	1601	457	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1120	227	84	330	0	1396	1601	457	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1120	227	84	330	0	1396	1601	457	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1120	227	84	330	0	1396	1601	457	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.16	0.84	1.00	3.00	0.00	1.86	2.14	2.00	0.00	0.00	0.00
Final Sat.:	0	6652	1348	1600	4800	0	2981	3419	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.05	0.07	0.00	0.47	0.47	0.14	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.581
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	92	989	0	0	107	119	0	0	0	315	1082	221
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	989	0	0	107	119	0	0	0	315	1082	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	989	0	0	107	119	0	0	0	315	1082	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	989	0	0	107	119	0	0	0	315	1082	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	989	0	0	107	119	0	0	0	315	1082	221
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.89	2.11	0.00	0.00	0.00	1.00	3.49	0.51
Final Sat.:	3200	3200	0	0	3030	3370	0	0	0	1600	5586	814
Capacity Analysis Module:												
Vol/Sat:	0.03	0.31	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.20	0.19	0.27
Crit Moves:		****										****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.400
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2	0 2	0 0	1 1	2	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	313	247	116	271	0	783	983	191	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	313	247	116	271	0	783	983	191	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	313	247	116	271	0	783	983	191	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	313	247	116	271	0	783	983	191	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	313	247	116	271	0	783	983	191	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.24	1.76	2.00	2.00	0.00	1.77	2.74	0.49	0.00	0.00	0.00
Final Sat.:	0	3577	2823	3200	3200	0	2838	4381	781	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.09	0.09	0.04	0.08	0.00	0.28	0.22	0.24	0.00	0.00	0.00
Crit Moves:		****		****			****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.609
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Ignore				Include				Ignore			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 2	1	0	2	0 3	0	1	2	0 2	1	0	1	0 3	0	1
Volume Module:																
Base Vol:	86	644	13		317	697	429		926	841	148		48	331	575	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	86	644	13		317	697	429		926	841	148		48	331	575	
User Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Volume:	86	644	13		317	697	0		926	841	148		48	331	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	86	644	13		317	697	0		926	841	148		48	331	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
FinalVolume:	86	644	13		317	697	0		926	841	148		48	331	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	2.94	0.06		2.00	3.00	1.00		2.00	2.55	0.45		1.00	3.00	1.00	
Final Sat.:	3400	4999	101		3400	5100	1700		3400	4337	763		1700	5100	1700	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.13	0.13		0.09	0.14	0.00		0.27	0.19	0.19		0.03	0.06	0.00	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.707
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 2	0	1	2	0 1	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	202	341	66		110	1000	200		162	624	365		103	292	124	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	202	341	66		110	1000	200		162	624	365		103	292	124	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	202	341	66		110	1000	200		162	624	365		103	292	124	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	202	341	66		110	1000	200		162	624	365		103	292	124	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	202	341	66		110	1000	200		162	624	365		103	292	124	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	2.00	1.00		2.00	1.67	0.33		2.00	2.00	1.00		2.00	2.11	0.89	
Final Sat.:	3400	3400	1700		3400	2833	567		3400	3400	1700		3400	3580	1520	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.10	0.04		0.03	0.35	0.35		0.05	0.18	0.21		0.03	0.08	0.08	
Crit Moves:	****					****					****	****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.504
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	118	466	145	248	148	64	388	761	71	88	428	510
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	118	466	145	248	148	64	388	761	71	88	428	510
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	118	466	145	248	148	64	388	761	71	88	428	510
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	118	466	145	248	148	64	388	761	71	88	428	510
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	118	466	145	248	148	64	388	761	71	88	428	510
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	2.00	2.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	3200	3200
Capacity Analysis Module:												
Vol/Sat:	0.04	0.15	0.09	0.08	0.05	0.04	0.12	0.16	0.04	0.03	0.13	0.16
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.496
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	13	371	39	48	164	38	162	263	35	23	83	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	371	39	48	164	38	162	263	35	23	83	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	371	39	48	164	38	162	263	35	23	83	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	371	39	48	164	38	162	263	35	23	83	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	371	39	48	164	38	162	263	35	23	83	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.90	0.10	1.00	1.00	1.00	1.00	0.88	0.12	1.00	0.48	0.52
Final Sat.:	1600	1448	152	1600	1600	1600	1600	1412	188	1600	768	832
Capacity Analysis Module:												
Vol/Sat:	0.01	0.26	0.26	0.03	0.10	0.02	0.10	0.19	0.19	0.01	0.11	0.11
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.719
Loss Time (sec):	0	Average Delay (sec/veh):	18.7
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	74	269	51	73	148	54	68	255	47	7	125	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	269	51	73	148	54	68	255	47	7	125	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	269	51	73	148	54	68	255	47	7	125	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	269	51	73	148	54	68	255	47	7	125	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	269	51	73	148	54	68	255	47	7	125	83
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.19	0.68	0.13	0.26	0.54	0.20	0.18	0.69	0.13	0.03	0.58	0.39
Final Sat.:	103	374	71	135	273	100	98	369	68	16	280	186
Capacity Analysis Module:												
Vol/Sat:	0.72	0.72	0.72	0.54	0.54	0.54	0.69	0.69	0.69	0.45	0.45	0.45
Crit Moves:		****			****			****			****	
Delay/Veh:	21.8	21.8	21.8	15.7	15.7	15.7	20.5	20.5	20.5	13.7	13.7	13.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.8	21.8	21.8	15.7	15.7	15.7	20.5	20.5	20.5	13.7	13.7	13.7
LOS by Move:	C	C	C	C	C	C	C	C	C	B	B	B
ApproachDel:		21.8			15.7			20.5			13.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		21.8			15.7			20.5			13.7	
LOS by Appr:		C			C			C			B	
AllWayAvgQ:	1.9	1.9	1.9	0.9	0.9	0.9	1.7	1.7	1.7	0.6	0.6	0.6

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.369
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	85	1178	348	7	546	32	123	160	96	127	22	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	85	1178	348	7	546	32	123	160	96	127	22	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	85	1178	348	7	546	32	123	160	96	127	22	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	1178	348	7	546	32	123	160	96	127	22	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	1178	348	7	546	32	123	160	96	127	22	4
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.25	0.75	2.00	0.85	0.15
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	2000	1200	3200	1354	246
Capacity Analysis Module:												
Vol/Sat:	0.05	0.25	0.22	0.00	0.11	0.02	0.08	0.08	0.08	0.04	0.02	0.02
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	98	1384	37	72	603	93	205	61	111	22	30	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	98	1384	37	72	603	93	205	61	111	22	30	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	98	1384	37	72	603	93	205	61	111	22	30	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	1384	37	72	603	93	205	61	111	22	30	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	98	1384	37	72	603	93	205	61	111	22	30	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.53	0.47
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	842	758
Capacity Analysis Module:												
Vol/Sat:	0.06	0.43	0.02	0.05	0.19	0.06	0.13	0.04	0.07	0.01	0.04	0.04
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.619
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	50	1224	6	63	815	35	121	50	103	17	49	125
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	1224	6	63	815	35	121	50	103	17	49	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	1224	6	63	815	35	121	50	103	17	49	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	1224	6	63	815	35	121	50	103	17	49	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	1224	6	63	815	35	121	50	103	17	49	125
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.92	0.08	0.71	0.29	1.00	0.09	0.26	0.65
Final Sat.:	1600	3184	16	1600	3068	132	1132	468	1600	142	410	1047
Capacity Analysis Module:												
Vol/Sat:	0.03	0.38	0.38	0.04	0.27	0.27	0.08	0.11	0.06	0.01	0.12	0.12
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.485
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	0	0 1!	0	0	0	0 1!	0	0
Volume Module:																
Base Vol:	52	1096	8		27	850	29		61	22	106		15	38	83	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	52	1096	8		27	850	29		61	22	106		15	38	83	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	52	1096	8		27	850	29		61	22	106		15	38	83	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	52	1096	8		27	850	29		61	22	106		15	38	83	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	52	1096	8		27	850	29		61	22	106		15	38	83	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.99	0.01		1.00	1.93	0.07		0.32	0.12	0.56		0.11	0.28	0.61	
Final Sat.:	1600	3177	23		1600	3094	106		516	186	897		176	447	976	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.35	0.34		0.02	0.27	0.27		0.04	0.12	0.12		0.01	0.09	0.08	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.528
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 0	1	0	1	0 1	0	1
Volume Module:																
Base Vol:	51	865	12		130	837	23		66	101	41		12	69	211	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	51	865	12		130	837	23		66	101	41		12	69	211	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	51	865	12		130	837	23		66	101	41		12	69	211	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	51	865	12		130	837	23		66	101	41		12	69	211	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	51	865	12		130	837	23		66	101	41		12	69	211	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.97	0.03		1.00	1.95	0.05		1.00	0.71	0.29		1.00	1.00	1.00	
Final Sat.:	1600	3156	44		1600	3114	86		1600	1138	462		1600	1600	1600	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.27	0.27		0.08	0.27	0.27		0.04	0.09	0.09		0.01	0.04	0.13	
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.540
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	374	541	22	251	419	169	275	533	170	31	363	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	374	541	22	251	419	169	275	533	170	31	363	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	374	541	22	251	419	169	275	533	170	31	363	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	374	541	22	251	419	169	275	533	170	31	363	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	374	541	22	251	419	169	275	533	170	31	363	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.92	0.08	2.00	1.43	0.57	2.00	1.52	0.48	1.00	1.71	0.29
Final Sat.:	3200	3075	125	3200	2280	920	3200	2426	774	1600	2740	460
Capacity Analysis Module:												
Vol/Sat:	0.12	0.18	0.18	0.08	0.18	0.18	0.09	0.22	0.22	0.02	0.13	0.13
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.221
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	0	4	0	1	0	0	1	0	1	1	0	1	0	0
Volume Module:												
Base Vol:	0	0	0	213	1119	1	0	0	1	74	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	213	1119	1	0	0	1	74	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	213	1119	1	0	0	1	74	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	213	1119	1	0	0	1	74	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	213	1119	1	0	0	1	74	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.17	0.00	0.00	0.00	0.00	0.05	0.00	0.00
Crit Moves:				****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.439
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	10	853	236	0	0	0	81	129	0	0	65	52
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	853	236	0	0	0	81	129	0	0	65	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	853	236	0	0	0	81	129	0	0	65	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	853	236	0	0	0	81	129	0	0	65	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	853	236	0	0	0	81	129	0	0	65	52
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.57	0.43	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.56	0.44
Final Sat.:	1600	2507	693	0	0	0	3200	1600	0	0	889	711
Capacity Analysis Module:												
Vol/Sat:	0.01	0.34	0.34	0.00	0.00	0.00	0.03	0.08	0.00	0.00	0.07	0.07
Crit Moves:		****					****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.316
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	0	3	0	0	3	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	0	0	0	188	468	539	0	869	38	91	250	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	188	468	539	0	869	38	91	250	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	188	468	0	0	869	38	91	250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	188	468	0	0	869	38	91	250	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	188	468	0	0	869	38	91	250	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.83	0.17	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	6132	268	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.10	0.00	0.00	0.14	0.14	0.06	0.08	0.00
Crit Moves:				****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.824
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	106	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 1	0	0	0 0	0	2	0 2	0 0	0	0 2	0 1
Volume Module:												
Base Vol:	142	1574	142	0	0	0	747	306	0	0	214	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	142	1574	142	0	0	0	747	306	0	0	214	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	142	1574	142	0	0	0	747	306	0	0	214	326
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	142	1574	142	0	0	0	747	306	0	0	214	326
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	142	1574	142	0	0	0	747	306	0	0	214	326
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.23	2.54	0.23	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	367	4066	367	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.39	0.39	0.00	0.00	0.00	0.23	0.10	0.00	0.00	0.07	0.20
Crit Moves:		****					****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.531
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	18	556	47	42	360	87	321	409	61	78	272	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	556	47	42	360	87	321	409	61	78	272	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	556	47	42	360	87	321	409	61	78	272	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	556	47	42	360	87	321	409	61	78	272	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	556	47	42	360	87	321	409	61	78	272	98
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.61	0.39	1.00	2.00	1.00	1.00	1.47	0.53
Final Sat.:	1600	2951	249	1600	2577	623	1600	3200	1600	1600	2352	848
Capacity Analysis Module:												
Vol/Sat:	0.01	0.19	0.19	0.03	0.14	0.14	0.20	0.13	0.04	0.05	0.12	0.12
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.576
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0	1 0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	11	82	17	76	129	24	59	436	160	59	754	699
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	82	17	76	129	24	59	436	160	59	754	699
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	82	17	76	129	24	59	436	160	59	754	699
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	82	17	76	129	24	59	436	160	59	754	699
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	82	17	76	129	24	59	436	160	59	754	699
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.66	0.34	2.00	0.84	0.16	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	2651	549	3200	1349	251	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.02	0.10	0.10	0.04	0.09	0.10	0.04	0.16	0.44
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.397
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 2	0 0	0	0 0	0 0	4	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	0	68	0	0	0	0	2403	344	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	68	0	0	0	0	2403	344	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	68	0	0	0	0	2403	344	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	68	0	0	0	0	2403	344	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	68	0	0	0	0	2403	344	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.38	0.22	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.488
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	1	1 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	197	1286	5	2	1476	451	139	5	56	4	3	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	197	1286	5	2	1476	451	139	5	56	4	3	12
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	197	1286	5	2	1476	0	139	5	0	4	3	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	197	1286	5	2	1476	0	139	5	0	4	3	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	197	1286	5	2	1476	0	139	5	0	4	3	12
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.99	0.01	1.00	3.00	1.00	1.93	0.07	1.00	0.21	0.16	0.63
Final Sat.:	1600	4781	19	1600	4800	1600	3089	111	1600	337	253	1011
Capacity Analysis Module:												
Vol/Sat:	0.12	0.27	0.27	0.00	0.31	0.00	0.04	0.05	0.00	0.01	0.01	0.01
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.441
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	111	1788	64	64	1423	124	50	8	110	11	1	86
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	1788	64	64	1423	124	50	8	110	11	1	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	1788	64	64	1423	124	50	8	110	11	1	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	1788	64	64	1423	124	50	8	110	11	1	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	111	1788	64	64	1423	124	50	8	110	11	1	86
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.86	0.14	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6179	221	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.29	0.29	0.04	0.30	0.08	0.02	0.01	0.07	0.01	0.00	0.05
Crit Moves:	****				****				****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.535
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	22	1419	220	69	1505	154	290	81	8	319	50	195
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	1419	220	69	1505	154	290	81	8	319	50	195
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	22	1419	220	69	1505	154	290	81	8	319	50	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	1419	220	69	1505	154	290	81	8	319	50	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	22	1419	220	69	1505	154	290	81	8	319	50	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.53	0.43	0.04	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2449	684	68	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.30	0.14	0.02	0.31	0.10	0.12	0.12	0.12	0.10	0.03	0.00
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.470
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1396	155	108	1379	46	77	0	94	175	0	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1396	155	108	1379	46	77	0	94	175	0	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1396	155	108	1379	46	77	0	94	175	0	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1396	155	108	1379	46	77	0	94	175	0	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1396	155	108	1379	46	77	0	94	175	0	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.70	0.30	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4320	480	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.32	0.03	0.29	0.03	0.05	0.00	0.06	0.05	0.00	0.03
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.830
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	134	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	2	1 0	1	0	3	0 1	1	1	1	0 1	1	1	1	0 1
Volume Module:																
Base Vol:	419	1196		93	73	1458		143	182	284		390	160	485		40
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	419	1196		93	73	1458		143	182	284		390	160	485		40
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	419	1196		93	73	1458		143	182	284		390	160	485		40
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	419	1196		93	73	1458		143	182	284		390	160	485		40
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	419	1196		93	73	1458		143	182	284		390	160	485		40
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	2.00	2.78		0.22	1.00	3.00		1.00	1.17	1.83		1.00	1.00	2.00		1.00
Final Sat.:	3200	4454		346	1600	4800		1600	1875	2925		1600	1600	3200		1600
Capacity Analysis Module:																
Vol/Sat:	0.13	0.27		0.27	0.05	0.30		0.09	0.10	0.10		0.24	0.10	0.15		0.03
Crit Moves:	****				****							****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	208	2773	211	40	2147	271	193	177	125	298	194	99
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	208	2773	211	40	2147	271	193	177	125	298	194	99
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	208	2773	0	40	2147	271	193	177	0	298	194	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	208	2773	0	40	2147	271	193	177	0	298	194	99
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	208	2773	0	40	2147	271	193	177	0	298	194	99
OvlAdjVol:						175						79
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.43	0.00	0.01	0.34	0.17	0.06	0.06	0.00	0.09	0.06	0.06
OvlAdjV/S:						0.11						0.05
Crit Moves:	****			****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.764
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	97	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	131	1999	119	574	2268	18	45	287	78	585	563	918
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	131	1999	119	574	2268	18	45	287	78	585	563	918
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	131	1999	0	574	2268	0	45	287	78	585	563	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	1999	0	574	2268	0	45	287	78	585	563	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	131	1999	0	574	2268	0	45	287	78	585	563	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.00	0.18	0.35	0.00	0.01	0.09	0.05	0.18	0.18	0.00
Crit Moves:		****			****				****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.540
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	79	1053	27		57	446	84		235	305	115		4	53	10	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	79	1053	27		57	446	84		235	305	115		4	53	10	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	79	1053	27		57	446	84		235	305	115		4	53	10	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	79	1053	27		57	446	84		235	305	115		4	53	10	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	79	1053	27		57	446	84		235	305	115		4	53	10	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.95	0.05		1.00	1.68	0.32		1.00	1.45	0.55		1.00	1.68	0.32	
Final Sat.:	3200	3120	80		1600	2693	507		1600	2324	876		1600	2692	508	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.34	0.34		0.04	0.17	0.17		0.15	0.13	0.13		0.00	0.02	0.02	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.423
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	161	656		60	33	412		118	498	262		167	12	53		12
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	161	656		60	33	412		118	498	262		167	12	53		12
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	161	656		60	33	412		118	498	262		167	12	53		12
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	161	656		60	33	412		118	498	262		167	12	53		12
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	161	656		60	33	412		118	498	262		167	12	53		12
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	2.00	1.83		0.17	1.00	1.55		0.45	1.97	1.03		1.00	1.00	1.63		0.37
Final Sat.:	3200	2932		268	1600	2488		712	3145	1655		1600	1600	2609		591
Capacity Analysis Module:																
Vol/Sat:	0.05	0.22		0.22	0.02	0.17		0.17	0.16	0.16		0.10	0.01	0.02		0.02
Crit Moves:		****			****					****						****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.761
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Permitted						Permitted					
Rights:	Ignore						Include						Ignore						Ignore					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Y+R:	4.0	4.0	4.0				4.0	4.0	4.0				4.0	4.0	4.0				4.0	4.0	4.0			
Lanes:	2	0	0	0	1		0	0	0	0	0		0	0	2	0	2		0	0	3	0	1	
Volume Module:																								
Base Vol:	948	0	777				0	0	0				0	1470	727				0	597	227			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	948	0	777				0	0	0				0	1470	727				0	597	227			
User Adj:	1.00	1.00	0.00				1.00	1.00	1.00				1.00	1.00	0.00				1.00	1.00	0.00			
PHF Adj:	1.00	1.00	0.00				1.00	1.00	1.00				1.00	1.00	0.00				1.00	1.00	0.00			
PHF Volume:	948	0	0				0	0	0				0	1470	0				0	597	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	948	0	0				0	0	0				0	1470	0				0	597	0			
PCE Adj:	1.00	1.00	0.00				1.00	1.00	1.00				1.00	1.00	0.00				1.00	1.00	0.00			
MLF Adj:	1.00	1.00	0.00				1.00	1.00	1.00				1.00	1.00	0.00				1.00	1.00	0.00			
FinalVolume:	948	0	0				0	0	0				0	1470	0				0	597	0			
Saturation Flow Module:																								
Sat/Lane:	1600	1600	1600				1600	1600	1600				1600	1600	1600				1600	1600	1600			
Adjustment:	1.06	1.06	1.06				1.06	1.06	1.06				1.06	1.06	1.06				1.06	1.06	1.06			
Lanes:	2.00	0.00	1.00				0.00	0.00	0.00				0.00	2.00	2.00				0.00	3.00	1.00			
Final Sat.:	3400	0	1700				0	0	0				0	3400	3400				0	5100	1700			
Capacity Analysis Module:																								
Vol/Sat:	0.28	0.00	0.00				0.00	0.00	0.00				0.00	0.43	0.00				0.00	0.12	0.00			
Crit Moves:	****													****					****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.517
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	130	342	79	416	995	112	103	741	169	449	754	306
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	342	79	416	995	112	103	741	169	449	754	306
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	342	79	416	995	112	103	741	169	449	754	306
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	342	79	416	995	112	103	741	169	449	754	306
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	342	79	416	995	112	103	741	169	449	754	306
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.25	0.75	2.00	3.60	0.40	2.00	3.26	0.74	2.00	4.00	1.00
Final Sat.:	3400	5524	1276	3400	6112	688	3400	5537	1263	3400	6800	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.12	0.16	0.16	0.03	0.13	0.13	0.13	0.11	0.18
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.520
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	0	1	2	0 1	0	1
Volume Module:																
Base Vol:	132	487	363		234	1123	89		10	39	18		304	192	127	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	132	487	363		234	1123	89		10	39	18		304	192	127	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	132	487	363		234	1123	89		10	39	18		304	192	127	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	132	487	363		234	1123	89		10	39	18		304	192	127	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	132	487	363		234	1123	89		10	39	18		304	192	127	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.00	1.00		1.00	2.78	0.22		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	3400	1700		1700	4725	375		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.08	0.14	0.21		0.14	0.24	0.24		0.01	0.01	0.01		0.09	0.11	0.07	
Crit Moves:			****	****					****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.451
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	254	922	297	103	1244	76	14	30	40	168	71	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	254	922	297	103	1244	76	14	30	40	168	71	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	254	922	297	103	1244	76	14	30	40	168	71	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	254	922	297	103	1244	76	14	30	40	168	71	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	254	922	297	103	1244	76	14	30	40	168	71	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.83	0.17	1.00	1.00	1.00	2.00	1.41	0.59
Final Sat.:	3400	5100	1700	3400	4806	294	1700	1700	1700	3400	2390	1010
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.17	0.03	0.26	0.26	0.01	0.02	0.02	0.05	0.03	0.03
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.704
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2 0	2	1 0	2	1 0	2 0	3 0	1
Volume Module:												
Base Vol:	75	56	53	10	778	414	82	554	266	824	1279	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	75	56	53	10	778	414	82	554	266	824	1279	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	75	56	53	10	778	414	82	554	266	824	1279	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	56	53	10	778	414	82	554	266	824	1279	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	75	56	53	10	778	414	82	554	266	824	1279	13
OvlAdjVol:						250						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.03	0.97	2.00	2.00	2.00	1.00	2.03	0.97	2.00	3.00	1.00
Final Sat.:	3400	1747	1653	3400	3400	3400	1700	3446	1654	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.03	0.00	0.23	0.12	0.05	0.16	0.16	0.24	0.25	0.01
OvlAdjV/S:						0.07						
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.760
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	69	198	37		19	1369	142		42	188	55		203	605	76	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	69	198	37		19	1369	142		42	188	55		203	605	76	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	69	198	37		19	1369	142		42	188	55		203	605	76	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	69	198	37		19	1369	142		42	188	55		203	605	76	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	69	198	37		19	1369	142		42	188	55		203	605	76	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.69	0.31		1.00	1.81	0.19		1.00	1.55	0.45		1.00	1.78	0.22	
Final Sat.:	1700	2865	535		1700	3080	320		1700	2630	770		1700	3021	379	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.07	0.07		0.01	0.44	0.44		0.02	0.07	0.07		0.12	0.20	0.20	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.604
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	71	250	69	96	1074	286	154	635	369	350	792	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	71	250	69	96	1074	286	154	635	369	350	792	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	71	250	69	96	1074	286	154	635	0	350	792	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	250	69	96	1074	286	154	635	0	350	792	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	71	250	69	96	1074	286	154	635	0	350	792	85
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.71	0.29
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4606	494
Capacity Analysis Module:												
Vol/Sat:	0.02	0.07	0.04	0.06	0.32	0.17	0.05	0.12	0.00	0.10	0.17	0.17
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.733
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 1	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	117	793	116	385	3311	1532	143	299	100	213	610	225
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	117	793	116	385	3311	1532	143	299	100	213	610	225
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	117	793	0	385	3311	0	143	299	100	213	610	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	793	0	385	3311	0	143	299	100	213	610	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	117	793	0	385	3311	0	143	299	100	213	610	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.00	0.11	0.49	0.00	0.04	0.06	0.06	0.06	0.12	0.00
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	3 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	210	942	135	160	3145	226	57	149	81	255	687	111
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	942	135	160	3145	226	57	149	81	255	687	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	942	135	160	3145	226	57	149	81	255	687	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	942	135	160	3145	226	57	149	81	255	687	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	210	942	135	160	3145	226	57	149	81	255	687	111
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	3.73	0.27	2.00	2.00	1.00	2.00	2.58	0.42
Final Sat.:	3400	6800	1700	3400	6344	456	3400	3400	1700	3400	4391	709
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.08	0.05	0.50	0.50	0.02	0.04	0.05	0.08	0.16	0.16
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.642
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	168	1283	39		22	3281	215		21	19	31		21	39	15	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	168	1283	39		22	3281	215		21	19	31		21	39	15	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	168	1283	39		22	3281	215		21	19	31		21	39	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	168	1283	39		22	3281	215		21	19	31		21	39	15	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	168	1283	39		22	3281	215		21	19	31		21	39	15	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.88	0.12		2.00	3.75	0.25		1.00	1.00	1.00		1.00	1.44	0.56	
Final Sat.:	3400	6599	201		3400	6382	418		1700	1700	1700		1700	2456	944	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.19	0.19		0.01	0.51	0.51		0.01	0.01	0.02		0.01	0.02	0.02	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.765
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	472	1110	395	433	2545	371	107	261	168	513	750	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	472	1110	395	433	2545	371	107	261	168	513	750	116
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	472	1110	0	433	2545	371	107	261	0	513	750	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	472	1110	0	433	2545	371	107	261	0	513	750	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	472	1110	0	433	2545	371	107	261	0	513	750	0
OvlAdjVol:						318						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.14	0.16	0.00	0.13	0.37	0.22	0.03	0.05	0.00	0.15	0.15	0.00
OvlAdjV/S:						0.19						
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.648
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	2 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	81	266	20	123	749	475	73	126	31	101	723	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	81	266	20	123	749	475	73	126	31	101	723	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	81	266	20	123	749	475	73	126	0	101	723	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	266	20	123	749	475	73	126	0	101	723	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	81	266	20	123	749	475	73	126	0	101	723	126
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.86	0.14	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.70	0.30
Final Sat.:	1700	3162	238	1700	3400	1700	3400	3400	1700	1700	2895	505
Capacity Analysis Module:												
Vol/Sat:	0.05	0.08	0.08	0.07	0.22	0.28	0.02	0.04	0.00	0.06	0.25	0.25
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Scenario Report

Scenario:	EX-PM
Command:	EX-PM
Volume:	EX-PM
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	EX-PM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	C	xxxxx	0.731	C	xxxxx	0.731	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.640	B	xxxxx	0.640	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.647	B	xxxxx	0.647	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	D	xxxxx	0.885	D	xxxxx	0.885	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	C	xxxxx	0.745	C	xxxxx	0.745	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.490	A	xxxxx	0.490	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	C	xxxxx	0.793	C	xxxxx	0.793	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	C	xxxxx	0.780	C	xxxxx	0.780	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	D	xxxxx	0.823	D	xxxxx	0.823	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	A	xxxxx	0.600	A	xxxxx	0.600	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	C	xxxxx	0.714	C	xxxxx	0.714	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.488	A	xxxxx	0.488	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.632	B	xxxxx	0.632	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	B	xxxxx	0.635	B	xxxxx	0.635	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	B	xxxxx	0.660	B	xxxxx	0.660	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.463	A	xxxxx	0.463	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	D	xxxxx	0.885	D	xxxxx	0.885	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	A	xxxxx	0.439	A	xxxxx	0.439	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	A	xxxxx	0.581	A	xxxxx	0.581	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.434	A	xxxxx	0.434	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	C	xxxxx	0.714	C	xxxxx	0.714	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.701	C	xxxxx	0.701	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.466	A	xxxxx	0.466	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.529	A	xxxxx	0.529	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	C	19.4	0.792	C	19.4	0.792	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.573	A	xxxxx	0.573	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	C	xxxxx	0.719	C	xxxxx	0.719	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	B	xxxxx	0.695	B	xxxxx	0.695	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	B	xxxxx	0.624	B	xxxxx	0.624	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	B	xxxxx	0.662	B	xxxxx	0.662	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	C	xxxxx	0.709	C	xxxxx	0.709	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	A	xxxxx	0.560	A	xxxxx	0.560	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.364	A	xxxxx	0.364	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.428	A	xxxxx	0.428	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	A	xxxxx	0.504	A	xxxxx	0.504	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	B	xxxxx	0.681	B	xxxxx	0.681	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	A	xxxxx	0.543	A	xxxxx	0.543	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.413	A	xxxxx	0.413	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.494	A	xxxxx	0.494	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.522	A	xxxxx	0.522	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	A	xxxxx	0.558	A	xxxxx	0.558	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.498	A	xxxxx	0.498	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	C	xxxxx	0.707	C	xxxxx	0.707	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	A	xxxxx	0.590	A	xxxxx	0.590	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	D	xxxxx	0.841	D	xxxxx	0.841	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	B	xxxxx	0.654	B	xxxxx	0.654	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	B	xxxxx	0.614	B	xxxxx	0.614	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	B	xxxxx	0.616	B	xxxxx	0.616	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 49 RED HILL AVE/DYER RD	D	xxxxx	0.878	D	xxxxx	0.878	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	C	xxxxx	0.787	C	xxxxx	0.787	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	C	xxxxx	0.744	C	xxxxx	0.744	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	D	xxxxx	0.889	D	xxxxx	0.889	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	D	xxxxx	0.884	D	xxxxx	0.884	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	C	xxxxx	0.781	C	xxxxx	0.781	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	D	xxxxx	0.894	D	xxxxx	0.894	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.811	D	xxxxx	0.811	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	B	xxxxx	0.653	B	xxxxx	0.653	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	D	xxxxx	0.850	D	xxxxx	0.850	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	D	xxxxx	0.822	D	xxxxx	0.822	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.731
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	596	1058	610	281	751	64	69	943	602	716	1059	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	596	1058	610	281	751	64	69	943	602	716	1059	520
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	596	1058	0	281	751	64	69	943	602	716	1059	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	596	1058	0	281	751	64	69	943	602	716	1059	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	596	1058	0	281	751	64	69	943	602	716	1059	0
OvlAdjVol:									304			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.18	0.16	0.00	0.08	0.11	0.04	0.04	0.18	0.35	0.21	0.21	0.00
OvlAdjV/S:									0.18			
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.640
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0 0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1910	758	584	1468	0	0	0	0	357	0	349
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1910	758	584	1468	0	0	0	0	357	0	349
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1910	758	584	1468	0	0	0	0	357	0	233
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1910	758	584	1468	0	0	0	0	357	0	233
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1910	758	584	1468	0	0	0	0	357	0	233
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.22	0.17	0.22	0.00	0.00	0.00	0.00	0.11	0.00	0.14
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	2135	474	432	1198	183	0	0	0	529	76	541
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2135	474	432	1198	183	0	0	0	529	76	541
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2135	474	432	1198	183	0	0	0	529	76	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2135	474	432	1198	183	0	0	0	529	76	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2135	474	432	1198	183	0	0	0	529	76	0
OvlAdjVol:			210									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.31	0.28	0.13	0.18	0.11	0.00	0.00	0.00	0.16	0.04	0.00
OvlAdjV/S:			0.12									
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	79	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	107	1580	102	504	1235	8	228	73	76	381	67	658
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	1580	102	504	1235	8	228	73	76	381	67	658
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	107	1580	102	504	1235	8	228	73	76	381	67	658
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	1580	102	504	1235	8	228	73	76	381	67	658
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	107	1580	102	504	1235	8	228	73	76	381	67	658
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.97	0.03	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6756	44	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.06	0.15	0.18	0.18	0.07	0.04	0.04	0.11	0.04	0.39
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.745
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Ignore			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 4	0	1	1	0 4	0	1	2	0 2	1	0	2	0 3	0	1
Volume Module:																
Base Vol:	99	1013		29	137	898		561	361	372		83	74	1025		180
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	99	1013		29	137	898		561	361	372		83	74	1025		180
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		0.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		0.00
PHF Volume:	99	1013		29	137	898		561	361	372		83	74	1025		0
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	99	1013		29	137	898		561	361	372		83	74	1025		0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		0.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		0.00
FinalVolume:	99	1013		29	137	898		561	361	372		83	74	1025		0
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06
Lanes:	1.00	4.00		1.00	1.00	4.00		1.00	2.00	2.45		0.55	2.00	3.00		1.00
Final Sat.:	1700	6800		1700	1700	6800		1700	3400	4170		930	3400	5100		1700
Capacity Analysis Module:																
Vol/Sat:	0.06	0.15		0.02	0.08	0.13		0.33	0.11	0.09		0.09	0.02	0.20		0.00
Crit Moves:	****							****	****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.490
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	128	678	38	44	786	207	302	177	38	103	469	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	678	38	44	786	207	302	177	38	103	469	166
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	128	678	38	44	786	207	302	177	38	103	469	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	678	38	44	786	207	302	177	38	103	469	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	128	678	38	44	786	207	302	177	38	103	469	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.17	0.83	1.75	1.03	0.22	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	5066	1334	2805	1642	352	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.14	0.02	0.03	0.16	0.16	0.11	0.11	0.11	0.06	0.15	0.00
Crit Moves:	****			****					****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.793
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 2	0	0 0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	3147	0	0	1820	1020	0	0	0	642	0	386
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3147	0	0	1820	1020	0	0	0	642	0	386
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	3147	0	0	1820	0	0	0	0	642	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3147	0	0	1820	0	0	0	0	642	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	3147	0	0	1820	0	0	0	0	642	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.62	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.13	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.780
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 1	1	0 1!	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	1989	0	0	1834	622	1156	0	619	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1989	0	0	1834	622	1156	0	619	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1989	0	0	1834	0	1156	0	619	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1989	0	0	1834	0	1156	0	619	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1989	0	0	1834	0	1156	0	619	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.00	0.00	0.27	0.00	0.34	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.823
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	61	2027	276	591	1520	255	825	665	98	250	200	916
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	2027	276	591	1520	255	825	665	98	250	200	916
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	61	2027	276	591	1520	0	825	665	98	250	200	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	2027	276	591	1520	0	825	665	98	250	200	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	61	2027	276	591	1520	0	825	665	98	250	200	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.74	0.26	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2963	437	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.16	0.17	0.22	0.00	0.24	0.22	0.22	0.07	0.06	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	36	1670	275	187	1451	160	284	573	159	136	246	191
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	1670	275	187	1451	160	284	573	159	136	246	191
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	36	1670	275	187	1451	160	284	573	0	136	246	191
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1670	275	187	1451	160	284	573	0	136	246	191
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	36	1670	275	187	1451	160	284	573	0	136	246	191
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.43	0.57	2.00	2.70	0.30	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5839	961	3400	4593	507	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.29	0.29	0.06	0.32	0.32	0.08	0.17	0.00	0.04	0.07	0.11
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.714
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	80	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ignore				Ovl			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	3	0 3	0	1	2	0 3	0	1	2	0 3	0	1
Volume Module:																
Base Vol:	166	1396	425		269	504	363		600	981	165		224	891	50	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	166	1396	425		269	504	363		600	981	165		224	891	50	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Volume:	166	1396	425		269	504	363		600	981	0		224	891	50	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	166	1396	425		269	504	363		600	981	0		224	891	50	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
FinalVolume:	166	1396	425		269	504	363		600	981	0		224	891	50	
OvlAdjVol:																0
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	3.07	0.93		3.00	3.00	1.00		2.00	3.00	1.00		2.00	3.00	1.00	
Final Sat.:	3200	4906	1494		4800	4800	1600		3200	4800	1600		3200	4800	1600	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.28	0.28		0.06	0.11	0.23		0.19	0.20	0.00		0.07	0.19	0.03	
OvlAdjV/S:																0.00
Crit Moves:	****				****				****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.488
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 3	1 1	0 0	0 0	0	0	0 0	0 0
Volume Module:												
Base Vol:	780	2344	0	0	995	676	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	780	2344	0	0	995	676	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	780	2344	0	0	995	676	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	780	2344	0	0	995	676	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	780	2344	0	0	995	676	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	3200	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.24	0.49	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.632
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	1 0	0 0	4	0 0	1 1	1	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	2269	87	0	1001	0	860	759	1037	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2269	87	0	1001	0	860	759	1037	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2269	87	0	1001	0	860	759	1037	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2269	87	0	1001	0	860	759	1037	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2269	87	0	1001	0	860	759	1037	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.82	0.18	0.00	4.00	0.00	1.59	1.41	2.00	0.00	0.00	0.00
Final Sat.:	0	7705	295	0	6400	0	2550	2250	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.00	0.16	0.00	0.34	0.34	0.32	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.635
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	51	680	147	231	750	109	149	427	65	177	416	314
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	680	147	231	750	109	149	427	65	177	416	314
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	51	680	147	231	750	109	149	427	65	177	416	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	680	147	231	750	109	149	427	65	177	416	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	51	680	147	231	750	109	149	427	65	177	416	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.75	0.25	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2969	431	1700	2951	449	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.09	0.14	0.25	0.25	0.09	0.14	0.14	0.10	0.12	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.660
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	344	720	0	0	1576	120	0	0	293	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	344	720	0	0	1576	120	0	0	293	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	344	0	0	0	1576	120	0	0	293	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	344	0	0	0	1576	120	0	0	293	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	344	0	0	0	1576	120	0	0	293	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.79	0.21	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4460	340	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.09	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.463
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	0 0	1!	0 0	1 0	0	1 0
Volume Module:												
Base Vol:	13	705	60	56	1895	3	6	1	12	76	0	44
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	705	60	56	1895	3	6	1	12	76	0	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	705	60	56	1895	3	6	1	12	76	0	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	705	60	56	1895	3	6	1	12	76	0	44
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	705	60	56	1895	3	6	1	12	76	0	44
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.76	0.24	1.00	2.99	0.01	0.32	0.05	0.63	1.00	0.00	1.00
Final Sat.:	1600	4424	376	1600	4792	8	505	84	1011	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.16	0.16	0.04	0.40	0.40	0.00	0.01	0.01	0.05	0.00	0.03
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	162	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	3	0 0	0	0	4	0 2	0	0	0	0 0	1	0	3	1 0
Volume Module:																
Base Vol:	506	661	0	0	935	1140	0	0	0	264	2273	98				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	506	661	0	0	935	1140	0	0	0	264	2273	98				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	506	661	0	0	935	1140	0	0	0	264	2273	98				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	506	661	0	0	935	1140	0	0	0	264	2273	98				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
FinalVolume:	506	661	0	0	935	1140	0	0	0	264	2273	98				
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600				
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Lanes:	2.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	1.00	3.83	0.17				
Final Sat.:	3200	4800	0	0	6400	3200	0	0	0	1600	6135	265				
Capacity Analysis Module:																
Vol/Sat:	0.16	0.14	0.00	0.00	0.15	0.36	0.00	0.00	0.00	0.17	0.37	0.37				
Crit Moves:	****					****					****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.439
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 4	1 0	1	0 3	0 0	1	1 2	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	730	225	138	1065	0	431	959	590	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	730	225	138	1065	0	431	959	590	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	730	225	138	1065	0	431	959	590	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	730	225	138	1065	0	431	959	590	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	730	225	138	1065	0	431	959	590	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	1.00	1.00	3.00	0.00	1.24	2.76	2.00	0.00	0.00	0.00
Final Sat.:	0	6400	1600	1600	4800	0	1984	4416	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.14	0.09	0.22	0.00	0.22	0.22	0.18	0.00	0.00	0.00
Crit Moves:					****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.581
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	152	298	0	0	445	824	0	0	0	415	1502	109
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	298	0	0	445	824	0	0	0	415	1502	109
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	152	298	0	0	445	824	0	0	0	415	1502	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	298	0	0	445	824	0	0	0	415	1502	109
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	152	298	0	0	445	824	0	0	0	415	1502	109
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.40	2.60	0.00	0.00	0.00	1.00	3.80	0.20
Final Sat.:	3200	3200	0	0	2244	4156	0	0	0	1600	6075	325
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.26	0.25	0.34
Crit Moves:	****				****							****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.434
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2	0 2	0 0	1	1 2	1 0	0	0 0	0 0 0
Volume Module:												
Base Vol:	0	194	253	250	614	0	270	1041	121	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	194	253	250	614	0	270	1041	121	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	194	253	250	614	0	270	1041	121	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	194	253	250	614	0	270	1041	121	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	194	253	250	614	0	270	1041	121	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	3.69	0.31	0.00	0.00	0.00
Final Sat.:	0	3200	3200	3200	3200	0	1600	5900	500	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.08	0.08	0.19	0.00	0.17	0.18	0.24	0.00	0.00	0.00
Crit Moves:				****					****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.714
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	175	1093	20	323	759	917	704	485	78	51	733	832
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	175	1093	20	323	759	917	704	485	78	51	733	832
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	175	1093	20	323	759	0	704	485	78	51	733	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	175	1093	20	323	759	0	704	485	78	51	733	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	175	1093	20	323	759	0	704	485	78	51	733	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.95	0.05	2.00	3.00	1.00	2.00	2.58	0.42	1.00	3.00	1.00
Final Sat.:	3400	5008	92	3400	5100	1700	3400	4393	707	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.22	0.10	0.15	0.00	0.21	0.11	0.11	0.03	0.14	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.701
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 2	0	1	2	0 1	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	335	1289		93	151	850		151	239	769		249	78	568		235
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	335	1289		93	151	850		151	239	769		249	78	568		235
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	335	1289		93	151	850		151	239	769		249	78	568		235
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	335	1289		93	151	850		151	239	769		249	78	568		235
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	335	1289		93	151	850		151	239	769		249	78	568		235
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06
Lanes:	2.00	2.00		1.00	2.00	1.70		0.30	2.00	2.27		0.73	2.00	2.12		0.88
Final Sat.:	3400	3400		1700	3400	2887		513	3400	3853		1247	3400	3607		1493
Capacity Analysis Module:																
Vol/Sat:	0.10	0.38		0.05	0.04	0.29		0.29	0.07	0.20		0.20	0.02	0.16		0.16
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.466
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	121	166	75	433	460	298	128	486	153	137	967	242
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	121	166	75	433	460	298	128	486	153	137	967	242
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	166	75	433	460	298	128	486	153	137	967	242
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	166	75	433	460	298	128	486	153	137	967	242
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	121	166	75	433	460	298	128	486	153	137	967	242
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.05	0.05	0.14	0.14	0.19	0.04	0.10	0.10	0.04	0.20	0.15
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.529
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	16	175	31	123	373	155	92	137	59	44	293	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	175	31	123	373	155	92	137	59	44	293	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	16	175	31	123	373	155	92	137	59	44	293	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	175	31	123	373	155	92	137	59	44	293	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	16	175	31	123	373	155	92	137	59	44	293	72
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.85	0.15	1.00	1.00	1.00	1.00	0.70	0.30	1.00	0.80	0.20
Final Sat.:	1600	1359	241	1600	1600	1600	1600	1118	482	1600	1284	316
Capacity Analysis Module:												
Vol/Sat:	0.01	0.13	0.13	0.08	0.23	0.10	0.06	0.12	0.12	0.03	0.23	0.23
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.792
Loss Time (sec):	0	Average Delay (sec/veh):	19.4
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	34	155	21	81	312	65	44	161	56	29	227	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	155	21	81	312	65	44	161	56	29	227	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	155	21	81	312	65	44	161	56	29	227	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	155	21	81	312	65	44	161	56	29	227	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	155	21	81	312	65	44	161	56	29	227	50
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.16	0.74	0.10	0.18	0.68	0.14	0.17	0.62	0.21	0.09	0.75	0.16
Final Sat.:	79	360	49	102	394	82	85	312	108	50	388	85
Capacity Analysis Module:												
Vol/Sat:	0.43	0.43	0.43	0.79	0.79	0.79	0.52	0.52	0.52	0.59	0.59	0.59
Crit Moves:		****		****				****		****		
Delay/Veh:	13.6	13.6	13.6	26.2	26.2	26.2	15.1	15.1	15.1	16.7	16.7	16.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.6	13.6	13.6	26.2	26.2	26.2	15.1	15.1	15.1	16.7	16.7	16.7
LOS by Move:	B	B	B	D	D	D	C	C	C	C	C	C
ApproachDel:	13.6			26.2			15.1			16.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.6			26.2			15.1			16.7		
LOS by Appr:	B			D			C			C		
AllWayAvgQ:	0.5	0.5	0.5	2.8	2.8	2.8	0.8	0.8	0.8	1.1	1.1	1.1

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.573
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	62	581	188	10	1380	214	38	58	146	497	151	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	581	188	10	1380	214	38	58	146	497	151	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	62	581	188	10	1380	214	38	58	146	497	151	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	581	188	10	1380	214	38	58	146	497	151	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	62	581	188	10	1380	214	38	58	146	497	151	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	2.00	0.94	0.06
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	1600	1600	3200	1501	99
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.12	0.01	0.29	0.13	0.02	0.04	0.09	0.16	0.10	0.10
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.719
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	84	690	34	47	1788	165	94	37	104	37	42	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	690	34	47	1788	165	94	37	104	37	42	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	690	34	47	1788	165	94	37	104	37	42	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	690	34	47	1788	165	94	37	104	37	42	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	84	690	34	47	1788	165	94	37	104	37	42	37
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.53	0.47
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	851	749
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.02	0.03	0.56	0.10	0.06	0.02	0.07	0.02	0.05	0.05
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.695
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	82	801	9	106	1625	80	42	50	89	18	52	66
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	82	801	9	106	1625	80	42	50	89	18	52	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	82	801	9	106	1625	80	42	50	89	18	52	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	801	9	106	1625	80	42	50	89	18	52	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	82	801	9	106	1625	80	42	50	89	18	52	66
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.91	0.09	0.46	0.54	1.00	0.13	0.38	0.49
Final Sat.:	1600	3164	36	1600	3050	150	730	870	1600	212	612	776
Capacity Analysis Module:												
Vol/Sat:	0.05	0.25	0.25	0.07	0.53	0.53	0.03	0.06	0.06	0.01	0.08	0.08
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.624
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	0	0 1!	0	0	0	0 1!	0	0
Volume Module:																
Base Vol:	74	905	18		47	1502	66		31	22	54		24	34	51	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	74	905	18		47	1502	66		31	22	54		24	34	51	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	74	905	18		47	1502	66		31	22	54		24	34	51	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	74	905	18		47	1502	66		31	22	54		24	34	51	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	74	905	18		47	1502	66		31	22	54		24	34	51	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.96	0.04		1.00	1.92	0.08		0.29	0.21	0.50		0.22	0.31	0.47	
Final Sat.:	1600	3138	62		1600	3065	135		464	329	807		352	499	749	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.29	0.29		0.03	0.49	0.49		0.02	0.07	0.07		0.02	0.07	0.07	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.662
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	78	721	26	126	1284	83	55	90	59	24	174	243
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	78	721	26	126	1284	83	55	90	59	24	174	243
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	78	721	26	126	1284	83	55	90	59	24	174	243
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	721	26	126	1284	83	55	90	59	24	174	243
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	721	26	126	1284	83	55	90	59	24	174	243
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.93	0.07	1.00	1.88	0.12	1.00	0.60	0.40	1.00	1.00	1.00
Final Sat.:	1600	3089	111	1600	3006	194	1600	966	634	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.23	0.23	0.08	0.43	0.43	0.03	0.09	0.09	0.02	0.11	0.15
Crit Moves:	****				****		****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.709
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	283	467	53	208	622	365	264	549	216	92	644	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	283	467	53	208	622	365	264	549	216	92	644	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	283	467	53	208	622	365	264	549	216	92	644	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	283	467	53	208	622	365	264	549	216	92	644	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	283	467	53	208	622	365	264	549	216	92	644	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.80	0.20	2.00	1.26	0.74	2.00	1.44	0.56	1.00	1.75	0.25
Final Sat.:	3200	2874	326	3200	2017	1183	3200	2296	904	1600	2808	392
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.16	0.07	0.31	0.31	0.08	0.24	0.24	0.06	0.23	0.23
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.560
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 4	0 1	0	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	0	0	0	241	2487	0	0	2	5	272	2	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	241	2487	0	0	2	5	272	2	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	241	2487	0	0	2	5	272	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	241	2487	0	0	2	5	272	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	241	2487	0	0	2	5	272	2	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.39	0.00	0.00	0.00	0.00	0.17	0.00	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.364
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	30	390	117	0	0	0	55	181	0	0	249	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	390	117	0	0	0	55	181	0	0	249	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	390	117	0	0	0	55	181	0	0	249	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	390	117	0	0	0	55	181	0	0	249	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	390	117	0	0	0	55	181	0	0	249	53
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.54	0.46	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.82	0.18
Final Sat.:	1600	2462	738	0	0	0	3200	1600	0	0	1319	281
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.16	0.00	0.00	0.00	0.02	0.11	0.00	0.00	0.19	0.19
Crit Moves:		****					****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.428
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	0	3	0	0	3	1	0	1	0	2	0	0
Volume Module:												
Base Vol:	0	0	0	331	1279	1167	0	602	73	89	338	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	331	1279	1167	0	602	73	89	338	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	331	1279	0	0	602	73	89	338	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	331	1279	0	0	602	73	89	338	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	331	1279	0	0	602	73	89	338	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.57	0.43	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	5708	692	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.27	0.00	0.00	0.11	0.11	0.06	0.11	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.504
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	0	0	2	0	2	0	0	2
Volume Module:												
Base Vol:	143	757	115	0	0	0	547	405	0	0	289	194
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	757	115	0	0	0	547	405	0	0	289	194
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	757	115	0	0	0	547	405	0	0	289	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	757	115	0	0	0	547	405	0	0	289	194
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	757	115	0	0	0	547	405	0	0	289	194
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.42	2.24	0.34	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	676	3580	544	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.00	0.00	0.00	0.17	0.13	0.00	0.00	0.09	0.12
Crit Moves:	****						****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	46	460	82	120	682	369	138	478	28	50	685	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	460	82	120	682	369	138	478	28	50	685	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	46	460	82	120	682	369	138	478	28	50	685	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	460	82	120	682	369	138	478	28	50	685	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	46	460	82	120	682	369	138	478	28	50	685	76
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.70	0.30	1.00	1.30	0.70	1.00	2.00	1.00	1.00	1.80	0.20
Final Sat.:	1600	2716	484	1600	2076	1124	1600	3200	1600	1600	2880	320
Capacity Analysis Module:												
Vol/Sat:	0.03	0.17	0.17	0.08	0.33	0.33	0.09	0.15	0.02	0.03	0.24	0.24
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.543
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0	1 0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	101	174	172	591	97	98	27	1080	63	40	578	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	101	174	172	591	97	98	27	1080	63	40	578	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	101	174	172	591	97	98	27	1080	63	40	578	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	174	172	591	97	98	27	1080	63	40	578	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	101	174	172	591	97	98	27	1080	63	40	578	115
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.01	0.99	2.00	0.50	0.50	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1609	1591	3200	796	804	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.11	0.18	0.12	0.12	0.02	0.23	0.04	0.03	0.12	0.07
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.413
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 2	0	0 0	0 0	0	0 4	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	0	228	0	0	0	0	2190	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	228	0	0	0	0	2190	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	228	0	0	0	0	2190	150	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	228	0	0	0	0	2190	150	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	228	0	0	0	0	2190	150	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.34	0.09	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.494
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Ignore				Ignore				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 3	0	1	1	1 0	0	1	0	0 1!	0	0
Volume Module:																
Base Vol:	33	1529	0	0	1896		82		251	0	124		0	0	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	33	1529	0	0	1896		82		251	0	124		0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00		0.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00		0.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Volume:	33	1529	0	0	1896		0		251	0	0		0	0	0	
Reduct Vol:	0	0	0	0	0		0		0	0	0		0	0	0	
Reduced Vol:	33	1529	0	0	1896		0		251	0	0		0	0	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00		0.00		1.00	1.00	0.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00		0.00		1.00	1.00	0.00		1.00	1.00	1.00	
FinalVolume:	33	1529	0	0	1896		0		251	0	0		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600	1600	1600		1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	3.00	0.00	1.00	3.00		1.00		2.00	0.00	1.00		0.00	1.00	0.00	
Final Sat.:	1600	4800	0	1600	4800		1600		3200	0	1600		0	1600	0	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.32	0.00	0.00	0.40		0.00		0.08	0.00	0.00		0.00	0.00	0.00	
Crit Moves:	****				****				****							

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.522
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	57	1740	52	40	1844	51	73	4	144	20	1	91
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	57	1740	52	40	1844	51	73	4	144	20	1	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	57	1740	52	40	1844	51	73	4	144	20	1	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	1740	52	40	1844	51	73	4	144	20	1	91
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	1740	52	40	1844	51	73	4	144	20	1	91
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.88	0.12	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6214	186	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.28	0.28	0.03	0.38	0.03	0.02	0.00	0.09	0.01	0.00	0.06
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.558
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	39	1646	328	153	1640	358	193	81	12	248	115	95
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	1646	328	153	1640	358	193	81	12	248	115	95
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	39	1646	328	153	1640	358	193	81	12	248	115	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	1646	328	153	1640	358	193	81	12	248	115	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	39	1646	328	153	1640	358	193	81	12	248	115	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.35	0.57	0.08	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2159	906	134	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.34	0.21	0.05	0.34	0.22	0.09	0.09	0.09	0.08	0.07	0.00
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.498
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1630	185	99	1519	79	37	0	14	210	0	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1630	185	99	1519	79	37	0	14	210	0	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1630	185	99	1519	79	37	0	14	210	0	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1630	185	99	1519	79	37	0	14	210	0	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1630	185	99	1519	79	37	0	14	210	0	126
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.69	0.31	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4311	489	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.38	0.38	0.03	0.32	0.05	0.02	0.00	0.01	0.07	0.00	0.04
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.707
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 2	1	0	1	0 3	0	1	1	1 1	0	1	1	1 1	0	1
Volume Module:																
Base Vol:	328	1817	314		31	1406	75		103	234	272		164	189	27	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	328	1817	314		31	1406	75		103	234	272		164	189	27	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	328	1817	314		31	1406	75		103	234	272		164	189	27	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	328	1817	314		31	1406	75		103	234	272		164	189	27	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	328	1817	314		31	1406	75		103	234	272		164	189	27	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	2.56	0.44		1.00	3.00	1.00		1.00	2.00	1.00		1.39	1.61	1.00	
Final Sat.:	3200	4093	707		1600	4800	1600		1600	3200	1600		2230	2570	1600	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.44	0.44		0.02	0.29	0.05		0.06	0.07	0.17		0.07	0.07	0.02	
Crit Moves:		****				****					****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	140	2342	162	133	2451	212	221	216	99	305	218	137
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	2342	162	133	2451	212	221	216	99	305	218	137
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	140	2342	0	133	2451	212	221	216	0	305	218	137
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	2342	0	133	2451	212	221	216	0	305	218	137
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	140	2342	0	133	2451	212	221	216	0	305	218	137
OvlAdjVol:						102						71
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.37	0.00	0.04	0.38	0.13	0.07	0.07	0.00	0.10	0.07	0.09
OvlAdjV/S:						0.06						0.04
Crit Moves:	****				****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.841
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	143	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	88	2017	529	1116	2301	46	30	343	46	224	276	649
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	88	2017	529	1116	2301	46	30	343	46	224	276	649
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	88	2017	0	1116	2301	0	30	343	46	224	276	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	2017	0	1116	2301	0	30	343	46	224	276	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	88	2017	0	1116	2301	0	30	343	46	224	276	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.00	0.35	0.36	0.00	0.01	0.11	0.03	0.07	0.09	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.654
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	149	831	7	21	949	279	186	54	71	31	282	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	149	831	7	21	949	279	186	54	71	31	282	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	149	831	7	21	949	279	186	54	71	31	282	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	149	831	7	21	949	279	186	54	71	31	282	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	149	831	7	21	949	279	186	54	71	31	282	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.98	0.02	1.00	1.55	0.45	1.00	1.00	1.00	1.00	1.63	0.37
Final Sat.:	3200	3173	27	1600	2473	727	1600	1600	1600	1600	2616	584
Capacity Analysis Module:												
Vol/Sat:	0.05	0.26	0.26	0.01	0.38	0.38	0.12	0.03	0.04	0.02	0.11	0.11
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.614
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 1	1	0	1	0 1	1	0	1	1 1	0	1	1	0 1	1	0
Volume Module:																
Base Vol:	282	623	16		20	525	383		358	74	83		44	356	61	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	282	623	16		20	525	383		358	74	83		44	356	61	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	282	623	16		20	525	383		358	74	83		44	356	61	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	282	623	16		20	525	383		358	74	83		44	356	61	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	282	623	16		20	525	383		358	74	83		44	356	61	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.95	0.05		1.00	1.16	0.84		2.00	1.00	1.00		1.00	1.71	0.29	
Final Sat.:	3200	3120	80		1600	1850	1350		3200	1600	1600		1600	2732	468	
Capacity Analysis Module:																
Vol/Sat:	0.09	0.20	0.20		0.01	0.28	0.28		0.11	0.05	0.05		0.03	0.13	0.13	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.616
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Ignore			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0 2	0 2	0	0 3	0 1
Volume Module:												
Base Vol:	732	0	293	0	0	0	0	784	805	0	1791	1081
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	732	0	293	0	0	0	0	784	805	0	1791	1081
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	732	0	0	0	0	0	0	784	0	0	1791	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	732	0	0	0	0	0	0	784	0	0	1791	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	732	0	0	0	0	0	0	784	0	0	1791	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	3.00	1.00
Final Sat.:	3400	0	1700	0	0	0	0	3400	3400	0	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.35	0.00
Crit Moves:	****						****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.878
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	2	0 3	1	0	2	0 4	0	1
Volume Module:																
Base Vol:	424	1767	356		368	450	110		191	792	56		149	910	597	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	424	1767	356		368	450	110		191	792	56		149	910	597	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	424	1767	356		368	450	110		191	792	56		149	910	597	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	424	1767	356		368	450	110		191	792	56		149	910	597	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	424	1767	356		368	450	110		191	792	56		149	910	597	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.33	0.67		2.00	3.21	0.79		2.00	3.74	0.26		2.00	4.00	1.00	
Final Sat.:	3400	5660	1140		3400	5464	1336		3400	6351	449		3400	6800	1700	
Capacity Analysis Module:																
Vol/Sat:	0.12	0.31	0.31		0.11	0.08	0.08		0.06	0.12	0.12		0.04	0.13	0.35	
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.787
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	2	0 1	2 0	1	0 1
Volume Module:												
Base Vol:	27	1936	251	116	670	6	49	182	93	491	91	359
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	1936	251	116	670	6	49	182	93	491	91	359
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	1936	251	116	670	6	49	182	93	491	91	359
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	1936	251	116	670	6	49	182	93	491	91	359
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	1936	251	116	670	6	49	182	93	491	91	359
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.66	0.34	1.00	2.97	0.03	1.00	2.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	4515	585	1700	5055	45	1700	3400	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.02	0.43	0.43	0.07	0.13	0.13	0.03	0.05	0.05	0.14	0.05	0.21
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.744
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	122	1931	272	43	1197	28	90	117	292	444	59	172
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	122	1931	272	43	1197	28	90	117	292	444	59	172
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	122	1931	272	43	1197	28	90	117	292	444	59	172
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	1931	272	43	1197	28	90	117	292	444	59	172
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	1931	272	43	1197	28	90	117	292	444	59	172
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.93	0.07	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	3400	5100	1700	3400	4983	117	1700	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.38	0.16	0.01	0.24	0.24	0.05	0.07	0.17	0.13	0.03	0.10
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.889
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	81	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 1		1 0	2 0 2		0 2	1 0 2		1 0	2 0 3		0 1
Volume Module:												
Base Vol:	431	879	440	30	130	244	487	1232	86	134	796	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	431	879	440	30	130	244	487	1232	86	134	796	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	431	879	440	30	130	244	487	1232	86	134	796	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	431	879	440	30	130	244	487	1232	86	134	796	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	431	879	440	30	130	244	487	1232	86	134	796	55
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.33	0.67	2.00	2.00	2.00	1.00	2.80	0.20	2.00	3.00	1.00
Final Sat.:	3400	2266	1134	3400	3400	3400	1700	4767	333	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.39	0.39	0.01	0.04	0.07	0.29	0.26	0.26	0.04	0.16	0.03
OvlAdjV/S:						0.00						
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.884
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	84	1360	329	89	330	72	100	756	86	63	472	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	1360	329	89	330	72	100	756	86	63	472	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	1360	329	89	330	72	100	756	86	63	472	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	1360	329	89	330	72	100	756	86	63	472	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	84	1360	329	89	330	72	100	756	86	63	472	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.61	0.39	1.00	1.64	0.36	1.00	1.80	0.20	1.00	1.77	0.23
Final Sat.:	1700	2738	662	1700	2791	609	1700	3053	347	1700	3017	383
Capacity Analysis Module:												
Vol/Sat:	0.05	0.50	0.50	0.05	0.12	0.12	0.06	0.25	0.25	0.04	0.16	0.16
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	277	1043	344	129	322	190	469	1342	100	118	919	156
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	277	1043	344	129	322	190	469	1342	100	118	919	156
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	277	1043	344	129	322	190	469	1342	0	118	919	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	277	1043	344	129	322	190	469	1342	0	118	919	156
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	277	1043	344	129	322	190	469	1342	0	118	919	156
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.56	0.44
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4360	740
Capacity Analysis Module:												
Vol/Sat:	0.08	0.31	0.20	0.08	0.09	0.11	0.14	0.26	0.00	0.03	0.21	0.21
Crit Moves:		****		****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.894
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 1	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	392	2981	181	326	1324	354	944	685	241	152	603	515
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	392	2981	181	326	1324	354	944	685	241	152	603	515
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	392	2981	0	326	1324	0	944	685	241	152	603	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	392	2981	0	326	1324	0	944	685	241	152	603	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	392	2981	0	326	1324	0	944	685	241	152	603	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.90	2.10	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	4926	3574	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.12	0.44	0.00	0.10	0.19	0.00	0.19	0.19	0.14	0.04	0.12	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.811
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	3 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	185	2858	252	277	1335	189	415	757	248	211	381	193
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	185	2858	252	277	1335	189	415	757	248	211	381	193
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	185	2858	252	277	1335	189	415	757	248	211	381	193
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	2858	252	277	1335	189	415	757	248	211	381	193
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	185	2858	252	277	1335	189	415	757	248	211	381	193
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	3.50	0.50	2.00	2.26	0.74	2.00	2.00	1.00
Final Sat.:	3400	6800	1700	3400	5957	843	3400	3841	1259	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.42	0.15	0.08	0.22	0.22	0.12	0.20	0.20	0.06	0.11	0.11
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	92	2976	37		24	1777	61		231	208	182		37	32	26	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	92	2976	37		24	1777	61		231	208	182		37	32	26	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	92	2976	37		24	1777	61		231	208	182		37	32	26	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	92	2976	37		24	1777	61		231	208	182		37	32	26	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	92	2976	37		24	1777	61		231	208	182		37	32	26	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.95	0.05		2.00	3.87	0.13		1.00	1.07	0.93		1.00	1.10	0.90	
Final Sat.:	3400	6716	84		3400	6574	226		1700	1813	1587		1700	1876	1524	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.44	0.44		0.01	0.27	0.27		0.14	0.11	0.11		0.02	0.02	0.02	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.850
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	342	2320	568	249	1561	209	537	1229	718	491	533	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	342	2320	568	249	1561	209	537	1229	718	491	533	330
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	342	2320	0	249	1561	209	537	1229	0	491	533	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	342	2320	0	249	1561	209	537	1229	0	491	533	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	342	2320	0	249	1561	209	537	1229	0	491	533	0
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.10	0.34	0.00	0.07	0.23	0.12	0.16	0.24	0.00	0.14	0.10	0.00
OvlAdjV/S:						0.00						
Crit Moves:	****			****				****		****		

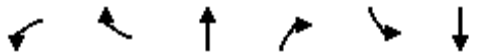
JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.822
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	2 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	47	895	78	275	539	149	478	939	127	82	285	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	895	78	275	539	149	478	939	127	82	285	151
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	47	895	78	275	539	149	478	939	0	82	285	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	895	78	275	539	149	478	939	0	82	285	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	47	895	78	275	539	149	478	939	0	82	285	151
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.84	0.16	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.31	0.69
Final Sat.:	1700	3127	273	1700	3400	1700	3400	3400	1700	1700	2222	1178
Capacity Analysis Module:												
Vol/Sat:	0.03	0.29	0.29	0.16	0.16	0.09	0.14	0.28	0.00	0.05	0.13	0.13
Crit Moves:		****		****				****		****		



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	818	530	1991	315	162	1093
v/c Ratio	0.77	0.71	0.82	0.25	0.49	0.32
Control Delay	29.8	12.8	28.0	3.4	39.1	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.8	12.8	28.0	3.4	39.1	11.1
Queue Length 50th (ft)	189	63	253	0	40	81
Queue Length 95th (ft)	222	156	#420	31	67	123
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	1416	867	2438	1256	430	3468
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.61	0.82	0.25	0.38	0.32

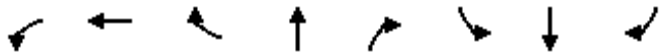
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	793	988	1891	299	149	1006
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.97	0.97	0.95	0.95	0.92	0.92
Growth Factor (vph)	100%	52%	100%	100%	100%	100%
Adj. Flow (vph)	818	530	1991	315	162	1093
RTOR Reduction (vph)	0	252	0	195	0	0
Lane Group Flow (vph)	818	278	1991	120	162	1093
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	24.8	24.8	30.4	30.4	7.7	43.3
Effective Green, g (s)	24.8	24.8	30.4	30.4	7.7	43.3
Actuated g/C Ratio	0.31	0.31	0.38	0.38	0.10	0.54
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	1064	491	2435	1059	330	3468
v/s Ratio Prot	c0.24		c0.31		c0.05	0.17
v/s Ratio Perm		0.18		0.04		
v/c Ratio	0.77	0.57	0.82	0.11	0.49	0.32
Uniform Delay, d1	25.0	23.1	22.3	16.1	34.3	10.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.1	0.9	3.2	0.2	0.4	0.2
Delay (s)	28.1	24.0	25.5	16.3	34.7	10.4
Level of Service	C	C	C	B	C	B
Approach Delay (s)	26.5		24.2			13.5
Approach LOS	C		C			B

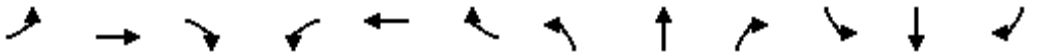
Intersection Summary			
HCM Average Control Delay	22.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



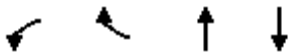
Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1211	144	1132	1193	342	143	1399	277
v/c Ratio	0.82	0.18	0.72	0.51	0.26	0.54	0.46	0.31
Control Delay	35.6	21.1	2.8	32.9	10.0	60.8	22.3	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.6	21.1	2.8	32.9	10.0	60.8	22.3	3.3
Queue Length 50th (ft)	405	66	0	279	142	56	213	0
Queue Length 95th (ft)	483	106	0	321	271	88	252	48
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	1573	854	1583	2342	1384	458	3047	898
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.17	0.72	0.51	0.25	0.31	0.46	0.31

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1126	134	1053	0	1157	332	142	1385	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.93	0.93	0.93	0.97	0.97	0.97	0.99	0.99	0.99
Adj. Flow (vph)	0	0	0	1211	144	1132	0	1193	342	143	1399	277
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	145
Lane Group Flow (vph)	0	0	0	1211	144	1132	0	1193	342	143	1399	132
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				51.3	51.3	120.0		43.9	95.2	9.2	57.1	57.1
Effective Green, g (s)				51.3	51.3	120.0		43.9	95.2	9.2	57.1	57.1
Actuated g/C Ratio				0.43	0.43	1.00		0.37	0.79	0.08	0.48	0.48
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				1468	796	1583		2344	1256	263	3049	753
v/s Ratio Prot				c0.35	0.08			0.19	0.12	0.04	0.22	
v/s Ratio Perm						c0.71			0.10			0.08
v/c Ratio				0.82	0.18	0.72		0.51	0.27	0.54	0.46	0.18
Uniform Delay, d1				30.4	21.3	0.0		29.7	3.3	53.4	21.1	18.0
Progression Factor				1.00	1.00	1.00		1.05	4.67	1.00	1.00	1.00
Incremental Delay, d2				3.8	0.1	2.8		0.7	0.0	1.2	0.5	0.5
Delay (s)				34.2	21.4	2.8		31.7	15.3	54.6	21.6	18.5
Level of Service				C	C	A		C	B	D	C	B
Approach Delay (s)		0.0			19.1			28.1			23.7	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM Average Control Delay	22.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	5.5
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	1235	684	2148	2097
v/c Ratio	0.98	0.43	0.72	0.56
Control Delay	49.7	0.9	8.2	10.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	49.7	0.9	8.2	10.1
Queue Length 50th (ft)	202	0	246	156
Queue Length 95th (ft)	#293	0	m181	186
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	2997	3776
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.98	0.43	0.72	0.56

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1186	657	2019	0	0	2013
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.96	0.96	0.94	0.94	0.96	0.96
Adj. Flow (vph)	1235	684	2148	0	0	2097
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1235	684	2148	0	0	2097
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	19.0	75.0	44.2			44.2
Effective Green, g (s)	19.0	75.0	44.2			44.2
Actuated g/C Ratio	0.25	1.00	0.59			0.59
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1264	1583	2997			3776
v/s Ratio Prot	c0.25		c0.42			0.33
v/s Ratio Perm		0.43				
v/c Ratio	0.98	0.43	0.72			0.56
Uniform Delay, d1	27.8	0.0	10.9			9.4
Progression Factor	1.00	1.00	0.67			1.00
Incremental Delay, d2	19.8	0.9	0.6			0.6
Delay (s)	47.6	0.9	8.0			10.0
Level of Service	D	A	A			A
Approach Delay (s)	30.9		8.0			10.0
Approach LOS	C		A			A

Intersection Summary			
HCM Average Control Delay	15.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

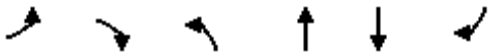
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1472	1330	903	3029	237
v/c Ratio	1.30	1.46	0.35	0.93	0.15
Control Delay	168.2	239.9	11.4	19.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	168.2	239.9	11.4	19.4	0.1
Queue Length 50th (ft)	~461	~502	85	410	0
Queue Length 95th (ft)	#586	#640	112	m448	m0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1130	908	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.30	1.46	0.35	0.93	0.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1206	1484	0	813	2968	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.98	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3390	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3390	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1256	1546	0	903	3029	237
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1472	1330	0	903	3029	237
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1130	908		2597	3272	1583
v/s Ratio Prot	0.43			0.18	c0.47	
v/s Ratio Perm		c0.49				0.15
v/c Ratio	1.30	1.46		0.35	0.93	0.15
Uniform Delay, d1	25.0	25.0		10.9	17.0	0.0
Progression Factor	1.00	1.00		1.00	0.85	1.00
Incremental Delay, d2	142.7	215.2		0.4	4.2	0.1
Delay (s)	167.7	240.2		11.3	18.7	0.1
Level of Service	F	F		B	B	A
Approach Delay (s)	202.1			11.3	17.4	
Approach LOS	F			B	B	

Intersection Summary			
HCM Average Control Delay	90.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	96.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	420	275	2054	815	671	1687
v/c Ratio	0.71	0.55	0.88	0.53	0.72	0.38
Control Delay	41.6	8.4	32.1	2.9	36.2	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.6	8.4	32.1	2.9	36.2	6.3
Queue Length 50th (ft)	117	0	311	0	177	98
Queue Length 95th (ft)	145	50	363	40	#274	137
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	954	638	2342	1536	932	4453
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.43	0.88	0.53	0.72	0.38

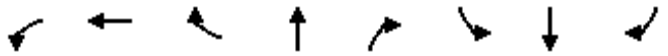
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	357	349	1910	758	584	1468
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.85	0.85	0.93	0.93	0.87	0.87
Growth Factor (vph)	100%	67%	100%	100%	100%	100%
Adj. Flow (vph)	420	275	2054	815	671	1687
RTOR Reduction (vph)	0	227	0	517	0	0
Lane Group Flow (vph)	420	48	2054	298	671	1687
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	15.6	15.6	32.9	32.9	24.4	62.5
Effective Green, g (s)	15.6	15.6	32.9	32.9	24.4	62.5
Actuated g/C Ratio	0.17	0.17	0.37	0.37	0.27	0.69
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	595	274	2342	1019	931	4450
v/s Ratio Prot	c0.12		c0.32		c0.20	0.26
v/s Ratio Perm		0.03		0.11		
v/c Ratio	0.71	0.17	0.88	0.29	0.72	0.38
Uniform Delay, d1	35.0	31.7	26.7	20.3	29.7	5.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.1	0.1	5.0	0.7	2.4	0.2
Delay (s)	38.2	31.8	31.7	21.0	32.1	5.9
Level of Service	D	C	C	C	C	A
Approach Delay (s)	35.7		28.7			13.4
Approach LOS	D		C			B

Intersection Summary			
HCM Average Control Delay	23.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		

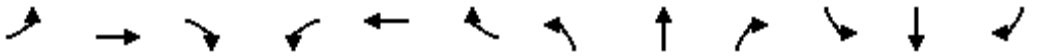
c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	575	83	588	2372	527	485	1346	206
v/c Ratio	0.80	0.21	0.37	0.76	0.45	0.80	0.30	0.18
Control Delay	53.8	39.9	0.7	32.7	15.5	58.0	7.5	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.8	39.9	0.7	32.7	15.5	58.0	7.5	1.2
Queue Length 50th (ft)	214	53	0	495	196	187	112	0
Queue Length 95th (ft)	279	98	0	m524	m385	231	128	22
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	772	419	1583	3103	1203	772	4442	1161
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.20	0.37	0.76	0.44	0.63	0.30	0.18

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	529	76	541	0	2135	474	432	1198	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.92	0.92	0.92	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	575	83	588	0	2372	527	485	1346	206
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	63
Lane Group Flow (vph)	0	0	0	575	83	588	0	2372	527	485	1346	143
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				25.2	25.2	120.0		58.1	83.3	21.1	83.2	83.2
Effective Green, g (s)				25.2	25.2	120.0		58.1	83.3	21.1	83.2	83.2
Actuated g/C Ratio				0.21	0.21	1.00		0.48	0.69	0.18	0.69	0.69
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				721	391	1583		3103	1099	604	4443	1098
v/s Ratio Prot				c0.17	0.04			c0.37	0.10	c0.14	0.21	
v/s Ratio Perm						0.37			0.23			0.09
v/c Ratio				0.80	0.21	0.37		0.76	0.48	0.80	0.30	0.13
Uniform Delay, d1				45.0	39.2	0.0		25.3	8.4	47.5	7.1	6.2
Progression Factor				1.00	1.00	1.00		1.19	2.25	1.00	1.00	1.00
Incremental Delay, d2				5.8	0.1	0.7		1.2	0.1	7.2	0.2	0.2
Delay (s)				50.8	39.3	0.7		31.3	19.0	54.6	7.3	6.4
Level of Service				D	D	A		C	B	D	A	A
Approach Delay (s)		0.0			26.4			29.0			18.5	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	25.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

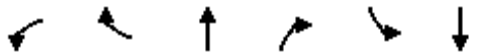
Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	834	501	3211	2022
v/c Ratio	0.73	0.32	1.03	0.52
Control Delay	30.6	0.5	31.9	9.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	30.6	0.5	31.9	9.0
Queue Length 50th (ft)	124	0	~624	143
Queue Length 95th (ft)	134	0	m#614	177
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	3115	3925
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.66	0.32	1.03	0.52

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	642	386	3147	0	0	1820
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.77	0.77	0.98	0.98	0.90	0.90
Adj. Flow (vph)	834	501	3211	0	0	2022
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	834	501	3211	0	0	2022
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	17.3	75.0	45.9			45.9
Effective Green, g (s)	17.3	75.0	45.9			45.9
Actuated g/C Ratio	0.23	1.00	0.61			0.61
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1151	1583	3112			3922
v/s Ratio Prot	c0.17		c0.63			0.32
v/s Ratio Perm		0.32				
v/c Ratio	0.72	0.32	1.03			0.52
Uniform Delay, d1	26.6	0.0	14.6			8.2
Progression Factor	1.00	1.00	0.65			1.00
Incremental Delay, d2	2.3	0.5	19.5			0.5
Delay (s)	28.9	0.5	29.0			8.7
Level of Service	C	A	C			A
Approach Delay (s)	18.3		29.0			8.7
Approach LOS	B		C			A

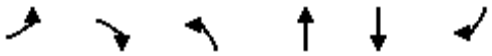
Intersection Summary			
HCM Average Control Delay	20.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1310	599	2030	1910	648
v/c Ratio	1.14	0.65	0.78	0.58	0.41
Control Delay	101.7	25.0	17.7	9.4	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	101.7	25.0	17.7	9.4	0.7
Queue Length 50th (ft)	~376	133	264	136	0
Queue Length 95th (ft)	#502	194	325	156	0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1145	915	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.14	0.65	0.78	0.58	0.41

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1156	619	0	1989	1834	622
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.99	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3424	2723		5085	6408	1583
Flt Permitted	0.95	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3424	2723		5085	6408	1583
Peak-hour factor, PHF	0.93	0.93	0.98	0.98	0.96	0.96
Adj. Flow (vph)	1243	666	0	2030	1910	648
RTOR Reduction (vph)	4	7	0	0	0	0
Lane Group Flow (vph)	1306	592	0	2030	1910	648
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1141	908		2597	3272	1583
v/s Ratio Prot	c0.38			c0.40	0.30	
v/s Ratio Perm		0.22				0.41
v/c Ratio	1.14	0.65		0.78	0.58	0.41
Uniform Delay, d1	25.0	21.3		14.9	12.8	0.0
Progression Factor	1.00	1.00		1.00	0.68	1.00
Incremental Delay, d2	75.8	1.5		2.4	0.6	0.7
Delay (s)	100.8	22.8		17.4	9.3	0.7
Level of Service	F	C		B	A	A
Approach Delay (s)	76.3			17.4	7.1	
Approach LOS	E			B	A	

Intersection Summary			
HCM Average Control Delay	30.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX C: EXISTING FREEWAY LOS RESULTS

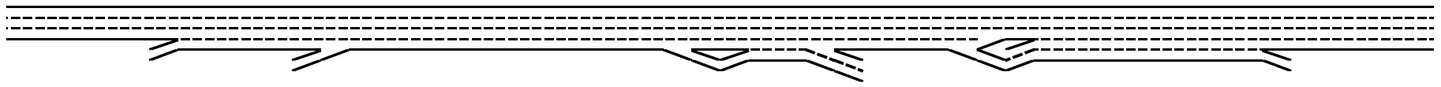
Project: John Wayne Airport Expansion **Scenario:** Existing Conditions
Freeway Corridor: 73N **Peak Hour:** AM

Location	1	2	3	4	5	6	7	8	9	10

Key
<> Express Lane (HOV)
No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*6,272*	6,272	7,942	*5,763*	5,763	*5,782*	4,477	*3,714*		3,367
On Ramp Volume		*1,670*	*701*			*674*		*622*		
Off Ramp Volume					*974*	*1,979*	*726*	*969*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	6,272	7,942	8,643	5,763	5,763	6,456	4,477	4,336		3,367
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	6,680	8,458	9,205	6,138	6,138	6,876	4,768	4,618		3,586
GP Flow (pcphpl)	2,227	2,115	2,301	1,534	1,534	1,375	1,192	924		896
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*62.3*	*62.3*	*62.3*	*66.1*	*66.1*	*66.1*	*66.1*	*65.5*		*65.5*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.95	0.90	0.98	0.65	0.65	0.59	0.51	0.39		0.38
Speed (mph)	55.3	57.8	53.5	64.7	64.7	65.0	65.0	65.0		65.0
Density (pcphpl)	40.3	36.6	43.0	23.7	23.7	21.2	18.3	14.2		13.8
LOS	E	E	E	C	C	C	C	B		B
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		6,683	8,460			6,159		3,955		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.95	0.90			0.66		0.56		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					5,102	4,768	3,995	3,588		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.54	0.51	0.57	0.51		

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,670	701			674		622		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,775	745			717		662		
On Flow (pcphpl)		1,775	745			717		331		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.89	0.37			0.36		0.15		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					974	1,979	726	969		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					1,036	2,108	773	1,030		
Off Flow (pcphpl)					1,036	1,054	773	1,030		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.52	0.47	0.35	0.46		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			8,460							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.125							
v_{12} (pcph)			1,054							
v_3 (pcph)										
v_{34} (pcph)			7,405							
v_{12a} (pcph)			3,384							
v_{R12a} (pcph)			4,129							
Merge Speed Index			0.54							
Merge Area Speed			52.7							
Outer Lanes Volume			2,538							
Outer Lanes Speed			57.0							
Segment Speed			55.0							
Merge v/c ratio			0.90							
Merge Density			34.8							
Merge LOS			D							

Location	1	2	3	4	5	6	7	8	9	10

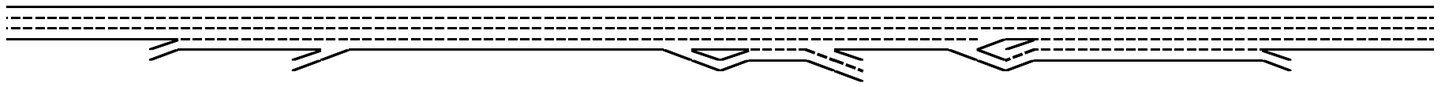
Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					6,138		4,768			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.559		0.605			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					3,260		2,515			
v_3 (pcph)										
v_{34} (pcph)					2,878		2,253			
v_{12a} (pcph)					3,260		2,515			
Diverge Speed Index					0.52		0.24			
Diverge Area Speed					53.0		59.5			
Outer Lanes Volume					1,439		1,127			
Outer Lanes Speed					69.6		70.8			
Segment Speed					59.7		64.4			
Diverge v/c ratio					0.74		0.57			
Diverge Density					30.5		24.1			
Diverge LOS					D		C			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						5,782 674 4,477 1,979 6,456		3,714 622 3,367 969 4,336		
On to Off Volume (vph)						*207*		*139*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						220		148		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						467		483		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						497		514		

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,772		830		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,888		884		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						4,010		2,884		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						4,270		3,071		

Location	1	2	3	4	5	6	7	8	9	10

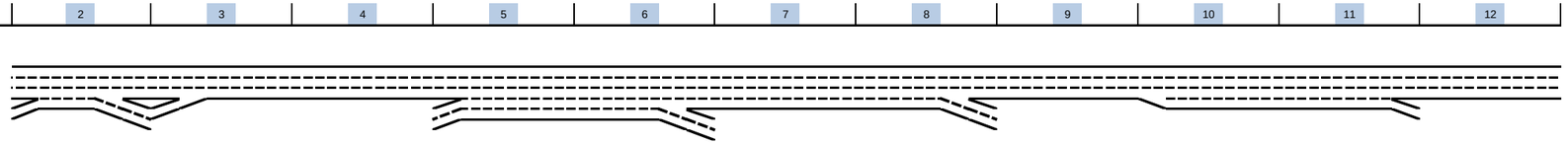
Key

<> Express Lane (HOV)

No Trucks

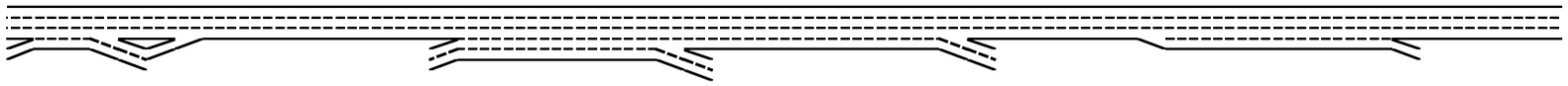
Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						2,385		1,398		
Non-Weave Flow						4,490		3,219		
Segment Flow						6,874		4,618		
Max Weave Length						6,092		4,048		
Length Check						OK		OK		
Ideal Weave Capacity						2,012		2,155		
f_{HV}						0.989		0.988		
f_p						0.999		0.999		
Capacity Condition 1						7,951		6,382		
Capacity Condition 2						6,835		11,409		
Weave v/c ratio						0.99		0.71		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						497		1,768		
Weave LC Rate						1,014		2,276		
Non-Weave LC Rate 1						1,062		898		
Non-Weave LC Rate 2						2,690		2,407		
Non-Weave LC Rate 3						-1,566		-1,745		
Segment LC Rate						2,076		3,175		
Weave Intensity Factor						0.268		0.408		
Weave Speed						54.4		50.5		
Non-Weave Speed						53.2		44.9		
Segment Speed						53.6		46.4		
Weave Density						32.1		33.1		
Weave LOS						D		D		
Summarize Segment Operations										
Segment v/c ratio	0.95	0.90	0.90	0.65	0.74	0.99	0.57	0.71		0.38
Segment Density	40.3	36.6	34.8	23.7	30.5	32.1	24.1	33.1		13.8
Segment LOS	E	E	D	C	D	D	C	D		B
Over Capacity										

Project: John Wayne Airport Expansion **Scenario:** Existing Conditions
Freeway Corridor: 73S **Peak Hour:** AM



Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,794	*4,578*	*4,720*	4,720		*6,876*	6,876	*4,734*	4,734		*2860*
On Ramp Volume	*783*	*726*		*2,408*							
Off Ramp Volume	*921*			*2,304*			*1,744*		*960*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	5,577	5,304	4,720	7,128		6,876	6,876	4,734	4,734		2,860
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,940	5,649	5,027	7,591		7,323	7,323	5,042	5,042		3,046
GP Flow (pcphpl)	1,485	1,883	1,676	1,518		1,831	1,831	1,681	1,008		1,015
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*62.8*	*62.8*	*52.5*	*52.5*		*63.4*	*63.4*	*63.4*	*63.4*		*63.4*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.63	0.80	0.71	0.65		0.78	0.78	0.72	0.43		0.43
Speed (mph)	64.9	61.7	63.9	64.8		62.4	62.4	63.9	65.0		65.0
Density (pcphpl)	22.9	30.5	26.2	23.4		29.4	29.4	26.3	15.5		15.6
LOS	C	D	D	C		D	D	D	B		B
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	5,107	4,876		5,027					5,042		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.72	0.69		0.71					0.72		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	4,959			5,142			5,469		4,021		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.70			0.73			0.78		0.43		

Location	2	3	4	5	6	7	8	9	10	11	12



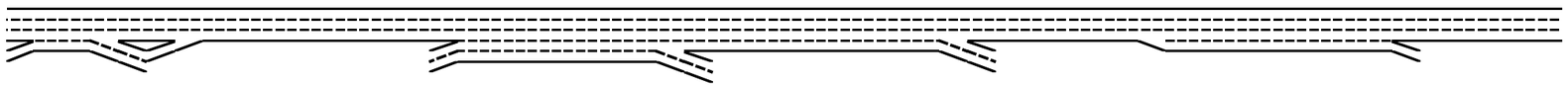
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	783	726		2,408							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	832	773		2,565							
On Flow (pcphpl)	832	773		1,282							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.42	0.35		0.57							

Location	2	3	4	5	6	7	8	9	10	11	12



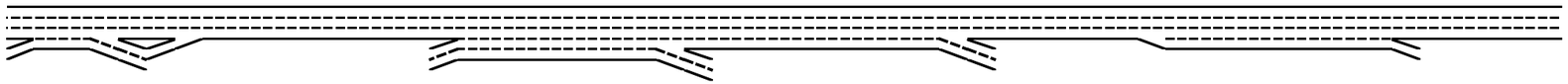
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	921			2,304			1,744		960		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	981			2,450			1,854		1,021		
Off Flow (pcphpl)	490			1,225			927		1,021		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.22			0.61			0.46		0.51		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		4,876									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,900									
v_3 (pcph)		1,976									
v_{34} (pcph)											
v_{12a} (pcph)		2,900									
v_{R12a} (pcph)		3,673									
Merge Speed Index		0.41									
Merge Area Speed		55.6									
Outer Lanes Volume		1,976									
Outer Lanes Speed		59.7									
Segment Speed		57.0									
Merge v/c ratio		0.80									
Merge Density		29.9									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



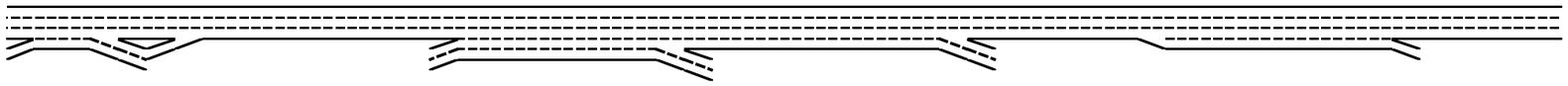
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							7,323				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.492				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							3,276				
v_3 (pcph)											
v_{34} (pcph)							4,047				
v_{12a} (pcph)							3,276				
Diverge Speed Index							0.59				
Diverge Area Speed							51.3				
Outer Lanes Volume							2,023				
Outer Lanes Speed							67.3				
Segment Speed							59.1				
Diverge v/c ratio							0.74				
Diverge Density							31.1				
Diverge LOS							D				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,794 783 4,656 921 5,577			4,720 2,408 4,824 2,304 7,128							
On to Off Volume (vph)	*129*			*778*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	137			828							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	654			1,630							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	695			1,736							

Location	2	3	4	5	6	7	8	9	10	11	12



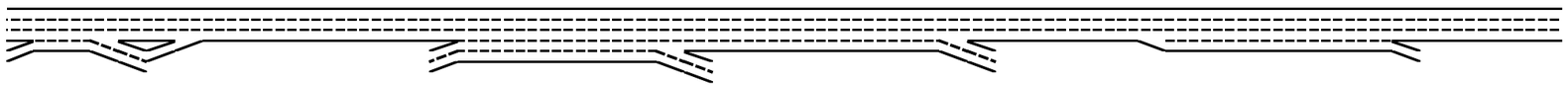
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	792			1,526							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	843			1,622							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	4,002			3,194							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	4,262			3,402							

Location	2	3	4	5	6	7	8	9	10	11	12



Key

<> Express Lane (HOV)

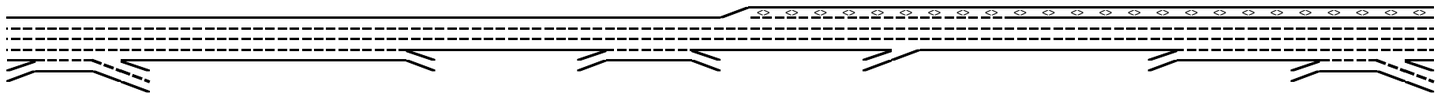
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,538			3,358							
Non-Weave Flow	4,400			4,229							
Segment Flow	5,938			7,587							
Max Weave Length	5,149			5,597							
Length Check	OK			OK							
Ideal Weave Capacity	2,086			2,011							
f_{HV}	0.989			0.989							
f_p	0.999			0.997							
Capacity Condition 1	6,180			5,949							
Capacity Condition 2	9,149			7,801							
Weave v/c ratio	0.95			1.26							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	695			1,622							
Weave LC Rate	1,281			1,998							
Non-Weave LC Rate 1	1,250			922							
Non-Weave LC Rate 2	2,670			2,632							
Non-Weave LC Rate 3	-1,046			-2,068							
Segment LC Rate	2,531			2,920							
Weave Intensity Factor	0.309			0.468							
Weave Speed	53.2			49.1							
Non-Weave Speed	50.5			41.2							
Segment Speed	51.2			44.3							
Weave Density	38.7			-							
Weave LOS	E			F							
Summarize Segment Operations											
Segment v/c ratio	0.95	0.80	0.71	1.26		0.78	0.74	0.72	0.43		0.43
Segment Density	38.7	29.9	26.2	-		29.4	31.1	26.3	15.5		15.6
Segment LOS	E	D	D	F		D	D	D	B		B
Over Capacity				Weave							

Project: John Wayne Airport Expansion **Scenario:** Existing Conditions

Freeway Corridor: 55N **Peak Hour:** AM

Location	2	3	4	5	6	7	8	9	10	12



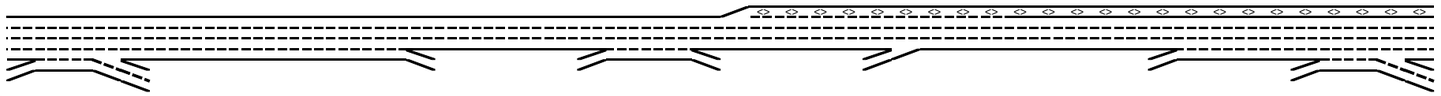
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	6,240	6,737	6,737	*4,495*	*4,454*	4,993	*4,744*	5,453	5,453	*7,305*
On Ramp Volume	*1,845*				*1,979*		*709*		*2,572*	*1,259*
Off Ramp Volume	*1,348*		*727*		*1,440*					*1,759*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	8,085	6,737	6,737	4,495	6,433	4,993	5,453	5,453	8,025	8,564
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,659	7,216	7,216	4,814	6,890	5,348	5,840	5,840	8,536	9,109
GP Flow (pcphpl)	1,732	1,804	1,804	1,605	1,723	1,783	1,947	1,947	2,134	1,822
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*53.0*	*53.0*	*53.0*	*29.2*	*32.9*	*32.9*	*43.6*	*43.6*	*43.6*	*64.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

Location	2	3	4	5	6	7	8	9	10	12



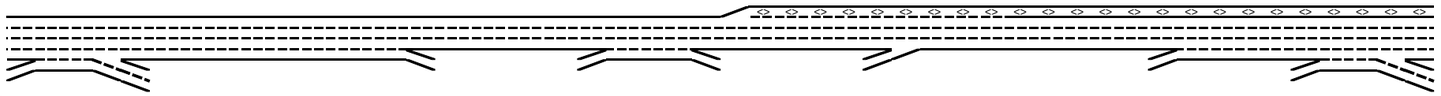
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	1,845				1,979		709		2,572	1,259
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,962				2,120		754		2,736	1,339
On Flow (pcphpl)	1,962				2,120		754		2,736	1,339
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.98				0.94		0.38		1.37	0.60

Location	2	3	4	5	6	7	8	9	10	12



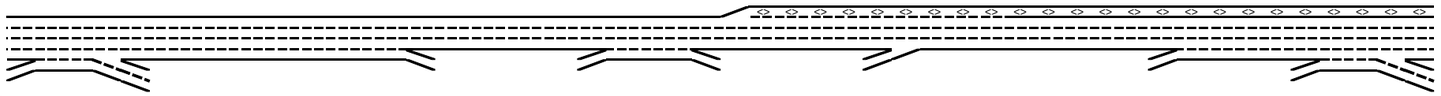
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	1,348		727		1,440					1,259
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	1,444		773		1,542					1,339
Off Flow (pcphpl)	722		773		1,542					670
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.32		0.39		0.69					0.33
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							5,087			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							3,091			
v_3 (pcph)							1,995			
v_{34} (pcph)										
v_{12a} (pcph)							3,091			
v_{R12a} (pcph)							3,845			
Merge Speed Index							0.43			
Merge Area Speed							55.2			
Outer Lanes Volume							1,995			
Outer Lanes Speed							59.6			
Segment Speed							56.6			
Merge v/c ratio							0.84			
Merge Density							28.3			
Merge LOS							D			

Location	2	3	4	5	6	7	8	9	10	12



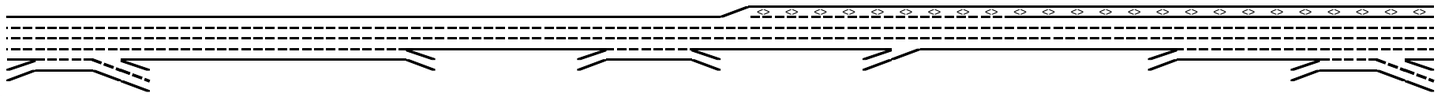
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			7,216							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.544							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			3,582							
v_3 (pcph)										
v_{34} (pcph)			3,634							
v_{12a} (pcph)			3,582							
Diverge Speed Index			0.50							
Diverge Area Speed			53.6							
Outer Lanes Volume			1,817							
Outer Lanes Speed			68.1							
Segment Speed			60.0							
Diverge v/c ratio			0.81							
Diverge Density			21.6							
Diverge LOS			C							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	6,240 1,845 6,737 1,348 8,085				4,454 1,979 4,993 1,440 6,433					7,305 1,259 6,805 1,759 8,564
On to Off Volume (vph)	*308*				*443*					*259*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	327				471					275
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	1,537				1,536					1,000
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	1,634				1,645					1,064

Location	2	3	4	5	6	7	8	9	10	12



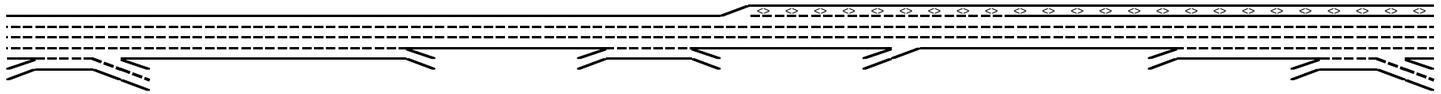
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,040				997					1,000
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	1,114				1,068					1,064
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	5,200				3,457					6,305
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	5,569				3,703					6,706

Location	2	3	4	5	6	7	8	9	10	12



Key

<> Express Lane (HOV)

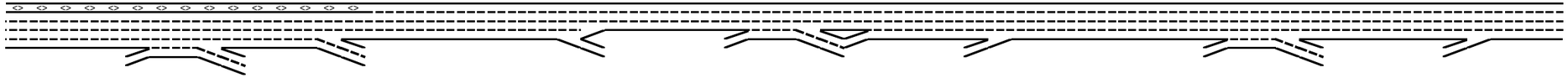
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,749				2,713					2,128
Non-Weave Flow	5,896				4,174					6,981
Segment Flow	8,645				6,887					9,109
Max Weave Length	5,777				6,613					4,883
Length Check	OK				OK					OK
Ideal Weave Capacity	1,968				1,875					2,127
f_{HV}	0.984				0.983					0.990
f_P	0.998				0.996					0.999
Capacity Condition 1	7,735				5,507					8,409
Capacity Condition 2	7,417				5,966					10,154
Weave v/c ratio	1.15				1.22					1.07
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	1,634				2,713					1,064
Weave LC Rate	1,805				2,792					1,694
Non-Weave LC Rate 1	870				499					1,733
Non-Weave LC Rate 2	3,004				2,620					3,246
Non-Weave LC Rate 3	-2,892				-3,562					-229
Segment LC Rate	2,674				3,291					3,427
Weave Intensity Factor	0.594				1.192					0.351
Weave Speed	46.4				37.8					52.0
Non-Weave Speed	42.9				34.4					46.4
Segment Speed	43.9				35.7					47.6
Weave Density	-				-					-
Weave LOS	F				F					F
Summarize Segment Operations										
Segment v/c ratio	1.15	0.77	0.81	0.68	1.22	0.76	0.84	0.83	0.91	1.07
Segment Density	-	28.8	21.6	24.9	-	28.3	28.3	32.0	-	-
Segment LOS	F	D	C	C	F	D	D	D	F	F
Over Capacity	Weave				Weave				On Ramp Roadway	Weave

Project: John Wayne Airport Expansion **Scenario:** Existing Conditions

Freeway Corridor: 55S **Peak Hour:** AM

hide	0 1 4 0 0	0 1 4 0 0	0 1 3 0 0	0 0 4 0 0	0 0 4 0 0	0 0 3 0 0	0 0 3 0 0	0 0 3 0 0	0 0 4 0 0	0 0 4 0 0	0 0 4 0 0	0 0 4 0 0	0 0 4 0 0
hide	0 FALSE FALSE FALSE 0	0 FALSE FALSE FALSE 0	0 FALSE FALSE FALSE 0	0 FALSE TRUE FALSE 0	0 FALSE TRUE FALSE 1	0 FALSE TRUE FALSE 0	0 FALSE TRUE FALSE 0	0 FALSE TRUE FALSE 0	0 FALSE TRUE FALSE 0	0 FALSE TRUE FALSE 0	0 FALSE TRUE FALSE 0	0 FALSE TRUE FALSE 0	0 FALSE TRUE FALSE 0
hide	0 0 14 0 0	1 1 14 2 1	0 0 14 2 1	0 0 13 0 0	0 0 13 1 0	0 0 13 0 0	1 1 13 2 1	1 1 13 0 0	0 1 13 0 0	0 0 13 0 0	1 1 13 2 1	0 0 13 0 0	0 1 13 0 0
hide	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Location	1	2	3	4	5	6	7	8	9	10	11	12	13



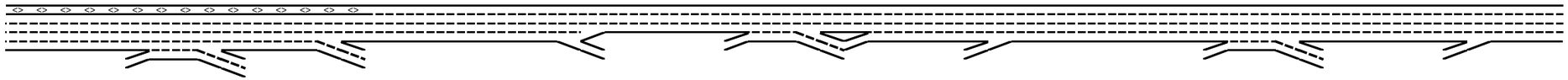
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*7,625*	7,625	*6,262*	5,612	5,612	4,992	4,992	3,827	4,135	4,861	4,861	*4,017*	4,017
On Ramp Volume		*867*					*1,243*	*308*	*726*		*921*		*283*
Off Ramp Volume		*2,300*	*650*		*620*		*2,408*				*755*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	7,625	8,492	6,262	5,612	5,612	4,992	6,235	4,135	4,861	4,861	5,782	4,017	4,300
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,111	9,033	6,661	6,011	6,011	5,347	6,678	4,429	5,206	5,206	6,193	4,302	4,606
GP Flow (pcphpl)	2,028	1,807	1,665	1,503	1,503	1,782	1,670	1,107	1,302	1,302	1,239	1,076	1,151
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*64.0*	*64.0*	*65.9*	*65.9*	*65.9*	*65.9*	*62.2*	*52.4*	*52.4*	*52.4*	*52.4*	*68.0*	*68.0*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.86	0.77	0.71	0.64	0.64	0.76	0.71	0.47	0.55	0.55	0.53	0.46	0.49
Speed (mph)	59.4	62.7	64.0	64.9	64.9	62.9	64.0	65.0	65.0	65.0	65.0	65.0	65.0
Density (pcphpl)	34.1	28.8	26.0	23.2	23.2	28.3	26.1	17.0	20.0	20.0	19.1	16.5	17.7
LOS	D	D	D	C	C	D	D	B	C	C	C	B	B
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,111					5,347	4,101	4,429		5,206		4,305
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.86					0.76	0.58	0.47		0.55		0.46

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



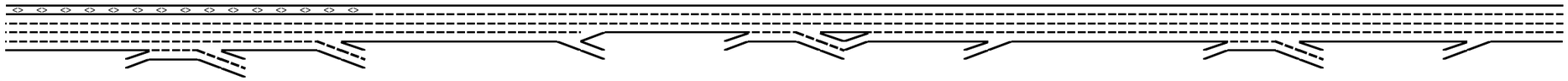
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		6,586	5,969		5,352		4,099				5,390		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.70	0.85		0.76		0.58				0.57		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



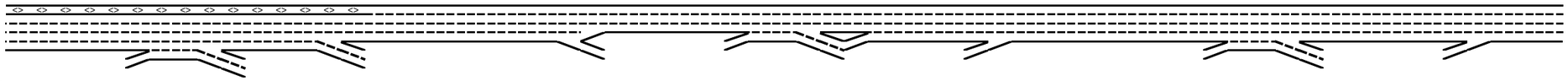
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		867					1,243	308	726		921		283
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		922					1,331	327	778		986		301
On Flow (pcphpl)		922					1,331	327	778		986		301
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.46					0.59	0.16	0.35		0.44		0.15

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



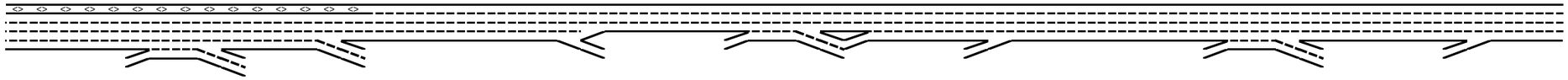
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		2,300	650		620		2,408				755		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		2,446	691		659		2,579				803		
Off Flow (pcphpl)		1,223	346		659		1,290				401		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.54	0.15		0.33		0.57				0.20		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									4,429				4,305
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.121				0.180
v_{12} (pcph)									534				776
v_3 (pcph)													
v_{34} (pcph)									3,895				3,529
v_{12a} (pcph)									1,772				1,722
v_{R12a} (pcph)									2,549				2,023
Merge Speed Index									0.30				0.31
Merge Area Speed									58.1				57.8
Outer Lanes Volume									1,329				1,291
Outer Lanes Speed									62.0				62.2
Segment Speed									60.0				60.2
Merge v/c ratio									0.55				0.44
Merge Density									20.9				17.7
Merge LOS									C				B

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



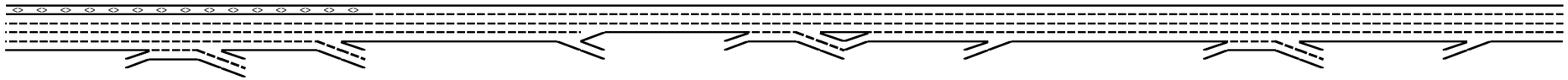
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			6,661		6,011								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.562		0.579								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,243		2,992								
v_3 (pcph)													
v_{34} (pcph)			4,417		3,018								
v_{12a} (pcph)			2,664		2,992								
Diverge Speed Index			0.23		0.49								
Diverge Area Speed			59.7		53.8								
Outer Lanes Volume			1,998		1,509								
Outer Lanes Speed			67.4		69.3								
Segment Speed			64.1		60.6								
Diverge v/c ratio			0.61		0.68								
Diverge Density			29.1		28.3								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		7,625 867 6,192 2,300 8,492					4,992 1,243 3,827 2,408 6,235				4,861 921 5,027 755 5,782		
On to Off Volume (vph)		*235*					*480*				*120*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		250					510				128		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		632					763				801		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		672					817				858		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



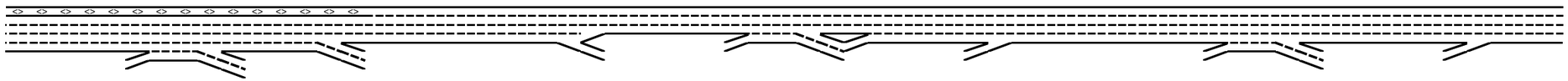
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		2,065					1,928				635		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		2,197					2,065				675		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		5,560					3,064				4,226		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		5,914					3,282				4,527		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



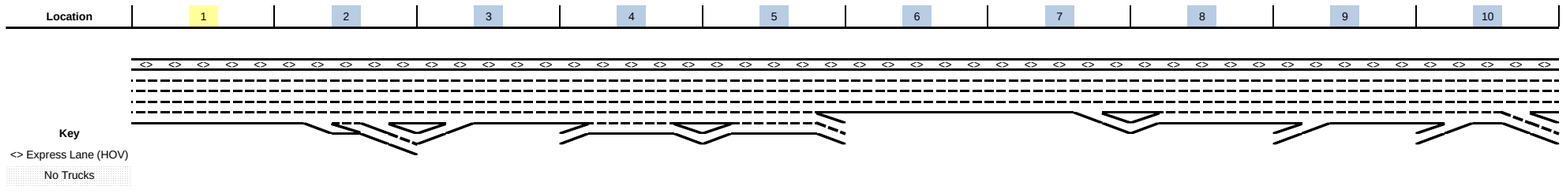
Key

<> Express Lane (HOV)

No Trucks

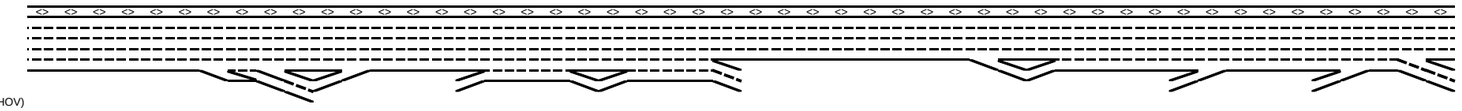
Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,869					2,882				1,532		
Non-Weave Flow		6,164					3,792				4,654		
Segment Flow		9,032					6,674				6,187		
Max Weave Length		5,774					7,040				5,030		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,056					1,985				2,045		
f_{HV}		0.990					0.983				0.984		
f_p		0.999					0.998				0.998		
Capacity Condition 1		8,134					5,843				8,027		
Capacity Condition 2		7,473					5,454				9,509		
Weave v/c ratio		1.20					1.20				0.76		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		672					817				858		
Weave LC Rate		1,291					1,624				1,127		
Non-Weave LC Rate 1		1,548					1,431				752		
Non-Weave LC Rate 2		3,063					2,535				2,727		
Non-Weave LC Rate 3		-556					-290				-2,707		
Segment LC Rate		2,839					3,055				1,879		
Weave Intensity Factor		0.306					0.286				0.360		
Weave Speed		53.3					53.9				51.8		
Non-Weave Speed		49.3					48.4				51.4		
Segment Speed		50.5					50.6				51.5		
Weave Density		-					-				30.0		
Weave LOS		F					F				D		
Summarize Segment Operations													
Segment v/c ratio	0.86	1.20	0.61	0.64	0.68	0.76	1.20	0.47	0.55	0.55	0.76	0.46	0.44
Segment Density	34.1	-	29.1	23.2	28.3	28.3	-	17.0	20.9	20.0	30.0	16.5	17.7
Segment LOS	D	F	D	C	D	D	F	B	C	C	D	B	B
Over Capacity		Weave					Weave						

Project: John Wayne Airport Expansion **Scenario:** Existing Conditions
Freeway Corridor: 405N **Peak Hour:** AM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*10,598*	10,598	*8,841*	*9,377*	*9,255*	7,201	7,201	6,584	8,024	*9,591*
On Ramp Volume			*432*	*1,186*	*448*			*1,440*	*178*	*284*
Off Ramp Volume		*1,843*		*1,781*	*2,502*		*617*			*2,658*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	10,598	10,598	9,273	10,563	9,703	7,201	7,201	8,024	8,202	9,875
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	11,468	11,468	10,005	11,397	10,392	7,713	7,713	8,594	8,785	10,577
GP Flow (pcphpl)	2,294	2,294	2,001	1,899	1,732	1,928	1,928	1,719	1,757	1,763
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*47.1*	*47.1*	*65.4*	*61.3*	*66.2*	*66.2*	*66.2*	*66.2*	*64.9*	*66.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.98	0.98	0.85	0.81	0.74	0.82	0.82	0.73	0.75	0.75
Speed (mph)	53.7	53.7	59.9	61.5	63.4	61.0	61.0	63.6	63.2	63.1
Density (pcphpl)	42.7	42.7	33.4	30.9	27.3	31.6	31.6	27.0	27.8	27.9
LOS	E	E	D	D	D	D	D	D	D	D
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			9,546	10,136	9,916			7,052	8,596	10,275
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.81	0.86	0.84			0.75	0.73	0.87
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		9,509		9,503	7,713		7,057			7,751
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.81		0.81	0.82		0.75			0.82

Location	1	2	3	4	5	6	7	8	9	10



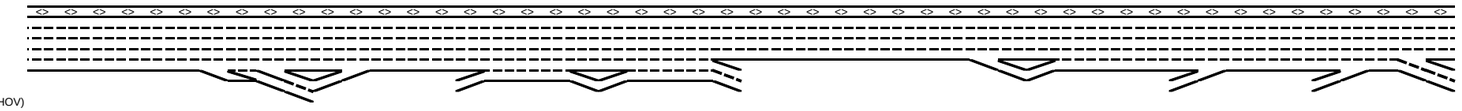
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			432	1,186	448			1,440	178	284
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			459	1,261	476			1,542	189	302
On Flow (pcphpl)			459	1,261	476			1,542	189	302
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.23	0.63	0.24			0.69	0.09	0.15

Location	1	2	3	4	5	6	7	8	9	10



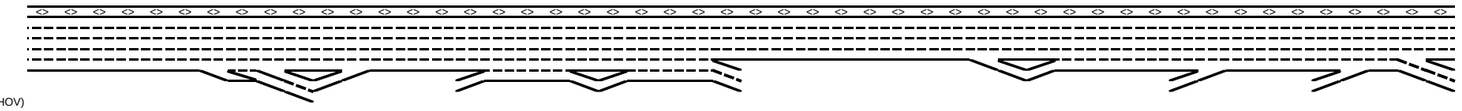
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,843		1,781	2,502		617			2,658
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,959		1,893	2,680		656			2,826
Off Flow (pcphpl)		980		1,893	1,340		656			1,413
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.49		0.95	0.60		0.33			0.71
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			7,046						6,096	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.160						0.194	
v_{12} (pcph)			1,130						1,183	
v_3 (pcph)										
v_{34} (pcph)			5,916						4,912	
v_{12a} (pcph)			2,818						2,438	
v_{R12a} (pcph)			3,278						2,627	
Merge Speed Index			0.39						0.34	
Merge Area Speed			56.1						57.1	
Outer Lanes Volume			2,114						1,829	
Outer Lanes Speed			59.2						60.2	
Segment Speed			57.8						58.9	
Merge v/c ratio			0.71						0.57	
Merge Density			27.3						22.9	
Merge LOS			C						C	

Location	1	2	3	4	5	6	7	8	9	10



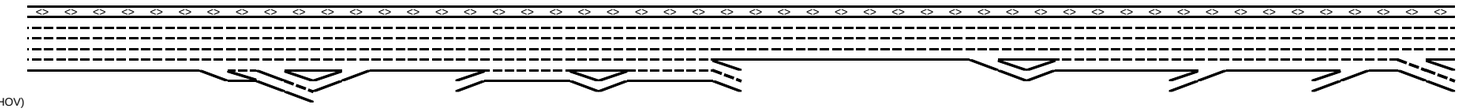
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		9,175					7,713			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.441					0.537			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		3,835					3,733			
v_3 (pcph)										
v_{34} (pcph)		5,339					3,980			
v_{12a} (pcph)		3,835					3,733			
Diverge Speed Index		0.60					0.49			
Diverge Area Speed		51.1					53.8			
Outer Lanes Volume		2,670					1,990			
Outer Lanes Speed		64.8					67.4			
Segment Speed		58.3					60.1			
Diverge v/c ratio		0.87					0.85			
Diverge Density		28.7					34.8			
Diverge LOS		D					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				9,377 1,186 8,782 1,781 10,563	9,255 448 7,201 2,502 9,703					9,591 284 7,217 2,658 9,875
On to Off Volume (vph)				*200*	*116*					*76*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				213	123					81
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				986	332					208
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,048	353					221

Location	1	2	3	4	5	6	7	8	9	10



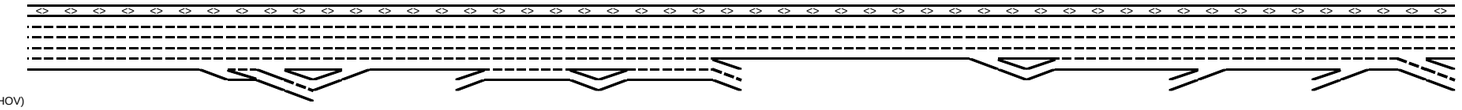
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				1,581	2,386					2,582
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				1,681	2,556					2,745
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				7,796	6,869					7,009
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				8,411	7,357					7,507

Location	1	2	3	4	5	6	7	8	9	10



Key

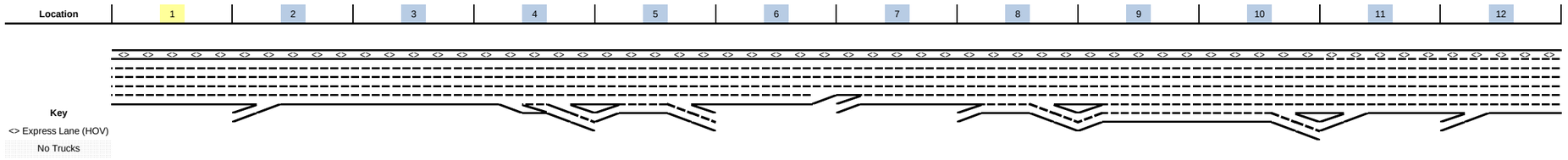
<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				2,729	2,910					2,965
Non-Weave Flow				8,624	7,479					7,589
Segment Flow				11,353	10,389					10,554
Max Weave Length				4,953	3,805					5,381
Length Check				OK	OK					OK
Ideal Weave Capacity				2,134	2,225					1,977
f_{HV}				0.979	0.983					0.985
f_P				0.999	1.000					1.000
Capacity Condition 1				10,440	10,935					9,732
Capacity Condition 2				9,769	12,282					8,411
Weave v/c ratio				1.14	0.93					1.24
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				2,729	707					221
Weave LC Rate				3,347	1,343					203
Non-Weave LC Rate 1				1,968	1,757					871
Non-Weave LC Rate 2				3,612	3,357					3,381
Non-Weave LC Rate 3				229	-109					-3,660
Segment LC Rate				5,315	3,099					1,074
Weave Intensity Factor				0.465	0.299					0.413
Weave Speed				49.1	53.5					50.4
Non-Weave Speed				34.5	49.9					53.3
Segment Speed				37.1	50.9					52.4
Weave Density				-	40.8					-
Weave LOS				F	E					F
Summarize Segment Operations										
Segment v/c ratio	0.98	0.87	0.71	1.14	0.93	0.82	0.85	0.73	0.57	1.24
Segment Density	42.7	28.7	27.3	-	40.8	31.6	34.8	27.0	22.9	-
Segment LOS	E	D	C	F	E	D	D	D	C	F
Over Capacity				Weave						Weave

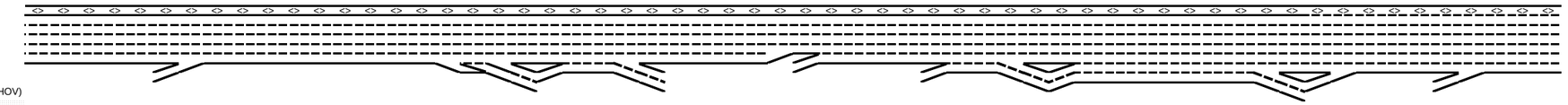
Project: John Wayne Airport Expansion **Scenario:** Existing Condition

Freeway Corridor: 405S **Peak Hour:** AM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*8,849*	8,849	10,167	10,167	*9,402*	7,931	7,931	*10,181*	9,927		*5,673*	*5867*
On Ramp Volume		*1,318*			*1,101*		*1,995*	*2,059*	*474*		*232*	*516*
Off Ramp Volume				*1,136*	*2,572*			*2,313*	*2,690*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	8,849	10,167	10,167	10,167	10,503	7,931	9,926	12,240	10,401		5,905	6,383
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	9,478	10,889	10,889	10,889	11,249	8,495	10,631	13,110	11,222		6,390	6,907
GP Flow (pcphpl)	1,896	2,178	2,178	2,178	1,875	2,124	2,126	2,185	1,603		1,278	1,381
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*35.7*	*35.7*	*35.7*	*35.7*	*44.8*	*44.8*	*44.8*	*50.1*	*50.1*		*54.0*	*54.0*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.81	0.93	0.93	0.93	0.80	0.90	0.90	0.93	0.68		0.54	0.59
Speed (mph)	61.5	56.4	56.4	56.4	61.8	57.6	57.5	56.3	64.4		65.0	65.0
Density (pcphpl)	30.8	38.6	38.6	38.6	30.3	36.9	37.0	38.8	24.9		19.7	21.3
LOS	D	E	E	E	D	E	E	E	C		C	C
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		9,488			10,079		8,495	10,904	10,718		6,144	6,358
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.81			0.86		0.90	0.93	0.91		0.52	0.54
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				9,682	8,495	8,495		10,651	8,362			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.82	0.72	0.90		0.91	0.71			

Location	1	2	3	4	5	6	7	8	9	10	11	12



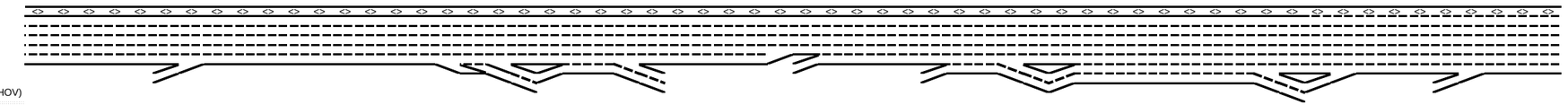
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,318			1,101		1,995	2,059	474		232	516
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,401			1,171		2,137	2,205	504		247	549
On Flow (pcphpl)		1,401			1,171		2,137	2,205	252		247	549
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.70			0.59		0.95	0.98	0.13		0.12	0.27

Location	1	2	3	4	5	6	7	8	9	10	11	12



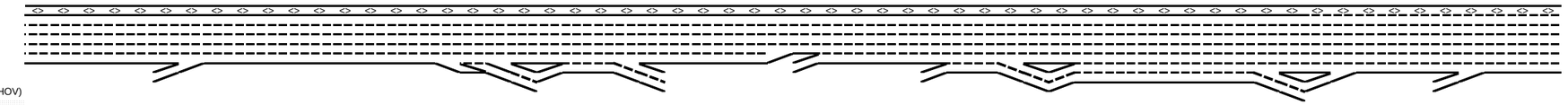
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,136	2,572			2,313	2,690			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,208	2,755			2,459	2,860			
Off Flow (pcphpl)				604	1,377			1,230	1,430			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.30	0.61			0.61	0.71			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		6,988									4,669	4,832
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.043									0.187	0.149
v_{12} (pcph)		298									873	721
v_3 (pcph)												
v_{34} (pcph)		6,690									3,796	4,111
v_{12a} (pcph)		2,795									1,868	1,933
v_{R12a} (pcph)		4,197									2,114	2,482
Merge Speed Index		0.54									0.32	0.29
Merge Area Speed		52.5									57.7	58.4
Outer Lanes Volume		2,096									1,401	1,450
Outer Lanes Speed		59.3									61.8	61.6
Segment Speed		55.7									60.0	60.1
Merge v/c ratio		0.91									0.46	0.54
Merge Density		34.1									18.6	17.2
Merge LOS		D									B	B

Location	1	2	3	4	5	6	7	8	9	10	11	12



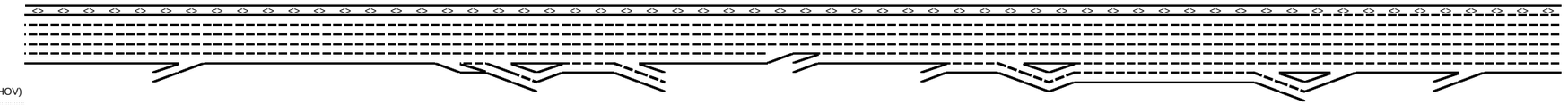
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				8,712								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.487								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				3,159								
v_3 (pcph)												
v_{34} (pcph)				5,553								
v_{12a} (pcph)				3,485								
Diverge Speed Index				0.54								
Diverge Area Speed				52.7								
Outer Lanes Volume				2,613								
Outer Lanes Speed				65.0								
Segment Speed				59.4								
Diverge v/c ratio				0.79								
Diverge Density				27.2								
Diverge LOS				C								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					9,402 1,101 7,931 2,572 10,503			10,181 2,059 9,927 2,313 12,240	9,927 474 7,711 2,690 10,401			
On to Off Volume (vph)					*270*			*389*	*123*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					287			414	130			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					831			1,670	351			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					884			1,789	374			

Location	1	2	3	4	5	6	7	8	9	10	11	12



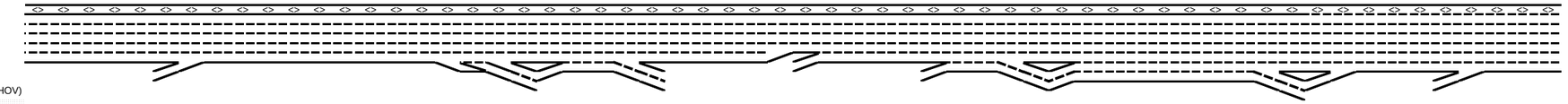
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					2,302			1,924	2,567			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					2,466			2,045	2,730			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					7,100			8,257	7,360			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					7,604			8,844	7,941			

Location	1	2	3	4	5	6	7	8	9	10	11	12



Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					3,350			3,834	3,103			
Non-Weave Flow					7,891			9,257	8,071			
Segment Flow					11,241			13,091	11,174			
Max Weave Length					5,563			5,507	3,780			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,045			1,967	2,099			
f_{HV}					0.984			0.984	0.980			
f_p					0.999			0.998	1.000			
Capacity Condition 1					10,049			9,656	10,280			
Capacity Condition 2					7,915			8,046	12,344			
Weave v/c ratio					1.40			1.60	1.06			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					884			1,789	2,730			
Weave LC Rate					1,286			1,771	2,712			
Non-Weave LC Rate 1					1,516			1,215	971			
Non-Weave LC Rate 2					3,449			3,753	3,489			
Non-Weave LC Rate 3					-1,117			-3,259	-3,545			
Segment LC Rate					2,802			2,986	3,683			
Weave Intensity Factor					0.356			0.926	1.092			
Weave Speed					51.9			41.0	38.9			
Non-Weave Speed					47.8			39.6	34.6			
Segment Speed					49.0			40.0	35.7			
Weave Density					-			-	-			
Weave LOS					F			F	F			
Summarize Segment Operations												
Segment v/c ratio	0.81	0.91	0.93	0.79	1.40	0.90	0.90	1.60	1.06		0.46	0.54
Segment Density	30.8	34.1	38.6	27.2	-	36.9	37.0	-	-		18.6	17.2
Segment LOS	D	D	E	C	F	E	E	F	F		B	B
Over Capacity					Weave			Weave	Weave			

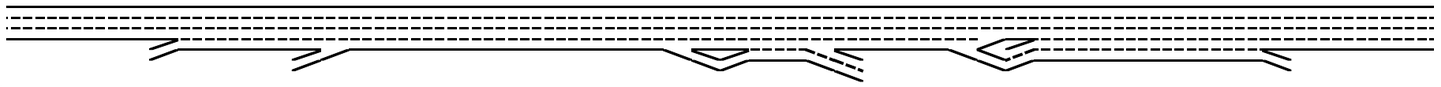
Project: John Wayne Airport Expansion **Scenario:** Existing Conditions
Freeway Corridor: 73N **Peak Hour:** PM

Location	1	2	3	4	5	6	7	8	9	10

Key
<> Express Lane (HOV)
No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*4,924*	4,924	6,749	*5,669*	5,669	*5,734*	6,697	*5,232*		5,895
On Ramp Volume		*1,825*	*886*			*2,371*		*1,213*		
Off Ramp Volume					*550*	*1,408*	*1,222*	*550*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	4,924	6,749	7,635	5,669	5,669	8,105	6,697	6,445		5,895
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,244	7,188	8,131	6,037	6,037	8,632	7,132	6,864		6,278
GP Flow (pcphpl)	1,748	1,797	2,033	1,509	1,509	1,726	1,783	1,373		1,570
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*57.9*	*57.9*	*57.9*	*65.1*	*65.1*	*64.5*	*64.5*	*60.4*		*60.4*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.74	0.76	0.87	0.64	0.64	0.73	0.76	0.58		0.67
Speed (mph)	63.3	62.8	59.3	64.8	64.8	63.5	62.9	65.0		64.6
Density (pcphpl)	27.6	28.6	34.3	23.3	23.3	27.2	28.3	21.1		24.3
LOS	D	D	D	C	C	D	D	C		C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		5,247	7,189			6,111		5,572		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.74	0.76			0.65		0.79		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					5,453	7,132	5,831	6,279		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.58	0.76	0.83	0.89		

Location	1	2	3	4	5	6	7	8	9	10



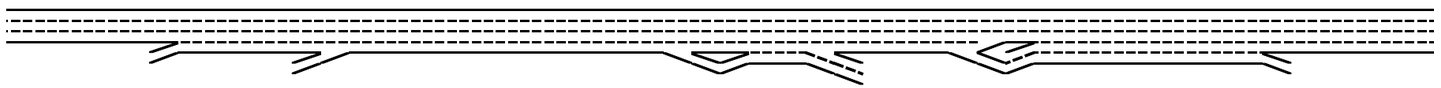
Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,825	886			2,371		1,213		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,940	942			2,521		1,292		
On Flow (pcphpl)		1,940	942			2,521		646		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.97	0.47			1.26		0.29		

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					550	1,408	1,222	550		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					585	1,500	1,301	585		
Off Flow (pcphpl)					585	750	1,301	585		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.29	0.33	0.59	0.26		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			7,189							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.100							
v_{12} (pcph)			719							
v_3 (pcph)										
v_{34} (pcph)			6,470							
v_{12a} (pcph)			2,876							
v_{R12a} (pcph)			3,818							
Merge Speed Index			0.47							
Merge Area Speed			54.2							
Outer Lanes Volume			2,157							
Outer Lanes Speed			59.0							
Segment Speed			56.7							
Merge v/c ratio			0.83							
Merge Density			32.3							
Merge LOS			D							

Location	1	2	3	4	5	6	7	8	9	10

Key

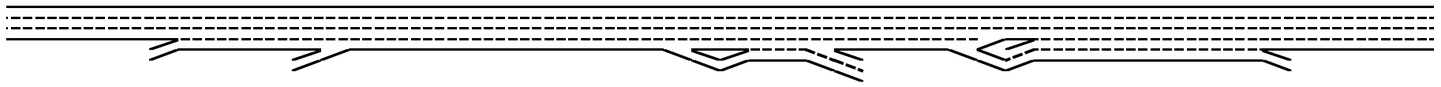
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					6,037		7,132			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.582		0.522			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					2,962		3,844			
v_3 (pcph)										
v_{34} (pcph)					3,075		3,289			
v_{12a} (pcph)					2,962		3,844			
Diverge Speed Index					0.48		0.29			
Diverge Area Speed					53.9		58.4			
Outer Lanes Volume					1,538		1,644			
Outer Lanes Speed					69.2		68.8			
Segment Speed					60.8		62.8			
Diverge v/c ratio					0.67		0.87			
Diverge Density					27.9		35.5			
Diverge LOS					C		E			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						5,734 2,371 6,697 1,408 8,105		5,232 1,213 5,895 550 6,445		
On to Off Volume (vph)						*412*		*104*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						438		110		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						1,959		1,109		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						2,083		1,182		

T

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						996		446		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,061		476		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						4,738		4,786		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						5,046		5,097		

T

Location	1	2	3	4	5	6	7	8	9	10

Key

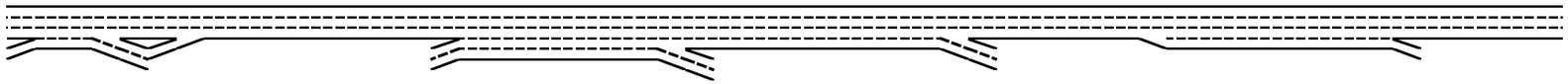
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						3,144		1,657		
Non-Weave Flow						5,484		5,207		
Segment Flow						8,627		6,864		
Max Weave Length						6,285		3,398		
Length Check						OK		OK		
Ideal Weave Capacity						1,997		2,205		
f_{HV}						0.989		0.988		
f_p						0.998		0.998		
Capacity Condition 1						7,882		6,525		
Capacity Condition 2						6,498		14,300		
Weave v/c ratio						1.31		1.04		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						2,083		951		
Weave LC Rate						2,600		1,459		
Non-Weave LC Rate 1						1,267		1,308		
Non-Weave LC Rate 2						2,912		2,850		
Non-Weave LC Rate 3						-1,248		-1,159		
Segment LC Rate						3,867		2,767		
Weave Intensity Factor						0.437		0.366		
Weave Speed						49.8		51.6		
Non-Weave Speed						39.7		47.2		
Segment Speed						42.8		48.2		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.74	0.76	0.83	0.64	0.67	1.31	0.87	1.04		0.67
Segment Density	27.6	28.6	32.3	23.3	27.9	-	35.5	-		24.3
Segment LOS	D	D	D	C	C	F	E	F		C
Over Capacity						On Ramp Roadway Weave		Weave		

Project: John Wayne Airport Expansion **Scenario:** Existing Conditions
Freeway Corridor: 73S **Peak Hour:** PM

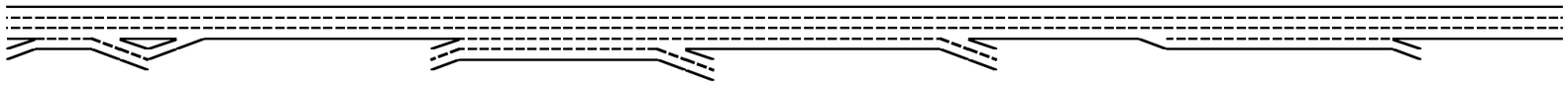
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,229	*3,717*	*3,913*	3,913		5,030	5,030	*5,388*	5,388		*4310*
On Ramp Volume	*653*	*1,222*		*2,089*							
Off Ramp Volume	*1,205*			*972*			*923*		*567*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	4,882	4,939	3,913	6,002		5,030	5,030	5,388	5,388		4,310
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,199	5,260	4,167	6,392		5,357	5,357	5,738	5,738		4,590
GP Flow (pcphpl)	1,300	1,753	1,389	1,278		1,339	1,339	1,913	1,148		1,530
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*63.8*	*63.8*	*63.9*	*63.9*		*72.7*	*72.7*	*72.7*	*72.7*		*72.7*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.55	0.75	0.59	0.54		0.57	0.57	0.81	0.49		0.65
Speed (mph)	65.0	63.2	65.0	65.0		65.0	65.0	61.3	65.0		64.8
Density (pcphpl)	20.0	27.7	21.4	19.7		20.6	20.6	31.2	17.7		23.6
LOS	C	D	C	C		C	C	D	B		C
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	4,505	3,959		4,167					5,738		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.64	0.56		0.59					0.81		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	3,916			5,359			4,376		5,135		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.56			0.76			0.62		0.55		

Location	2	3	4	5	6	7	8	9	10	11	12



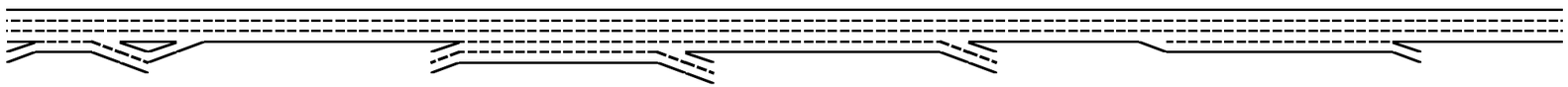
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	653	1,222		2,089							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	694	1,301		2,225							
On Flow (pcphpl)	694	1,301		1,112							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.35	0.59		0.49							

Location	2	3	4	5	6	7	8	9	10	11	12



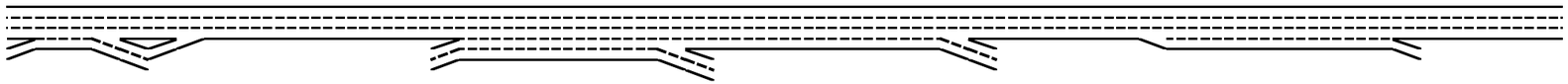
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	1,205			972			923		567		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	1,283			1,033			981		603		
Off Flow (pcphpl)	642			517			491		603		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.29			0.26			0.25		0.30		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		3,959									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,354									
v_3 (pcph)		1,604									
v_{34} (pcph)											
v_{12a} (pcph)		2,354									
v_{R12a} (pcph)		3,656									
Merge Speed Index		0.40									
Merge Area Speed		55.7									
Outer Lanes Volume		1,604									
Outer Lanes Speed		61.0									
Segment Speed		57.2									
Merge v/c ratio		0.79									
Merge Density		29.5									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



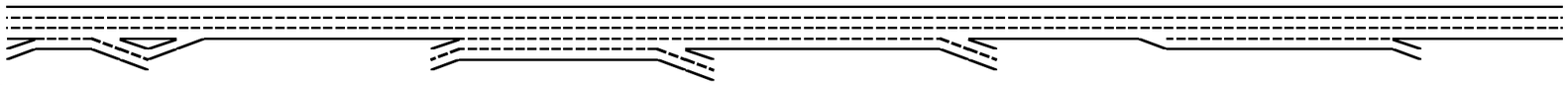
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							5,357				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.581				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,119				
v_3 (pcph)											
v_{34} (pcph)							3,238				
v_{12a} (pcph)							2,143				
Diverge Speed Index							0.52				
Diverge Area Speed							53.1				
Outer Lanes Volume							1,607				
Outer Lanes Speed							68.9				
Segment Speed							61.6				
Diverge v/c ratio							0.49				
Diverge Density							21.4				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,229 653 3,677 1,205 4,882			3,913 2,089 5,030 972 6,002							
On to Off Volume (vph)	*161*			*338*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	171			360							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	492			1,751							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	523			1,864							

Location	2	3	4	5	6	7	8	9	10	11	12



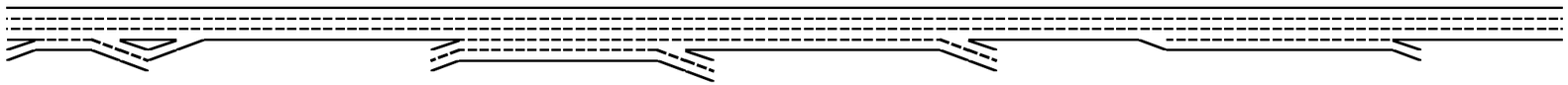
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	1,044			634							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	1,112			674							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	3,185			3,279							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	3,392			3,492							

Location	2	3	4	5	6	7	8	9	10	11	12



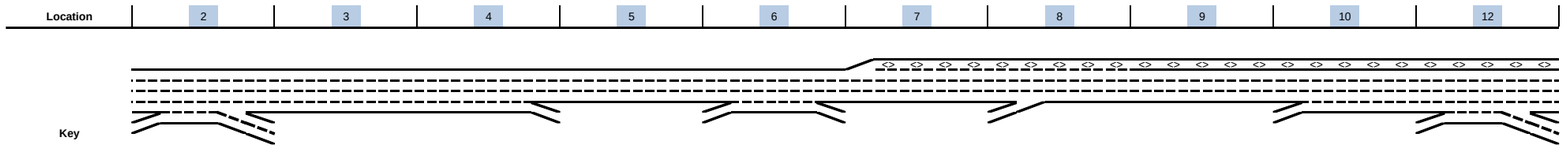
Key

<> Express Lane (HOV)

No Trucks

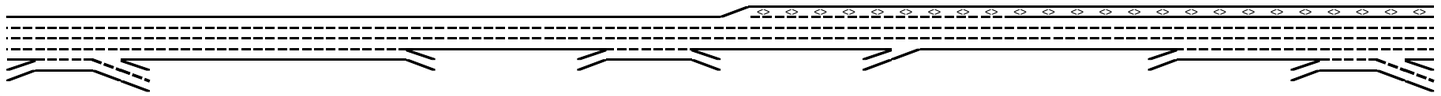
Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,635			2,538							
Non-Weave Flow	3,564			3,852							
Segment Flow	5,198			6,390							
Max Weave Length	5,739			5,084							
Length Check	OK			OK							
Ideal Weave Capacity	2,041			2,050							
f_{HV}	0.989			0.989							
f_p	0.999			0.997							
Capacity Condition 1	6,047			6,059							
Capacity Condition 2	7,538			8,682							
Weave v/c ratio	0.85			1.04							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	523			674							
Weave LC Rate	1,109			1,050							
Non-Weave LC Rate 1	1,078			844							
Non-Weave LC Rate 2	2,484			2,548							
Non-Weave LC Rate 3	-1,297			-2,172							
Segment LC Rate	2,187			1,894							
Weave Intensity Factor	0.276			0.333							
Weave Speed	54.2			52.5							
Non-Weave Speed	52.9			49.9							
Segment Speed	53.3			50.9							
Weave Density	32.5			-							
Weave LOS	D			F							
Summarize Segment Operations											
Segment v/c ratio	0.85	0.79	0.59	1.04		0.57	0.49	0.81	0.49		0.65
Segment Density	32.5	29.5	21.4	-		20.6	21.4	31.2	17.7		23.6
Segment LOS	D	D	C	F		C	C	D	B		C
Over Capacity				Weave							

Project: John Wayne Airport Expansion **Scenario:** Existing Conditions
Freeway Corridor: 55N **Peak Hour:** PM



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Define Freeway Segment										
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	4,074	2,604	2,604	*2,606*	2,606	2,904	*2,330*	2,890	2,890	*3,520*
On Ramp Volume	*965*				*1,408*		*560*		*905*	*1,091*
Off Ramp Volume	*2,435*		*422*		*1,110*					*1,045*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	5,039	2,604	2,604	2,606	4,014	2,904	2,890	2,890	3,795	4,611
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	5,397	2,789	2,789	2,791	4,299	3,110	3,095	3,095	4,037	4,905
GP Flow (pcphpl)	1,079	697	697	930	1,075	1,037	1,032	1,032	1,009	981
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*63.2*	*63.2*	*63.2*	*62.3*	*60.5*	*60.5*	*13.5*	*13.5*	*13.5*	*14.0*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

Location	2	3	4	5	6	7	8	9	10	12



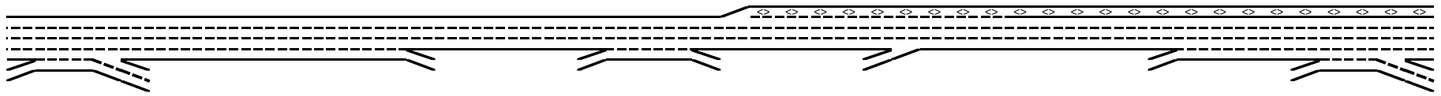
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	965				1,408		560		905	1,091
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,026				1,508		595		963	1,160
On Flow (pcphpl)	1,026				1,508		595		963	1,160
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.51				0.67		0.30		0.48	0.52

Location	2	3	4	5	6	7	8	9	10	12



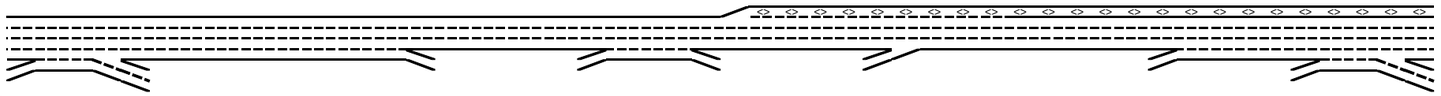
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	2,435		422		1,110					1,091
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	2,608		449		1,189					1,160
Off Flow (pcphpl)	1,304		449		1,189					580
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.58		0.22		0.53					0.29
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							2,500			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							1,519			
v_3 (pcph)							981			
v_{34} (pcph)										
v_{12a} (pcph)							1,519			
v_{R12a} (pcph)							2,115			
Merge Speed Index							0.28			
Merge Area Speed							58.6			
Outer Lanes Volume							981			
Outer Lanes Speed							63.3			
Segment Speed							60.0			
Merge v/c ratio							0.46			
Merge Density							14.9			
Merge LOS							B			

Location	2	3	4	5	6	7	8	9	10	12



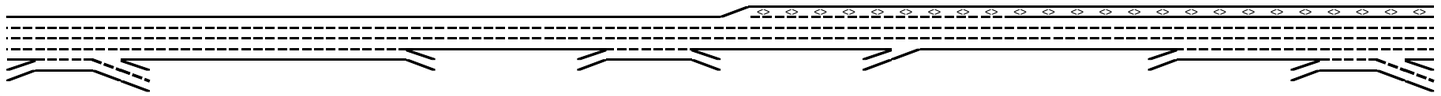
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			2,789							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.670							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			1,469							
v_3 (pcph)										
v_{34} (pcph)			1,320							
v_{12a} (pcph)			1,469							
Diverge Speed Index			0.47							
Diverge Area Speed			54.2							
Outer Lanes Volume			660							
Outer Lanes Speed			71.3							
Segment Speed			61.2							
Diverge v/c ratio			0.33							
Diverge Density			3.4							
Diverge LOS			A							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	4,074 965 2,604 2,435 5,039				2,606 1,408 2,904 1,110 4,014					3,520 1,091 3,566 1,045 4,611
On to Off Volume (vph)	*466*				*389*					*247*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	496				414					263
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	499				1,019					844
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	530				1,091					897

Location	2	3	4	5	6	7	8	9	10	12

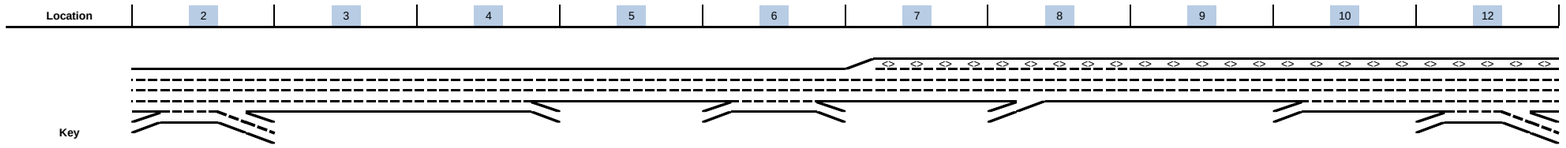


Key

<> Express Lane (HOV)

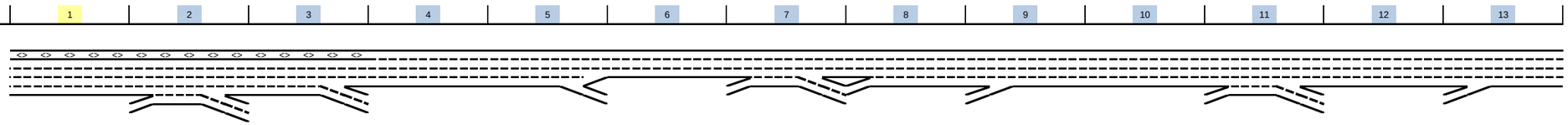
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,969				721					844
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	2,109				772					897
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	2,105				1,885					2,676
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	2,255				2,019					2,847



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,639				1,863					1,795
Non-Weave Flow	2,751				2,433					3,110
Segment Flow	5,389				4,296					4,905
Max Weave Length	7,705				7,061					6,302
Length Check	OK				OK					OK
Ideal Weave Capacity	1,821				1,840					2,018
f_{HV}	0.984				0.984					0.990
f_{P}	0.999				0.996					0.998
Capacity Condition 1	7,160				5,407					7,974
Capacity Condition 2	4,820				5,420					6,477
Weave v/c ratio	1.10				0.78					0.75
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	530				1,863					897
Weave LC Rate	700				1,942					1,528
Non-Weave LC Rate 1	222				140					935
Non-Weave LC Rate 2	2,302				2,232					2,382
Non-Weave LC Rate 3	-3,709				-3,938					-1,506
Segment LC Rate	922				2,083					2,463
Weave Intensity Factor	0.257				0.831					0.270
Weave Speed	54.8				42.3					54.4
Non-Weave Speed	54.7				44.7					52.7
Segment Speed	54.8				43.6					53.3
Weave Density	-				32.8					23.0
Weave LOS	F				D					C
Summarize Segment Operations										
Segment v/c ratio	1.10	0.30	0.33	0.40	0.78	0.44	0.46	0.44	0.43	0.75
Segment Density	-	10.7	3.4	14.3	32.8	16.0	14.9	15.9	15.5	23.0
Segment LOS	F	A	A	B	D	B	B	B	B	C
Over Capacity	Weave									

Project: John Wayne Airport Expansion **Scenario:** Existing Conditions
Freeway Corridor: 55S **Peak Hour:** PM



Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment	55S-1	55S-2 55S-2b 55S-2c	55S-3 55S-3b	55S-4	55S-5	55S-6	55S-7 55S-7b 55S-7c	55S-8 55S-8b	55S-9	55S-10	55S-11 55S-11b 55S-11c	55S-12	55S-13
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Density	36.5	-	33.7	25.8	30.6	33.0	-	23.7	30.2	30.1	-	23.5	22.9
LOS	E	F	D	C	D	D	F	C	D	D	F	C	C
Speed	55.7	55.7	63.9	63.9	63.9	63.9	58.0	51.0	51.0	51.0	51.0	65.1	65.1
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*7,941*	7,941	*7,248*	6,185	6,185	5,565	5,565	5,123	5,741	6,963	6,963	*5,686*	5,686
On Ramp Volume		*897*					*1,647*	*618*	*1,222*		*1,205*		*241*
Off Ramp Volume		*1,607*	*1,063*		*620*		*2,089*				*1,738*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	7,941	8,838	7,248	6,185	6,185	5,565	7,212	5,741	6,963	6,963	8,168	5,686	5,927
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,447	9,401	7,710	6,624	6,624	5,960	7,724	6,149	7,458	7,458	8,748	6,090	6,348
GP Flow (pcphpl)	2,112	1,880	1,927	1,656	1,656	1,987	1,931	1,537	1,864	1,864	1,750	1,523	1,587
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*55.7*	*55.7*	*63.9*	*63.9*	*63.9*	*63.9*	*58.0*	*51.0*	*51.0*	*51.0*	*51.0*	*65.1*	*65.1*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.90	0.80	0.82	0.70	0.70	0.85	0.82	0.65	0.79	0.79	0.74	0.65	0.68
Speed (mph)	57.8	61.7	61.1	64.1	64.1	60.1	61.0	64.7	61.9	61.9	63.3	64.8	64.5
Density (pcphpl)	36.5	30.5	31.6	25.8	25.8	33.0	31.7	23.7	30.1	30.1	27.7	23.5	24.6
LOS	E	D	D	C	C	D	D	C	D	D	D	C	C
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,447					5,960	5,492	6,149		7,458		6,092

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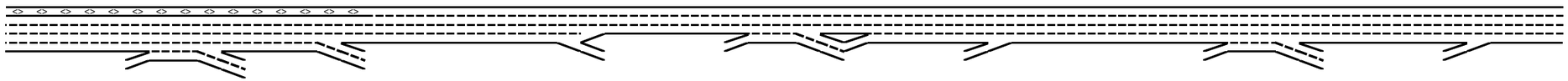
Location	1	2	3	4	5	6	7	8	9	10	11	12	13



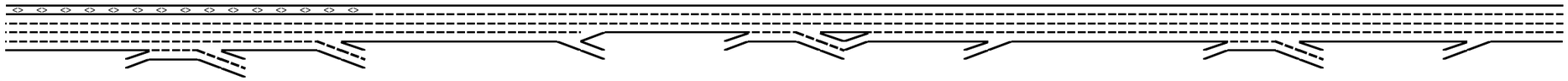
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.90					0.85	0.78	0.65		0.79		0.65
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		7,692	6,579		5,965		5,487				6,901		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.82	0.93		0.85		0.78				0.73		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



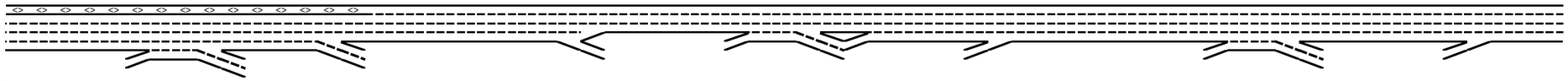
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		897					1,647	618	1,222		1,205		241
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		954					1,764	657	1,309		1,291		256
On Flow (pcphpl)		954					1,764	657	1,309		1,291		256
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.48					0.78	0.33	0.59		0.57		0.13

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



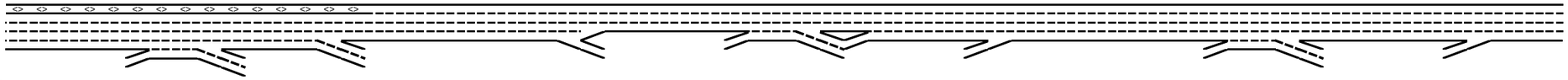
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		1,607	1,063		620		2,089				1,738		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		1,709	1,131		659		2,237				1,848		
Off Flow (pcphpl)		855	565		659		1,119				924		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.38	0.25		0.33		0.50				0.46		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									6,149				6,092
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.054				0.186
v_{12} (pcph)									333				1,132
v_3 (pcph)													
v_{34} (pcph)									5,816				4,960
v_{12a} (pcph)									2,460				2,437
v_{R12a} (pcph)									3,768				2,693
Merge Speed Index									0.42				0.34
Merge Area Speed									55.4				57.2
Outer Lanes Volume									1,845				1,828
Outer Lanes Speed									60.2				60.2
Segment Speed									57.6				58.9
Merge v/c ratio									0.82				0.59
Merge Density									30.2				22.9
Merge LOS									D				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



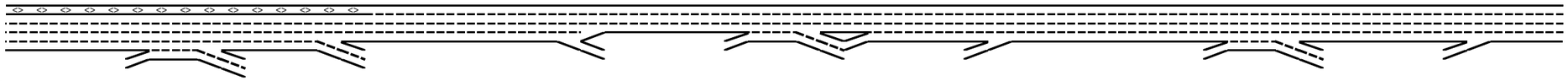
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			7,710		6,624								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.515		0.564								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,841		3,260								
v_3 (pcph)													
v_{34} (pcph)			4,868		3,364								
v_{12a} (pcph)			3,084		3,260								
Diverge Speed Index			0.27		0.49								
Diverge Area Speed			58.8		53.8								
Outer Lanes Volume			2,313		1,682								
Outer Lanes Speed			66.2		68.6								
Segment Speed			63.0		60.4								
Diverge v/c ratio			0.70		0.74								
Diverge Density			33.7		30.6								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		7,941 897 7,231 1,607 8,838					5,565 1,647 5,123 2,089 7,212				6,963 1,205 6,430 1,738 8,168		
On to Off Volume (vph)		*163*					*477*				*256*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		173					507				273		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		734					1,170				949		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		780					1,253				1,016		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



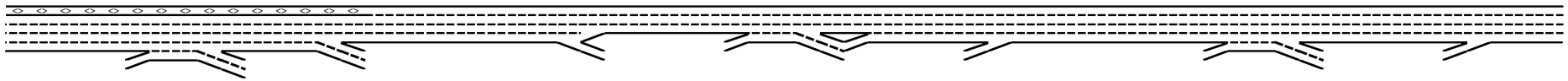
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		1,444					1,612				1,482		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		1,536					1,726				1,575		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		6,497					3,953				5,481		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		6,911					4,234				5,871		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



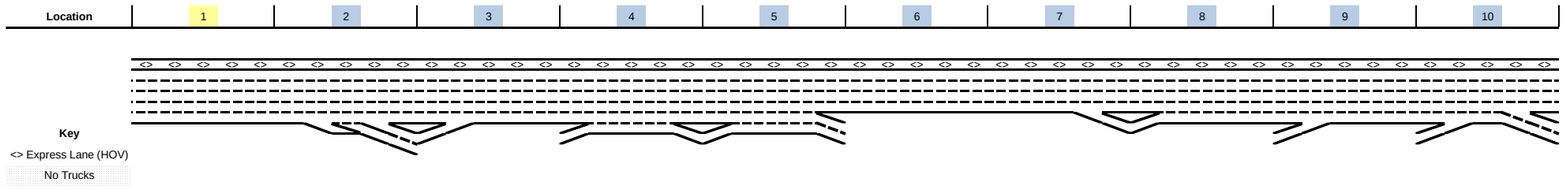
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,316					2,980				2,591		
Non-Weave Flow		7,084					4,741				6,143		
Segment Flow		9,400					7,721				8,735		
Max Weave Length		5,016					6,524				5,548		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,114					2,024				2,005		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.997				0.998		
Capacity Condition 1		8,363					5,954				7,879		
Capacity Condition 2		9,632					6,098				7,948		
Weave v/c ratio		1.11					1.27				1.09		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		780					1,253				1,016		
Weave LC Rate		1,399					2,060				1,286		
Non-Weave LC Rate 1		1,738					1,627				1,059		
Non-Weave LC Rate 2		3,269					2,746				3,059		
Non-Weave LC Rate 3		-248					4				-2,286		
Segment LC Rate		3,137					3,686				2,344		
Weave Intensity Factor		0.331					0.332				0.429		
Weave Speed		52.6					52.5				50.0		
Non-Weave Speed		48.1					43.6				47.2		
Segment Speed		49.1					46.7				48.0		
Weave Density		-					-				-		
Weave LOS		F					F				F		
Summarize Segment Operations													
Segment v/c ratio	0.90	1.11	0.70	0.70	0.74	0.85	1.27	0.65	0.82	0.79	1.09	0.65	0.59
Segment Density	36.5	-	33.7	25.8	30.6	33.0	-	23.7	30.2	30.1	-	23.5	22.9
Segment LOS	E	F	D	C	D	D	F	C	D	D	F	C	C
Over Capacity		Weave					Weave				Weave		

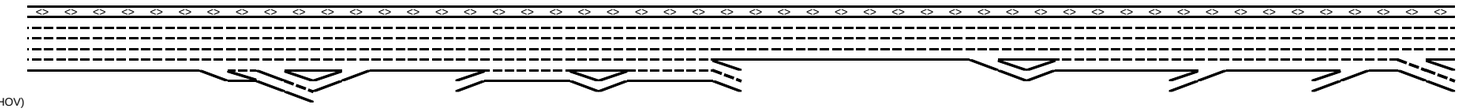
Project: John Wayne Airport Expansion **Scenario:** Existing Conditions
Freeway Corridor: 405N **Peak Hour:** PM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*7,556*	7,556	*6,761*	*7,536*	*8,942*	7,546	7,546	6,959	8,069	8,350
On Ramp Volume			*716*	*1,119*	*1,342*			*1,110*	*281*	*540*
Off Ramp Volume		*1,028*		*706*	*2,738*		*587*			*2,741*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	7,556	7,556	7,477	8,655	10,284	7,546	7,546	8,069	8,350	8,890
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,176	8,176	8,067	9,338	11,015	8,082	8,082	8,642	8,943	9,522
GP Flow (pcphpl)	1,635	1,635	1,613	1,556	1,836	2,021	2,021	1,728	1,789	1,587
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*23.5*	*23.5*	*22.3*	*20.6*	*26.8*	*26.8*	*26.8*	*26.8*	*11.4*	*11.3*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.70	0.70	0.69	0.66	0.78	0.86	0.86	0.74	0.76	0.68
Speed (mph)	64.2	64.2	64.4	64.7	62.3	59.5	59.5	63.5	62.9	64.5
Density (pcphpl)	25.5	25.5	25.1	24.1	29.5	33.9	33.9	27.2	28.5	24.6
LOS	C	C	C	C	D	D	D	D	D	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			7,306	8,149	9,588			7,453	8,645	8,948
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.62	0.69	0.82			0.79	0.74	0.76
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		7,083		8,588	8,082		7,458			6,608
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.60		0.73	0.86		0.79			0.70

T

Location	1	2	3	4	5	6	7	8	9	10



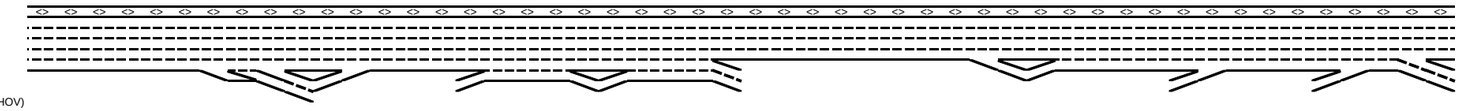
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			716	1,119	1,342			1,110	281	540
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			761	1,190	1,427			1,189	299	574
On Flow (pcphpl)			761	1,190	1,427			1,189	299	574
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.38	0.59	0.71			0.53	0.15	0.29

Location	1	2	3	4	5	6	7	8	9	10



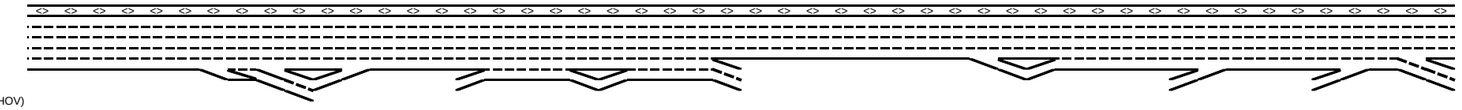
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,028		706	2,738		587			2,741
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,093		751	2,933		624			2,914
Off Flow (pcphpl)		546		751	1,466		624			1,457
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.27		0.38	0.65		0.31			0.73
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			5,333						6,145	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.123						0.180	
v_{12} (pcph)			654						1,109	
v_3 (pcph)										
v_{34} (pcph)			4,679						5,036	
v_{12a} (pcph)			2,133						2,458	
v_{R12a} (pcph)			2,895						2,757	
Merge Speed Index			0.35						0.35	
Merge Area Speed			56.9						57.0	
Outer Lanes Volume			1,600						1,843	
Outer Lanes Speed			61.0						60.2	
Segment Speed			59.0						58.8	
Merge v/c ratio			0.63						0.60	
Merge Density			24.2						23.9	
Merge LOS			C						C	

Location	1	2	3	4	5	6	7	8	9	10



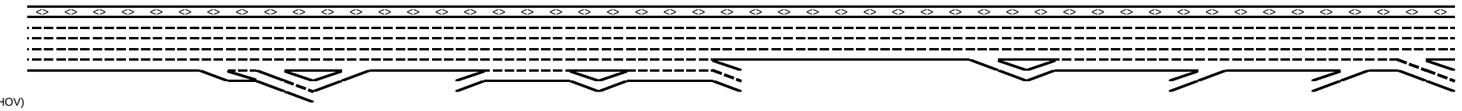
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		6,541					8,082			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.546					0.529			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		2,509					3,876			
v_3 (pcph)										
v_{34} (pcph)		4,032					4,206			
v_{12a} (pcph)		2,616					3,876			
Diverge Speed Index		0.53					0.48			
Diverge Area Speed		52.9					53.9			
Outer Lanes Volume		1.962					2,103			
Outer Lanes Speed		67.6					67.0			
Segment Speed		60.8					60.0			
Diverge v/c ratio		0.59					0.88			
Diverge Density		18.2					36.1			
Diverge LOS		B					E			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				7,536 1,119 7,949 706 8,655	8,942 1,342 7,546 2,738 10,284					8,350 540 6,149 2,741 8,890
On to Off Volume (vph)				*91*	*357*					*166*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				97	380					177
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				1,028	985					374
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,093	1,047					397

Location	1	2	3	4	5	6	7	8	9	10



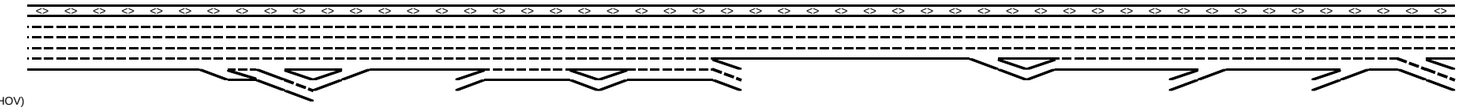
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				615	2,381					2,575
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				654	2,550					2,737
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				6,921	6,561					5,775
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				7,468	7,027					6,186

Location	1	2	3	4	5	6	7	8	9	10



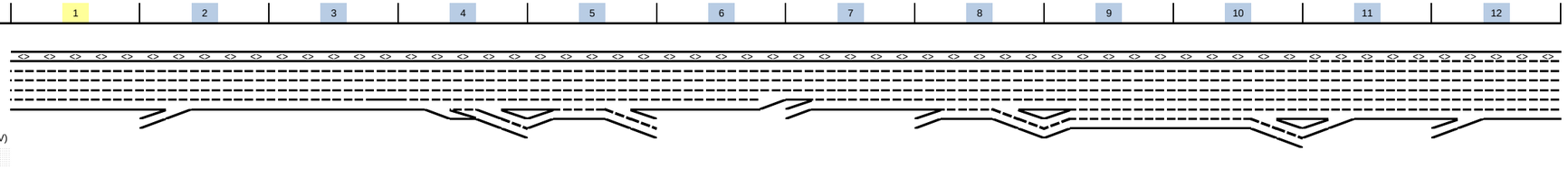
Key

<> Express Lane (HOV)

No Trucks

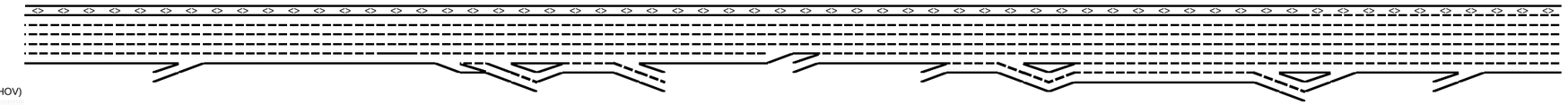
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				1,746	3,597					3,134
Non-Weave Flow				7,565	7,407					6,363
Segment Flow				9,311	11,004					9,497
Max Weave Length				4,409	4,308					5,908
Length Check				OK	OK					OK
Ideal Weave Capacity				2,176	2,187					1,936
f_{HV}				0.978	0.984					0.985
f_P				0.999	0.999					1.000
Capacity Condition 1				10,632	10,746					9,536
Capacity Condition 2				12,507	10,524					7,163
Weave v/c ratio				0.86	1.03					1.31
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				1,746	2,094					397
Weave LC Rate				2,364	2,729					380
Non-Weave LC Rate 1				1,750	1,742					619
Non-Weave LC Rate 2				3,376	3,341					3,108
Non-Weave LC Rate 3				-159	-135					-3,953
Segment LC Rate				4,114	4,471					998
Weave Intensity Factor				0.380	0.399					0.390
Weave Speed				51.2	50.7					51.0
Non-Weave Speed				43.5	39.4					53.0
Segment Speed				44.8	42.5					52.3
Weave Density				41.6	-					-
Weave LOS				E	F					F
Summarize Segment Operations										
Segment v/c ratio	0.70	0.59	0.63	0.86	1.03	0.86	0.88	0.74	0.60	1.31
Segment Density	25.5	18.2	24.2	41.6	-	33.9	36.1	27.2	23.9	-
Segment LOS	C	B	C	E	F	D	E	D	C	F
Over Capacity					Weave					Weave

Project: John Wayne Airport Expansion **Scenario:** Existing Conditions
Freeway Corridor: 405S **Peak Hour:** PM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*5,963*	5,963	7,038	7,038	*5,823*	6,070	6,070	*7,840*	8,114		*5,531*	*6049*
On Ramp Volume		*1,075*			*1,152*		*1,600*	*1,420*	*906*		*622*	*1,068*
Off Ramp Volume				*1,022*	*905*			*1,146*	*1,775*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	5,963	7,038	7,038	7,038	6,975	6,070	7,670	9,260	9,020		6,153	7,117
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	6,387	7,538	7,538	7,538	7,471	6,501	8,215	9,918	9,732		6,658	7,701
GP Flow (pcphpl)	1,277	1,508	1,508	1,508	1,245	1,625	1,643	1,653	1,390		1,332	1,540
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*67.6*	*67.6*	*67.6*	*67.6*	*70.8*	*70.8*	*70.8*	*50.3*	*50.3*		*23.7*	*23.7*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.54	0.64	0.64	0.64	0.53	0.69	0.70	0.70	0.59		0.57	0.66
Speed (mph)	65.0	64.8	64.8	64.8	65.0	64.3	64.2	64.1	65.0		65.0	64.7
Density (pcphpl)	19.7	23.3	23.3	23.3	19.2	25.3	25.6	25.8	21.4		20.5	23.8
LOS	C	C	C	C	C	C	C	C	C		C	C
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		6,395			6,246		6,501	8,397	8,769		5,997	6,566
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.54			0.53		0.69	0.71	0.75		0.51	0.56
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				6,452	6,501	6,501		8,700	7,845			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.55	0.55	0.69		0.74	0.67			

Location	1	2	3	4	5	6	7	8	9	10	11	12



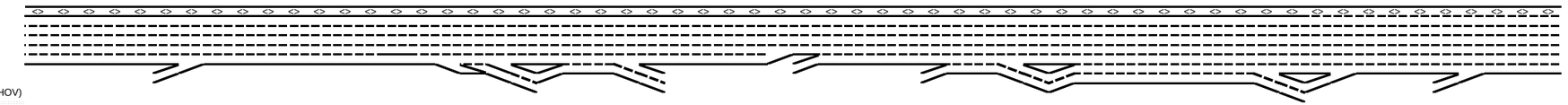
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,075			1,152		1,600	1,420	906		622	1,068
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,143			1,225		1,714	1,521	963		661	1,135
On Flow (pcphpl)		1,143			1,225		1,714	1,521	482		661	1,135
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.57			0.61		0.76	0.68	0.24		0.33	0.57

Location	1	2	3	4	5	6	7	8	9	10	11	12



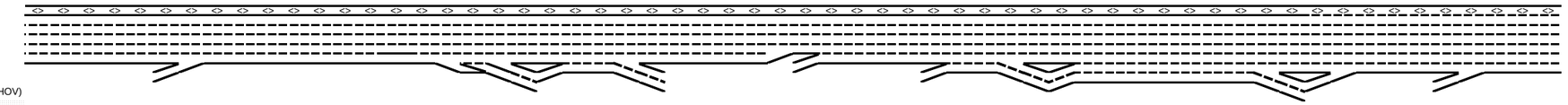
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,022	905			1,146	1,775			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,087	969			1,218	1,887			
Off Flow (pcphpl)				543	485			609	944			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.27	0.22			0.30	0.47			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		4,860									4,558	4,793
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.075									0.135	0.076
v_{12} (pcph)		364									616	364
v_3 (pcph)												
v_{34} (pcph)		4,496									3,942	4,429
v_{12a} (pcph)		1,944									1,823	1,917
v_{R12a} (pcph)		3,087									2,484	3,053
Merge Speed Index		0.37									0.33	0.32
Merge Area Speed		56.5									57.4	57.6
Outer Lanes Volume		1,458									1,367	1,438
Outer Lanes Speed		61.6									61.9	61.6
Segment Speed		58.9									59.7	59.5
Merge v/c ratio		0.67									0.54	0.66
Merge Density		25.6									21.3	21.4
Merge LOS		C									C	C

Location	1	2	3	4	5	6	7	8	9	10	11	12



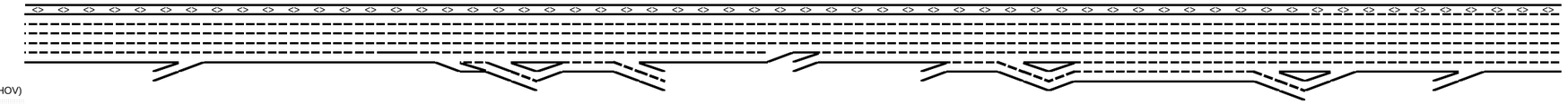
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				6,030								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.559								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				2,372								
v_3 (pcph)												
v_{34} (pcph)				3,658								
v_{12a} (pcph)				2,412								
Diverge Speed Index				0.53								
Diverge Area Speed				52.9								
Outer Lanes Volume				1,809								
Outer Lanes Speed				68.1								
Segment Speed				61.1								
Diverge v/c ratio				0.55								
Diverge Density				18.0								
Diverge LOS				B								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					5,823 1,152 6,070 905 6,975			7,840 1,420 8,114 1,146 9,260	8,114 906 7,245 1,775 9,020			
On to Off Volume (vph)					*149*			*176*	*178*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					159			187	190			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					1,003			1,244	728			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					1,066			1,333	774			

Location	1	2	3	4	5	6	7	8	9	10	11	12



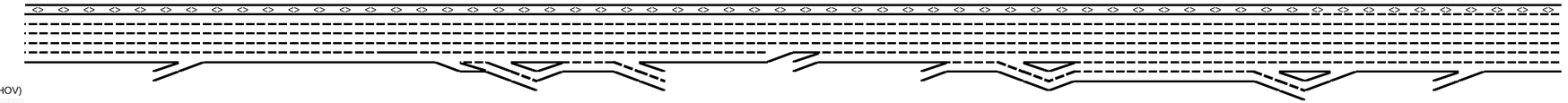
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					756			970	1,597			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					809			1,032	1,698			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					5,067			6,870	6,517			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					5,428			7,358	7,032			

Location	1	2	3	4	5	6	7	8	9	10	11	12



Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					1,875			2,364	2,471			
Non-Weave Flow					5,586			7,545	7,221			
Segment Flow					7,461			9,909	9,693			
Max Weave Length					5,067			4,935	3,540			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,083			2,011	2,117			
f_{HV}					0.984			0.984	0.980			
f_p					0.999			0.998	0.999			
Capacity Condition 1					10,233			9,867	10,363			
Capacity Condition 2					9,384			9,872	13,437			
Weave v/c ratio					0.78			0.99	0.92			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					1,066			1,333	1,698			
Weave LC Rate					1,468			1,315	1,680			
Non-Weave LC Rate 1					1,041			862	796			
Non-Weave LC Rate 2					2,935			3,371	3,299			
Non-Weave LC Rate 3					-1,891			-3,671	-3,748			
Segment LC Rate					2,509			2,177	2,476			
Weave Intensity Factor					0.326			0.722	0.798			
Weave Speed					52.7			44.0	42.8			
Non-Weave Speed					50.2			45.9	43.5			
Segment Speed					50.8			45.4	43.3			
Weave Density					29.4			43.6	44.8			
Weave LOS					D			E	E			
Summarize Segment Operations												
Segment v/c ratio	0.54	0.67	0.64	0.55	0.78	0.69	0.70	0.99	0.92		0.54	0.66
Segment Density	19.7	25.6	23.3	18.0	29.4	25.3	25.6	43.6	44.8		21.3	21.4
Segment LOS	C	C	C	B	D	C	C	E	E		C	C
Over Capacity												

APPENDIX D: AGENCY MEETING DOCUMENTATION

FEHR PEERS

MEMORANDUM

Date: March 19, 2014

To: Kari Rigoni, John Wayne Airport
Lea Choum, John Wayne Airport

From: Chris Gray, Fehr & Peers

Subject: ***Agency Coordination for JWA Traffic Study***

Ref: OC13-0266

This memorandum documents our meetings and correspondence with agencies related to the Traffic Study we prepared for the JWA Settlement Agreement. As part of our scoping effort related to the traffic study, we met with the following agencies:

- California Department of Transportation (Caltrans)
- Orange County Transportation Authority (OCTA)
- Foothill Transportation Corridor
- City of Costa Mesa
- City of Newport Beach
- City of Irvine
- County of Orange

Additional information regarding each outreach effort is provided below.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

The first meeting with JWA Staff was held on September 27, 2013. Key attendees at the meeting included:

Maureen El Harake, Caltrans
Bassem Barsoum, Caltrans
Adam Siddiqui, Caltrans
Aileen Kennedy, Caltrans
Chris Gray, Fehr & Peers
Lea Choum, Fehr & Peers

Key discussion items at this meeting included:

- A request from Caltrans to use HCM analysis for freeway facilities instead of a V/C ratios

- A request to analyze Caltrans intersections using Synchro and HCM instead of V/C ratios

Subsequent to this meeting, Caltrans provided a formal NOP comment letter which mirrored many of the requests made at this meeting.

A follow-up meeting was held on January 29, 2014 to address significance criteria. The specific purpose of this meeting was to verify whether a threshold could be applied to differentiate impacts on facilities which were already deficient prior to the addition of project traffic. After this meeting, Caltrans staff (Aileen Kennedy) provided an email which indicated that the use of any such threshold was due to the discretion of the Lead Agency (Attachment A). Some key elements from this email include:

- The Lead Agency is responsible for identifying the resulting impacts (and we've already communicated those areas and methods we prefer in relation to the State Highway, Sept. 27th Meeting copied below FYI) and is also responsible for identification mitigation projects or programs.
- The threshold of significance % depends on the impact of the proposed project, and its location and uniqueness. The Lead Agency will determine the methodology used to study and mitigate impacts should they occur.

Based on this input, we recommended to the Project Team that we proceed with our analysis. We have included in our document a threshold which indicated an impact only with the addition of a certain level of project trips for Caltrans facilities.

ORANGE COUNTY TRANSPORTATION AUTHORITY

A meeting was held with OCTA Staff on September 17, 2013. Meeting attendees included:

- Kurt Brotcke, OCTA
- Anup Kulkarni, OCTA
- Chris Gray, Fehr & Peers
- Lea Choum, JWA

OCTA did not provide specific input into the study except for three items of information including:

- OCTA provided contact information for the I-405 and SR-55 improvement projects, which are currently underway
- OCTA provided a reference for ongoing work related to their Long Range Transportation Plan
- OCTA provided a reference for their latest version of the regional traffic model (OCTAM)

FOOTHILL TRANSPORTATION CORRIDOR

A meeting was held with staff form the Foothill Transportation Corridor (FTC) at the Toll Corridor Authority (TCA) offices on October 3, 2013. The following persons attended this meeting:

David Lowe, TCA
Chris Gray, Fehr & Peers
Lea Choum, JWA

TCA staff provided no significant comments on the traffic study scope and did not request any specific additions to the study area or study methodology.

CITY OF COSTA MESA

A meeting was held with staff from the City of Costa Mesa at the City of Costa Mesa offices on September 19, 2013. Meeting attendees included:

- Gary Armstrong
- Pritam Deshmukh
- Raja Sethurman

Major items of discussion included the following:

- City was concerned about rental car activities off-site
- City wants to include additional intersections on Paularino behind the airport
- City is also concerned about on-site rental car groups that store or stage cars off-site in Costa Mesa
- City only has funding for programs in Year 1 of their CIP
- City currently updating their General Plan and circulation element
- Pritam will be our contact on any traffic related issues
- City has a recently approved residential project adjacent to the airport

Subsequent to this meeting, the City requested that the following study locations be added to the list of study intersections.

- Red Hill/Paularino
- Red Hill/Baker

Subsequent to this meeting, the traffic study was updated to include these locations.

CITY OF NEWPORT BEACH

A meeting was held with the City of Newport Beach on September 24, 2013. Meeting attendees included:

- Patrick Alford, City of Costa Mesa
- Tony Brine, City of Newport Beach
- Chris Gray, Fehr & Peers
  Lea Choum, JWA

The main topic of discussion at this meeting was the study locations. Subsequent to this meeting, the City requested that 10 locations be added to the analysis including:

- Campus Drive @ Von Karman Avenue
- MacArthur Boulevard @ Von Karman Avenue
- Bristol Street South @ Bayview Place
- Jamboree Road @ Birch Street
- Jamboree Road @ Bayview Way
- Jamboree Road @ University Drive/Eastbluff Drive
- Jamboree Road @ Bison Avenue
- Jamboree Road @ Eastbluff Drive/Ford Road
- MacArthur Boulevard @ Bison Avenue
- MacArthur Boulevard @ Ford Road/Bonita Canyon Drive

This request is documented in Attachment B.

Subsequent to this meeting, the traffic study locations were expanded to include these facilities.

CITY OF IRVINE

Two meetings were held with the City of Irvine. The first meeting on October 20, 2013 was attended by the following persons:

- Sun Sun Morillo, City of Irvine
- Kerwin Lau, City of Irvine
- Chris Gray, Fehr & Peers
- Lea Choum, JWA

Major topics of discussion at this meeting were as follows:

- City requests that the study area use the same intersections and roadway segments as the IBC EIR
- City requests that we use ITAM for intersections in the City of Irvine

A follow-up meeting was held with the City of Irvine in January 16, 2014. This meeting was attended by the following persons:

- Sun Sun Morillo, City of Irvine

- Kerwin Lau, City of Irvine
- Chris Gray, Fehr & Peers
- Lea Choum, JWA
- Barry Curtis, City of Irvine
- Larry Serafina, JWA
- Kari Rigoni, JWA

At this meeting, the issue of the study locations was addressed. Fehr & Peers provided a list of additional 10 intersections that were recommended for inclusion in the study. In a subsequent email, the City requested that an additional two locations be added to the study. This request is documented as Attachment C.

Subsequent to this request, the study area was expanded to include these facilities.

COUNTY OF ORANGE

A meeting was held on October 20th, 2013 with the County of Orange. Persons attending this meeting were:

- Isaac Alonso Rice, County of Orange
- Tony Small, County of Orange
- Chris Gray, Fehr & Peers
- Lea Choum, JWA

The County provided no substantive comments on the study area or the study methodology.

We hope you find this informational helpful. If you have any questions, please contact me at c.gray@fehrandpeers.com or by phone at 714-941-8800.

Chris Gray

To: Chris Gray
Subject: RE: TIS Traffic Study- CONFIDENTIAL ATTORNEY CLIENT COMMUNICATION

From: Kennedy, Aileen K@DOT [mailto:aileen.kennedy@dot.ca.gov]
Sent: Tuesday, February 11, 2014 8:28 AM
To: Chris Gray
Cc: El Harake, Maureen E@DOT; Siddiqui, Adam@DOT; Hernandez, Jose R@DOT; Amezcua, Eduardo C@DOT
Subject: TIS Traffic Study

Hi Chris,

I am writing to follow up on your e-mail February 6th concerning significance thresholds for the John Wayne Settlement Agreement Amendment DEIR project. I hope this information provides some clarity to your questions

1.) How do we address impacts to facilities that are a deficient LOS within any project traffic?
2.) What increase in traffic is considered problematic (1 car, 50 cars, 1% increase, etc.)

- As part of the Traffic Analysis portion of the EIR/ Doc; existing and future conditions with and without the project are identified.(Please see Cielo Vista Project Appendix L Traffic Study) as an example.
- The Lead Agency is responsible for identifying the resulting impacts (and we've already communicated those areas and methods we prefer in relation to the State Highway, Sept. 27th Meeting copied below FYI) and is also responsible for identification mitigation projects or programs.
- We recommend a LOS of E or better on the State Highway System for existing facilities; and LOS of D or better for new facilities.
- The threshold of significance % depends on the impact of the proposed project, and its location and uniqueness. The Lead Agency will determine the methodology used to study and mitigate impacts should they occur.
- The Departments Traffic Impact Study Guide (TIS) provides a formula to use see statement in blue.

The guideline is very brief and simple. However, Appendix B shows how to estimate the "Equitable Share Responsibility" and "Equitable Cost" of a proposed project. Also, Appendix C contains the tables that indicate measures of effectiveness for Caltrans' facilities. As we discussed in our last meeting, if a facility is already operating below the Red dashed line shown in these tables, then the additional impact the proposed project can be considered for the fair share calculations

As discussed during our September 27, 2013 meeting at Caltrans District Office;

- An Intersection Capacity Analysis shall be conducted using Highway Capacity Software for all intersections with Caltrans Right of Way.

- Conduct a Divergence/Capacity Analysis for all of the off-ramps. Demonstrate that the cars will not back up from the off-ramp onto the freeway mainline.

- Conduct a Vehicular Storage Analysis for the body of the on and off-ramps.

- Conduct a Mainline Analysis by the HCS for the corridors.

As discussed during our September 27, 2013 meeting, a Synchro Analysis would need to be conducted to determine how closely spaced intersections would operate. For example the intersections of MacArthur and Main street MacArthur and the northbound I-405 Ramps; MacArthur and southbound I-405 ramps; and MacArthur and Michelson Drive.

Caltrans is happy to meet with you in person or over the phone to discuss any questions you have, I look forward to hearing from you.

Aileen Kennedy
Associate Transportation Planner
Caltrans District 12
3347 Michelson Drive, Ste 100
Irvine, CA. 92612
(949) 724-2239

From:	Keely, David
To:	Chris Gray; "lchoum@ocair.com"
Cc:	Chhouk, Socheata; Alford, Patrick; Brine, Tony
Subject:	JWA Traffic Analysis
Date:	Thursday, September 26, 2013 10:27:45 AM
Attachments:	20130926085906930.pdf Campus Dr at Von Karman Ave (031413).pdf MacArthur Blvd at Von Karman Ave (040913).pdf Bayview Pl at Bristol Street South (031313).pdf Jamboree Rd at Birch St (031413).pdf Jamboree Rd at Bayview Wy (031413).pdf Jamboree Rd at University-Eastbluff North (041113).pdf Jamboree - Bison.pdf Jamboree-ford 3-7-2012.pdf MacArthur - Bison 4-24-2012.pdf MacArthur-Ford&Bonita Cyn 3-8-2012.pdf

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Christopher and Lea,

I had a chance to speak with the City Traffic Engineer, Tony Brine, before he went on vacation regarding the proposed study area. Attached is a map showing the current study area intersection (green circles) and the ones the City of Newport would like to include (black circles). Below is the list of additional intersection the City would like included in the study:

- Campus Drive @ Von Karman Avenue
- MacArthur Boulevard @ Von Karman Avenue
- Bristol Street South @ Bayview Place
- Jamboree Road @ Birch Street
- Jamboree Road @ Bayview Way
- Jamboree Road @ University Drive/Eastbluff Drive
- Jamboree Road @ Bison Avenue
- Jamboree Road @ Eastbluff Drive/Ford Road
- MacArthur Boulevard @ Bison Avenue
- MacArthur Boulevard @ Ford Road/Bonita Canyon Drive

Also, attached are the City's most recent traffic counts for the above mentioned intersections.

We will work on getting you the remaining information. Please let me know if you have any questions. Thanks

David Keely, P.E.
Senior Civil Engineer
City of Newport Beach, 100 Civic Center Dr, Newport Beach, CA 92660
Tel: (949) 644-3349 Fax: (949) 644-3318

Public Works Department ~ A Well-Engineered Machine
Protecting and providing quality public improvements and services

Important Announcement - We have moved to the new Civic Center located at 100 Civic Center Drive, Newport Beach, CA 92660. Our mailing address remains the same, PO Box 1768, Newport Beach, CA 92658-8915. We look forward to serving you in the new facility.

From: Kerwin Lau
To: Chris Gray; Sun-Sun Murillo
Cc: Choum, Lea (LChoum@ocair.com); Barry Curtis; Anthony Hernandez
Subject: RE: JWA Study Locations- City of Irvine
Date: Monday, January 27, 2014 11:33:02 AM

Thanks, Chris.

The Von Karman intersections are in addition to the ones you have previously identified as a result of your new location memo and spreadsheet.

Thanks
Kerwin

From: Chris Gray [mailto:C.Gray@fehrandpeers.com]
Sent: Monday, January 27, 2014 11:21 AM
To: Kerwin Lau; Sun-Sun Murillo
Cc: Choum, Lea (LChoum@ocair.com); Barry Curtis; Anthony Hernandez
Subject: RE: JWA Study Locations- City of Irvine

Kerwin,

I will have the trip distribution sent to you.

Can you clarify your comments below?

Are you asking us to add only the two intersections below to the study or did you want us to add those in addition to any we previously identified.

Thanks,
Chris

From: Kerwin Lau [mailto:klau@ci.irvine.ca.us]
Sent: Friday, January 24, 2014 9:08 AM
To: Chris Gray; Sun-Sun Murillo
Cc: Choum, Lea (LChoum@ocair.com); Barry Curtis
Subject: RE: JWA Study Locations- City of Irvine

Chris,

Thanks for the attached information. Is there a forecast trip distribution exhibit available to support Step 1 and attached spreadsheet? As previously discussed in our meeting, the following locations should be added to the analysis:

1. Von Karman/Alton
2. Von Karman/Barranca

Finally, based on your criteria of 1% project distribution, 50-peak trips and identified IBC impact, there are a few outlying intersections along Culver that meet some of the criteria including Culver/Main, Culver/Alton and Culver/I-405 NB ramps. For locations that are within acceptable LOS, this is less of an issue, however for locations that have previously been identified as being impacted or are at unacceptable LOS, further evaluation should be considered.

Thanks
Kerwin

From: Chris Gray [mailto:C.Gray@fehrandpeers.com]
Sent: Thursday, January 16, 2014 2:06 PM
To: Kerwin Lau; Sun-Sun Murillo
Cc: Choum, Lea (LChoum@ocair.com)
Subject: JWA Study Locations- City of Irvine

Kerwin & Sun-Sun,

Please find attached a memorandum and spreadsheet that documents our analysis of new study locations in the City of Irvine for the IBC. Please let us know if you have any questions or need more information.

Thanks,
Christopher J. Gray
Senior Associate
Fehr & Peers Transportation Consultants
8141 E. Kaiser Boulevard
Suite 110,
Anaheim, CA 92808

Main Line (714) 941-8800
Direct Line (714) 941-8771

FEHR PEERS

MEMORANDUM

Date: November 25, 2013

To: Kari Rigoni, John Wayne Airport
Lea Choum, John Wayne Airport

From: Christopher Gray
John Muggridge

Subject: ***John Wayne Airport Traffic Analysis – Additional City of Irvine Study Intersection Locations***

OC13-0266

The City of Irvine has requested that Fehr & Peers include additional study intersections consistent with the *Irvine Business Complex (IBC) Vision Plan Traffic Study (December 2009, Parsons Brinkerhoff)*. Fehr & Peers has filtered through the list of study intersections included in the IBC traffic study based on the following criteria:

- **Step 1: Trip Distribution** – Fehr & Peers reviewed the forecast trip distribution to/from John Wayne Airport. IBC study intersection locations forecast to carry greater than 1% of John Wayne Airport traffic were identified.

- **Step 2: Trip Assignment** – Fehr & Peers derived the forecast project trips (for MAP 16.9) expected at the intersections identified in Step 1 based on the forecast trip distribution to/from John Wayne Airport.

- **Step 3: IBC Impacts & Deficiencies** – Fehr & Peers reviewed the IBC traffic study and documented which study intersections were forecast to trigger a traffic impact or deficiency.

- **Step 4**: **Derive List of Potential New Irvine Study Intersections** – Based on Steps 2 and 3, Fehr & Peers reviewed intersections that are forecast to have approximately 50 or more peak hour trips as well as intersections that triggered a traffic impact or deficiency. In general, the additional study intersections identified by Fehr & Peers are along Red Hill Avenue, Main Street, and Jamboree Road. These corridors are either parallel to the SR-55 or I-405 freeways. Red Hill and Jamboree Road provide access to the I-5 freeway to the north.

FEHR PEERS

STUDY AREA

Table 1, summarizes the additional 10 study intersections based on the criteria listed above.

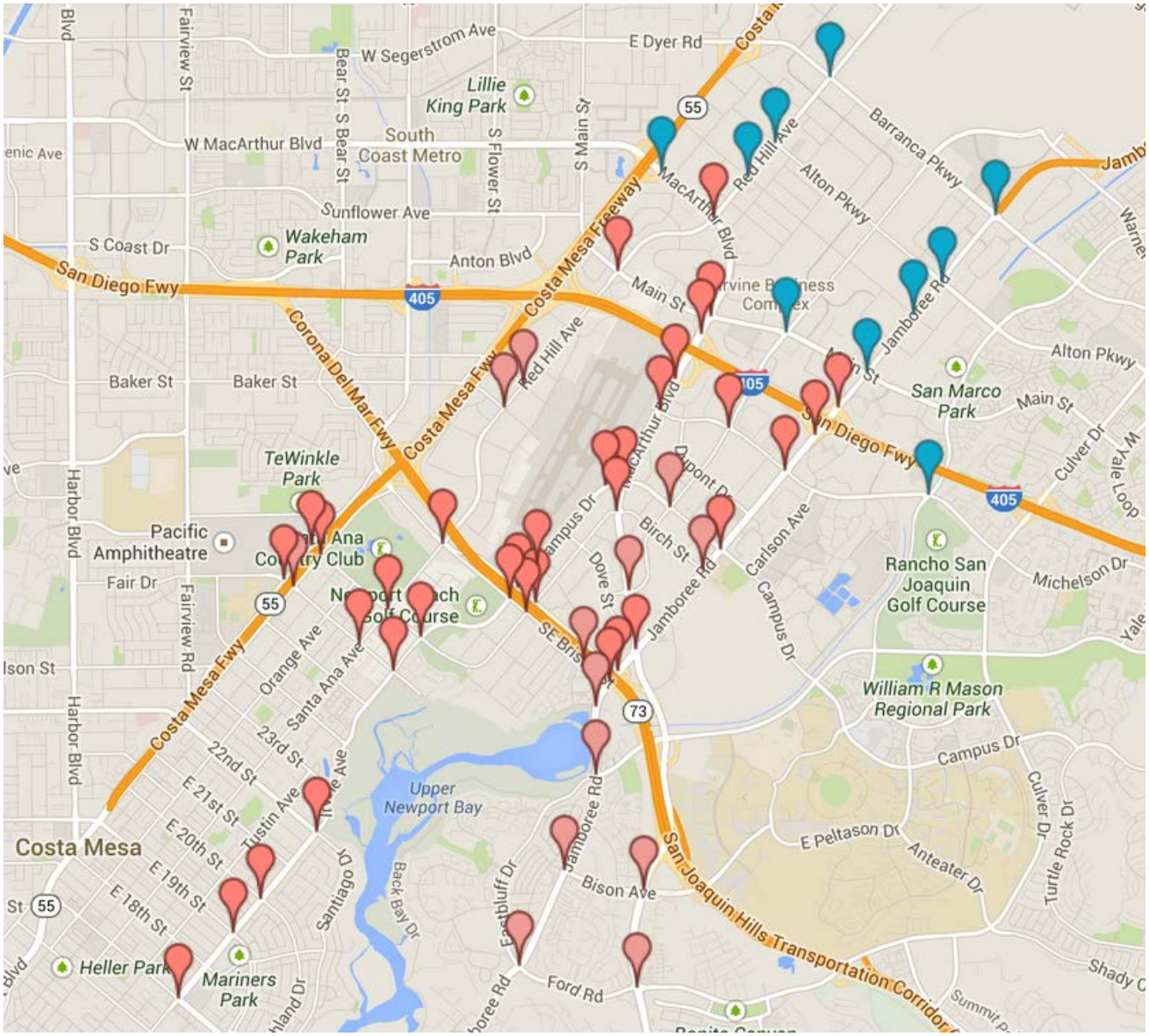
TABLE 1
ADDITIONAL CITY OF IRVINE STUDY INTERSECTION LOCATIONS

Intersection	John Wayne Airport Project Trips (MAP 16.9)		IBC Traffic Study Results	
	AM Peak Hour	PM Peak Hour	IBC Impact?	Cumulative Deficiency?
SR-55 NB Ramps at MacArthur Blvd	85	63		
Red Hill Ave at Dyer Rd	54	52		
Red Hill Ave at Alton Pkwy	64	52		
Red Hill Ave at McGaw Ave	64	52		
Von Karman Ave at Main St	108	84		
Jamboree Rd at Barranca Pkwy	73	54	✓	
Jamboree Rd at Alton Pkwy	74	45		
Jamboree Rd at McGaw Ave	74	45		
Jamboree Rd at Main St	95	88	✓	
Harvard Ave at Michelson Dr	63	74		✓

Figures 1 and 2 show a map of the existing 47 John Wayne Airport study intersections identified in **red**, as well as the potential 10 additional Irvine intersections identified in **blue**.

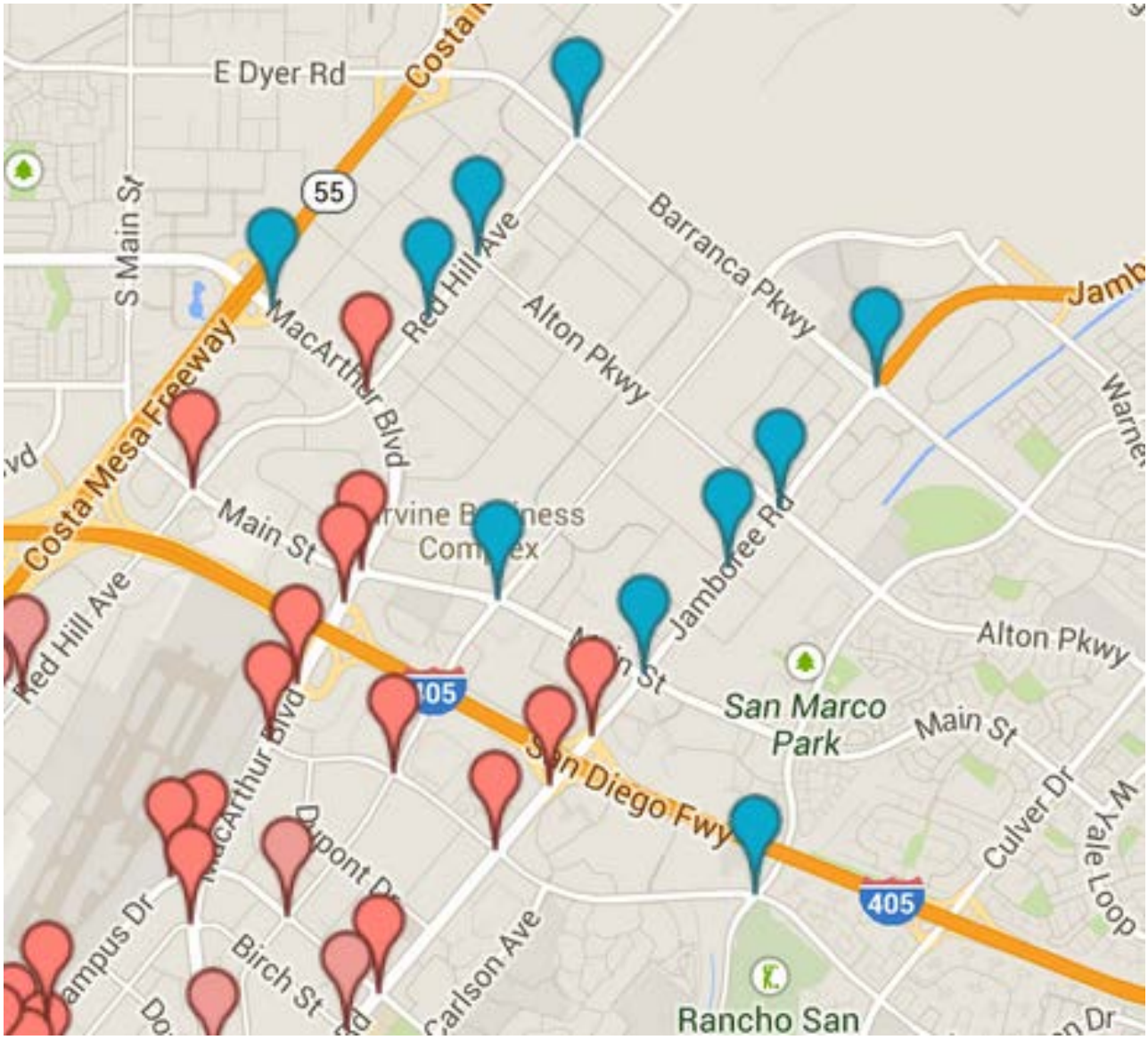
FEHR PEERS

FIGURE 1 STUDY INTERSECTION LOCATIONS



FEHR PEERS

FIGURE 2 STUDY INTERSECTION LOCATIONS



We hope you find this information informative and useful. If you have any specific questions or concerns, please contact us at 714-941-8800.

APPENDIX E: AIRPORT TRIP GENERATION CALCULATIONS

Flights

Year 2020					Percentage Increase/Decrease		
	Daily	AM	PM		daily	AM	PM
2013	238		17	16			
No Project		298	14	17	25%	-18%	6%
Proposed Project		298	14	17	25%	-18%	6%
Alt A		290	15	17	22%	-12%	6%
Alt B		292	15	17	23%	-12%	6%
Alt C		466	27	23	96%	59%	44%

Year 2025							
		AM	PM				
2013	238		17	16			
No Project		298	14	17	25%	-18%	6%
Proposed Project		322	16	18	35%	-6%	13%
Alt A		302	16	17	27%	-6%	6%
Alt B		350	17	19	47%	0%	19%
Alt C		466	27	23	96%	59%	44%

Year 2030							
		AM	PM				
2013	238		17	16			
No Project		298	14	17	25%	-18%	6%
Proposed Project		342	17	19	44%	0%	19%
Alt A		336	17	19	41%	0%	19%
Alt B		406	20	22	71%	18%	38%
Alt C		466	27	23	96%	59%	44%

Project MAP Levels

	Existing	2016	2021	2026
No Project	9.2	10.8	10.8	10.8
Proposed Project	9.2	10.8	11.8	12.5
Alternative A	9.2	10.8	11.4	12.8
Alternative B	9.2	10.8	13	15
Alternative C	9.2	16.9	16.9	16.9

Percentage Map Change

	2016	2021	2026
No Project	17%	17%	17%
Proposed Project	17%	28%	36%
Alternative A	17%	24%	39%
Alternative B	17%	41%	63%
Alternative C	84%	84%	84%

Totals

	AM	PM
Counts (Main Street)	38	51

Increment	AM IN	AM OUT	PM IN	PM OUT
Ex	27	12	16	35
Year 2016				
No Project	5	2	3	6
Proposed Project	5	2	3	6
Alternative A	5	2	3	6
Alternative B	5	2	3	6
Alternative C	22	10	13	29
Year 2021				
No Project	5	2	3	6
Proposed Project	8	3	5	10
Alternative A	6	3	4	8
Alternative B	11	5	7	14
Alternative C	22	10	13	29
Year 2026				
No Project	5	2	3	6
Proposed Project	10	4	6	12
Alternative A	10	5	6	14
Alternative B	17	7	10	22
Alternative C	22	10	13	29

Total	AM IN	AM OUT	PM IN	PM OUT
Ex	27	12	16	35
Year 2016				
No Project	32	14	19	41
Proposed Project	32	14	19	41
Alternative A	32	14	19	41
Alternative B	32	14	19	41
Alternative C	49	22	29	64
Year 2021				
No Project	32	14	19	41
Proposed Project	35	15	21	45
Alternative A	33	15	20	43
Alternative B	38	17	23	49
Alternative C	49	22	29	64
Year 2026				
No Project	32	14	19	41
Proposed Project	37	16	22	47
Alternative A	37	17	22	49
Alternative B	44	19	26	57
Alternative C	49	22	29	64

Project MAP Levels

	Existing	2016	2021	2026
No Project	9.2	10.8	10.8	10.8
Proposed Project	9.2	10.8	11.8	12.5
Alternative A	9.2	10.8	11.4	12.8
Alternative B	9.2	10.8	13	15
Alternative C	9.2	16.9	16.9	16.9

Percentage Map Change

	2016	2021	2026
No Project	17%	17%	17%
Proposed Project	17%	28%	36%
Alternative A	17%	24%	39%
Alternative B	17%	41%	63%
Alternative C	84%	84%	84%

Totals

	AM	PM
Counts (on airport)	2295	2305
Passenger Parking (Average)		
Rental Cars		
Other	2295	2305

Increment	AM IN	AM OUT	PM IN	PM OUT
Ex	1174	1121	1111	1194
Year 2016				
No Project	204	195	193	208
Proposed Project	204	195	193	208
Alternative A	204	195	193	208
Alternative B	204	195	193	208
Alternative C	983	938	930	999
Year 2021				
No Project	204	195	193	208
Proposed Project	332	317	314	337
Alternative A	281	268	266	286
Alternative B	485	463	459	493
Alternative C	983	938	930	999
Year 2026				
No Project	204	195	193	208
Proposed Project	421	402	399	428
Alternative A	459	439	435	467
Alternative B	740	707	700	753
Alternative C	983	938	930	999

Total	AM IN	AM OUT	PM IN	PM OUT
Ex	1174	1121	1111	1194
Year 2016				
No Project	1378	1316	1304	1402
Proposed Project	1378	1316	1304	1402
Alternative A	1378	1316	1304	1402
Alternative B	1378	1316	1304	1402
Alternative C	2157	2059	2041	2193
Year 2021				
No Project	1378	1316	1304	1402
Proposed Project	1506	1438	1425	1531
Alternative A	1455	1389	1377	1480
Alternative B	1659	1584	1570	1687
Alternative C	2157	2059	2041	2193
Year 2026				
No Project	1378	1316	1304	1402
Proposed Project	1595	1523	1510	1622
Alternative A	1633	1560	1546	1661
Alternative B	1914	1828	1811	1947
Alternative C	2157	2059	2041	2193

Percentage Flight Change

	2016	2021	2026
No Project	25%	25%	25%
Proposed Project	25%	35%	44%
Alternative A	22%	27%	41%
Alternative B	23%	47%	71%
Alternative C	96%	96%	96%

Totals	AM	PM
Counts (Employee Lot)	71	70

Increment	AM		PM	
	IN	OUT	IN	OUT
Ex	45	26	24	46
Year 2016				
No Project	11	6	6	11
Proposed Project	11	6	6	12
Alternative A	10	6	5	10
Alternative B	10	6	6	10
Alternative C	43	25	23	44
Year 2021				
No Project	11	6	6	11
Proposed Project	16	9	9	16
Alternative A	12	7	7	12
Alternative B	21	12	11	21
Alternative C	43	25	23	44
Year 2026				
No Project	11	6	6	11
Proposed Project	20	11	11	20
Alternative A	19	11	10	19
Alternative B	32	18	17	32
Alternative C	43	25	23	44

Total	AM		PM	
	IN	OUT	IN	OUT
Ex	45	26	24	46
Year 2016				
No Project	56	32	30	57
Proposed Project	56	32	30	58
Alternative A	55	32	29	56
Alternative B	55	32	30	56
Alternative C	88	51	47	90
Year 2021				
No Project	56	32	30	57
Proposed Project	61	35	33	62
Alternative A	57	33	31	58
Alternative B	66	38	35	67
Alternative C	88	51	47	90
Year 2026				
No Project	56	32	30	57
Proposed Project	65	37	35	66
Alternative A	64	37	34	65
Alternative B	77	44	41	78
Alternative C	88	51	47	90

Totals	AM	PM
Counts (Cargo) Paularino Av	73	82

	AM		PM	
	IN	OUT	IN	OUT
Ex	54	19	17	65
Year 2016				
No Project	14	5	4	16
Proposed Pro	14	5	4	16
Alternative A	12	4	4	14
Alternative B	12	4	4	15
Alternative C	52	18	16	62
Year 2021				
No Project	14	5	4	16
Proposed Pro	19	7	6	23
Alternative A	15	5	5	17
Alternative B	25	9	8	31
Alternative C	52	18	16	62
Year 2026				
No Project	14	5	4	16
Proposed Pro	24	8	7	28
Alternative A	22	8	7	27
Alternative B	38	13	12	46
Alternative C	52	18	16	62

Total	AM		PM	
	IN	OUT	IN	OUT
Ex	54	19	17	65
Year 2016				
No Project	68	24	21	81
Proposed Projec	68	24	21	81
Alternative A	66	23	21	79
Alternative B	66	23	21	80
Alternative C	106	37	33	127
Year 2021				
No Project	68	24	21	81
Proposed Projec	73	26	23	88
Alternative A	69	24	22	82
Alternative B	79	28	25	96
Alternative C	106	37	33	127
Year 2026				
No Project	68	24	21	81
Proposed Projec	78	27	24	93
Alternative A	76	27	24	92
Alternative B	92	32	29	111
Alternative C	106	37	33	127

APPENDIX F: JWA PARKING ANALYSIS

FEHR PEERS

MEMORANDUM

Date: March 17, 2014

To: Kari Rigoni, John Wayne Airport
Lea Choum, John Wayne Airport

From: Chris Gray, Fehr & Peers

Subject: ***Parking Adequacy for JWA With Increased MAP and Flights (Updated)***
Ref: OC13-0266

This memorandum evaluates available data related to parking supply and demand at JWA associated with the extension of the Settlement Agreement. This memorandum addresses two fundamental questions:

- Will there be an increase in parking demand beyond what can be accommodated by JWA under the Proposed Project and Alternatives?
- Will this increase in parking demand lead to additional vehicles beyond those already analyzed in the traffic study?

To address these questions, information is presented on the following items:

- Existing parking supply and operations
- Current parking demand
- Future parking supply improvements
- Increase in parking demand
- Strategies to address any potential parking shortfalls
- Relationship between parking demand and vehicle trips

EXISTING PARKING SUPPLY AND OPERATIONS

According to data provided by JWA (email from Kari Rigoni on February 21, 2014), there are approximately 8,556 total parking spaces at JWA. These spaces are distributed among 4 parking garages (A1, A2, B, and C) plus the Main Street Lot. 23 of the spaces are van accessible and 113 are handicap spaces. 8,168 of these spaces are allocated for unrestricted use by visitors.

Out of the 8,556 total spaces, 8,356 of these are designated as "revenue-generating" spaces since they are priced through various mechanisms. The remaining 200 spaces are set aside for VIP's (Board of Supervisors and other Elected Officials), maintenance vehicles, airport managers, the

Airport Director, on-site shuttles, and use by the valet company. Within the parking structures, the hourly cost is $2 per hour with a maximum of $20 per day. The Main Street lot costs $2 per hour as well with a maximum of $14 a day. The parking garages and the Main Street lot have a 15 minute grace period. Valet service is provided which costs $10 an hour with a maximum of $30 per day.

Anecdotal evidence suggests that parking rates at JWA are comparable to other regional airports such as the Ontario Airport and Long Beach. JWA daily parking rates are actually less than what is charged at LAX.

CURRENT PARKING DEMAND

Based on data provided by JWA (email March 6, 2014), peak parking demand at JWA currently occurs in August. Data collected in August 2013 yield a daily peak parking demand of 5,681 spaces based on observed entries and exits at parking facilities. When compared against the existing Million Annual Passengers (MAP) of 9.17, this observed parking demand yields 619 parking spaces per 1 MAP. With this parking demand, there are approximately 2,675 additional parking spaces available for passenger use.

FUTURE IMPROVEMENTS

Based on information provided by JWA Staff, there is the capacity to expand the parking facilities. JWA is planning to construct Phase 2 of Parking Structure C, which would add 1,381 parking spaces by 2016. Impacts associated with the construction of this structure was analyzed in EIR No. 582 (SCH No. 2003091046) and approved by the County in October 19, 2004.

INCREASES IN PARKING DEMAND

With the projected increases in passenger travel, parking demand would likely increase proportionally. When the factor of 619 parking spaces per 1 MAP is applied to the future levels of passenger travel, the anticipated parking demand is as described in Table 1 below.

One key element presented in Table 1 is the use of a 90% threshold to indicate when parking facilities are at capacity. This threshold is the "effective" capacity of a parking facility and reflects conditions such as when a person may park improperly thereby limiting access to adjacent spaces or drivers circulating around to find spaces. This concept of effective capacity is used regularly in any quantitative analysis of parking supply. Traffic engineers typically use factors ranging from 85% to 95% to identify the effective capacity.

In the case of JWA, access to parking garages is often restricted prior to reaching 100% occupancy to provide a buffer for persons who might already be in the facility looking for spaces. So, therefore, the 90% threshold indicates when a parking facility is effectively at capacity, even though some spaces might still be available, which mirrors current JWA operational practice.

As shown in the Table below, parking supply may be exceeded at one of two MAP levels.

- If no parking spaces are added, then parking will approach 90% occupancy prior to reaching 12.5 MAP.
- If the 1,381 parking spaces in Parking Structure C are added, the parking facilities will approach 90% capacity prior to reaching 15.0 MAP.

Table 1
Projected Parking Demand and Surplus by MAP

		Existing Parking Configuration		Existing Parking Plus 1,381 Additional Spaces	
MAP	**Parking Demand**	**Parking Supply**	**Parking Occupancy %**	**Parking Supply**	**Parking Occupancy %**
9.17	5,681	8,356	68%	9,737	58%
10.8	6,669	8,356	80%	9,737	69%
11.4	7,040	8,356	85%	9,737	73%
11.8	7,287	8,356	87%	9,737	75%
12.5	7,719	8,356	**93%**	9,737	80%
12.8	7,904	8,356	**95%**	9,737	81%
13	8,028	8,356	**96%**	9,737	83%
15	9,263	8,356	**111%**	9,737	**95%**
16.9	10,436	8,356	**125%**	9,737	**108%**

Scenarios where parking demand exceed 90% occupancy are noted in **Bold.**
Source: JWA Staff, Fehr & Peers

It should be noted that these projections rely on several key assumptions to determine parking supply and demand:

- We assume that JWA does not significantly reconfigure the existing parking facilities or change the manner in which they are operated.
- We also assume that current travel patterns at JWA for passengers do not change in the future. Passengers currently access the airport through a variety of travel modes including driving themselves, shuttles, taxis, and via other shared ride measures.

STRATEGIES TO ADDRESS PARKING SHORTFALLS

With the anticipated growth in passenger travel and flights associated with the proposed extension of the Settlement Agreement, we anticipate an increase in parking demand as shown in Table 1. However, as also shown, existing plus planned parking facilities at JWA are sufficient to accommodate the increased parking demand associated with increased MAP levels to a level between 13 and 15 MAP.

In the event future parking demand exceeds existing demand rates, there are several factors which would moderate growth in parking demand as levels of passenger travel increase.

The primary reason why any increase in parking demand would be moderated is the use of shared access modes. As passenger travel increases, these shared modes of travel will remain one of the primary means of access to JWA.

A secondary factor is the use of parking charges to restrict access to the passenger parking spaces. Parking charges currently moderate parking access by encouraging passengers to use travel modes which do not require parking such as being dropped-off, shuttles or taxis.

With moderate growth in passenger travel, it is expected that for the Proposed Project, any additional parking demand could be accommodated through existing mechanisms. For example, many of the additional passengers would continue to be dropped-off or arrive via another shared mode of travel. Maintaining parking charges at their current levels or with moderate increases would likely maintain the existing levels of drop-off as compared to self-parking.

With greater increases in passenger travel, particularly those associated with Alternative A, Alternative B and Alternative C, additional measures may be needed to accommodate any potential increase in parking demand. These measures might include:

- Significant increases in parking costs, which will discourage persons from parking on-site. Increases in parking charges would likely encourage additional use of shared modes of travel.
- Providing additional parking for passengers by reallocating parking for rental cars to restrict how much parking is available for rental cars.
- Providing additional parking facilities.

Based on our experience working at other airports, parking will essentially be a self-regulating element. If parking is unavailable, costly, or difficult to access, then passengers will more heavily utilize other modes of access like shuttles or taxis. If parking is more readily available, then persons will be more likely to drive themselves than use these shared access modes.

RELATIONSHIP BETWEEN PARKING DEMAND AND VEHICLE TRIPS

As described above, there may be increases in parking demand associated with concurrent increases in passenger travel. How much of a parking demand increase that occurs is dependent on a number of factors such as parking rates and allocation of parking within JWA.

However; it is unlikely that any increase in parking demand would result in additional vehicle trips beyond those forecasted already for the following reasons:

- The primary mode of travel for passengers accessing the airport is vehicle trips. The primary difference is whether the vehicles are operating as shared use (carpools, drop-off, shuttles, taxis, etc.) or being driven by a passenger. Only vehicles being driven by a

passenger actually require parking. However; all of the trips will still occur by a vehicle regardless whether parking is required or not.

- The traffic study prepared by Fehr & Peers estimates future JWA trips based on existing trip counts conducted at JWA. These trip counts include all vehicles currently accessing the airport, not just vehicles which require parking.
- As such, any change in parking demand will result in the same number of vehicle trips accessing the airport. As noted above, if parking becomes difficult to access, then other modes of access like shuttles or taxis will be used more heavily.

CONCLUSIONS

Based on the information above, we can reach the following conclusions:

- Based on current demand rates, there are sufficient parking facilities (existing plus approved) at JWA to accommodate an increase in parking demand that would be associated with an increase in MAP to a level between 13 and 15 MAP.
- In the event growth in passenger travel caused additional parking demand at JWA in excess of existing demand levels, factors mitigating this additional parking demand include the extensive use of shared use modes and the ability of JWA to change parking rates to affect parking demand.
- Any change in vehicular trips attributable to increased shared-use modes and/or parking rate adjustments would be incidental as persons would still be traveling to the airport via a vehicle, regardless of whether parking is required or not. The availability of parking is likely to shift persons between different access modes (i.e. passenger car vs. taxi or multi-person shuttle services) instead of increasing trips beyond those already forecasted. While increased use of taxis potentially would generate an increase in trips (2 roundtrips to airport v. 1), increased use of multi-person shuttles potentially would result in a decrease in trips (2 roundtrips accommodating several persons v several individual roundtrips).

We hope you find this informational helpful. If you have any questions, please contact me at c.gray@fehrandpeers.com or by phone at 714-941-8800.

APPENDIX G: NO PROJECT LOS RESULTS

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Scenario Report

Scenario:	2016NP-AM (Base)
Command:	2016NP-AM (Base)
Volume:	2016NP-AM (Base)
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2016NP-AM (Base)

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	A	xxxxx	0.586	A	xxxxx	0.586	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.682	B	xxxxx	0.682	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.601	B	xxxxx	0.601	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	C	xxxxx	0.709	C	xxxxx	0.709	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	A	xxxxx	0.566	A	xxxxx	0.566	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.391	A	xxxxx	0.391	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	B	xxxxx	0.687	B	xxxxx	0.687	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	D	xxxxx	0.894	D	xxxxx	0.894	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	B	xxxxx	0.687	B	xxxxx	0.687	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	A	xxxxx	0.597	A	xxxxx	0.597	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	B	xxxxx	0.666	B	xxxxx	0.666	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.517	A	xxxxx	0.517	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.629	B	xxxxx	0.629	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	A	xxxxx	0.524	A	xxxxx	0.524	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	A	xxxxx	0.346	A	xxxxx	0.346	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.506	A	xxxxx	0.506	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	B	xxxxx	0.614	B	xxxxx	0.614	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	C	xxxxx	0.710	C	xxxxx	0.710	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	A	xxxxx	0.596	A	xxxxx	0.596	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.416	A	xxxxx	0.416	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	B	xxxxx	0.630	B	xxxxx	0.630	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.721	C	xxxxx	0.721	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.516	A	xxxxx	0.516	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.525	A	xxxxx	0.525	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	C	23.4	0.801	C	23.4	0.801	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.381	A	xxxxx	0.381	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	B	xxxxx	0.669	B	xxxxx	0.669	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	B	xxxxx	0.647	B	xxxxx	0.647	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	A	xxxxx	0.512	A	xxxxx	0.512	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	A	xxxxx	0.550	A	xxxxx	0.550	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	A	xxxxx	0.572	A	xxxxx	0.572	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	A	xxxxx	0.233	A	xxxxx	0.233	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.459	A	xxxxx	0.459	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.325	A	xxxxx	0.325	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	D	xxxxx	0.834	D	xxxxx	0.834	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	A	xxxxx	0.553	A	xxxxx	0.553	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	A	xxxxx	0.594	A	xxxxx	0.594	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.405	A	xxxxx	0.405	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.519	A	xxxxx	0.519	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.449	A	xxxxx	0.449	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	A	xxxxx	0.561	A	xxxxx	0.561	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.482	A	xxxxx	0.482	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	D	xxxxx	0.844	D	xxxxx	0.844	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	B	xxxxx	0.602	B	xxxxx	0.602	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	C	xxxxx	0.770	C	xxxxx	0.770	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	A	xxxxx	0.563	A	xxxxx	0.563	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	A	xxxxx	0.446	A	xxxxx	0.446	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	C	xxxxx	0.762	C	xxxxx	0.762	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 49 RED HILL AVE/DYER RD	A	xxxxx	0.531	A	xxxxx	0.531	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	B	xxxxx	0.615	B	xxxxx	0.615	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	A	xxxxx	0.463	A	xxxxx	0.463	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	C	xxxxx	0.736	C	xxxxx	0.736	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	C	xxxxx	0.782	C	xxxxx	0.782	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	B	xxxxx	0.631	B	xxxxx	0.631	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	C	xxxxx	0.755	C	xxxxx	0.755	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.802	D	xxxxx	0.802	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	B	xxxxx	0.662	B	xxxxx	0.662	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	C	xxxxx	0.775	C	xxxxx	0.775	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	B	xxxxx	0.676	B	xxxxx	0.676	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.586
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	700	970	1260	480	600	70	60	890	430	230	580	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	700	970	1260	480	600	70	60	890	430	230	580	200
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	700	970	0	480	600	70	60	890	430	230	580	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	700	970	0	480	600	70	60	890	430	230	580	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	700	970	0	480	600	70	60	890	430	230	580	0
OvlAdjVol:									80			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.21	0.14	0.00	0.14	0.09	0.04	0.04	0.17	0.25	0.07	0.11	0.00
OvlAdjV/S:									0.05			
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.682
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1920	310	150	1070	0	0	0	0	810	0	990
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1920	310	150	1070	0	0	0	0	810	0	990
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.52
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1920	310	150	1070	0	0	0	0	810	0	519
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1920	310	150	1070	0	0	0	0	810	0	519
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1920	310	150	1070	0	0	0	0	810	0	519
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.09	0.04	0.16	0.00	0.00	0.00	0.00	0.24	0.00	0.31
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.601
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	0 1	2	0 4	0 1	0 0	0	0 0	2	0 1	0 1
Volume Module:												
Base Vol:	0	1190	340	150	1460	290	0	0	0	1130	140	1060
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1190	340	150	1460	290	0	0	0	1130	140	1060
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	1190	340	150	1460	290	0	0	0	1130	140	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1190	340	150	1460	290	0	0	0	1130	140	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	1190	340	150	1460	290	0	0	0	1130	140	0
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.20	0.04	0.21	0.17	0.00	0.00	0.00	0.33	0.08	0.00
OvlAdjV/S:			0.00									
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.709
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	150	1000	280	1040	1450	20	280	80	70	80	60	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1000	280	1040	1450	20	280	80	70	80	60	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1000	280	1040	1450	20	280	80	70	80	60	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1000	280	1040	1450	20	280	80	70	80	60	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1000	280	1040	1450	20	280	80	70	80	60	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.95	0.05	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6707	93	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.16	0.31	0.22	0.22	0.08	0.05	0.04	0.02	0.04	0.11
Crit Moves:			****	****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.566
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	1 0	4 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	50	770	70	280	890	240	620	1040	100	50	210	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	770	70	280	890	240	620	1040	100	50	210	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	50	770	70	280	890	240	620	1040	100	50	210	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	770	70	280	890	240	620	1040	100	50	210	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	50	770	70	280	890	240	620	1040	100	50	210	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	1.00	4.00	1.00	2.00	2.74	0.26	2.00	3.00	1.00
Final Sat.:	1700	6800	1700	1700	6800	1700	3400	4653	447	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.04	0.16	0.13	0.14	0.18	0.22	0.22	0.01	0.04	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.391
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	50	750	110	100	660	210	130	330	60	40	150	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	750	110	100	660	210	130	330	60	40	150	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	50	750	110	100	660	210	130	330	60	40	150	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	750	110	100	660	210	130	330	60	40	150	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	50	750	110	100	660	210	130	330	60	40	150	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.03	0.97	1.00	1.65	0.35	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	4855	1545	1600	2643	557	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.16	0.07	0.06	0.14	0.14	0.08	0.12	0.11	0.03	0.05	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.687
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 2	0	0 0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	2050	0	0	2050	1190	0	0	0	1200	0	670
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2050	0	0	2050	1190	0	0	0	1200	0	670
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2050	0	0	2050	0	0	0	0	1200	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2050	0	0	2050	0	0	0	0	1200	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2050	0	0	2050	0	0	0	0	1200	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.24	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.894
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 1	1	0 1!	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	840	0	0	3010	240	1210	0	1520	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	840	0	0	3010	240	1210	0	1520	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	840	0	0	3010	0	1210	0	1520	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	840	0	0	3010	0	1210	0	1520	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	840	0	0	3010	0	1210	0	1520	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	1.77	0.00	2.23	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	3014	0	3786	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.00	0.00	0.44	0.00	0.40	0.00	0.40	0.00	0.00	0.00
Crit Moves:	****				****		****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.687
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	210	1330	280	990	2130	1370	150	120	30	190	360	400
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	1330	280	990	2130	1370	150	120	30	190	360	400
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	210	1330	280	990	2130	0	150	120	30	190	360	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	1330	280	990	2130	0	150	120	30	190	360	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	210	1330	280	990	2130	0	150	120	30	190	360	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.60	0.40	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2720	680	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.16	0.29	0.31	0.00	0.04	0.04	0.04	0.06	0.11	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.597
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ignore				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 2	1	0	2	0 2	0	1	2	0 2	0	1
Volume Module:																
Base Vol:	110	1340	100		200	1620	180		130	170	40		380	390	90	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	110	1340	100		200	1620	180		130	170	40		380	390	90	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Volume:	110	1340	100		200	1620	180		130	170	0		380	390	90	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	110	1340	100		200	1620	180		130	170	0		380	390	90	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
FinalVolume:	110	1340	100		200	1620	180		130	170	0		380	390	90	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.72	0.28		2.00	2.70	0.30		2.00	2.00	1.00		2.00	2.00	1.00	
Final Sat.:	3400	6328	472		3400	4590	510		3400	3400	1700		3400	3400	1700	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.21	0.21		0.06	0.35	0.35		0.04	0.05	0.00		0.11	0.11	0.05	
Crit Moves:	****				****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.666
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	90	340	180	180	1340	530	340	610	140	390	960	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	340	180	180	1340	530	340	610	140	390	960	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	90	340	180	180	1340	530	340	610	0	390	960	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	340	180	180	1340	530	340	610	0	390	960	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	90	340	180	180	1340	530	340	610	0	390	960	210
OvlAdjVol:												150
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.07	0.11	0.04	0.28	0.33	0.11	0.13	0.00	0.12	0.20	0.13
OvlAdjV/S:												0.09
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.517
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	3	1 1	0 0	0	0 0	0 0	0	0 0
Volume Module:												
Base Vol:	710	2480	0	0	560	320	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	710	2480	0	0	560	320	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	710	2480	0	0	560	320	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	710	2480	0	0	560	320	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	710	2480	0	0	560	320	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.18	1.82	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	5091	2909	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.52	0.00	0.00	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.629
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 4	1 0	0	0 4	0 0	1	1 1	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	1960	50	0	560	0	1210	400	1160	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1960	50	0	560	0	1210	400	1160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1960	50	0	560	0	1210	400	1160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1960	50	0	560	0	1210	400	1160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1960	50	0	560	0	1210	400	1160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.88	0.12	0.00	4.00	0.00	2.00	1.00	2.00	0.00	0.00	0.00
Final Sat.:	0	7801	199	0	6400	0	3200	1600	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.00	0.09	0.00	0.38	0.25	0.36	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.524
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	70	700	120	170	700	150	100	230	40	150	350	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	700	120	170	700	150	100	230	40	150	350	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	70	700	120	170	700	150	100	230	40	150	350	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	700	120	170	700	150	100	230	40	150	350	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	70	700	120	170	700	150	100	230	40	150	350	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.65	0.35	1.00	1.70	0.30	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2800	600	1700	2896	504	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.21	0.07	0.10	0.25	0.25	0.06	0.08	0.08	0.09	0.10	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.346
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	260	1630	0	0	430	60	0	0	260	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	1630	0	0	430	60	0	0	260	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	0	0	0	430	60	0	0	260	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	0	0	0	430	60	0	0	260	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	260	0	0	0	430	60	0	0	260	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.63	0.37	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4212	588	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.08	0.00	0.00	0.00
Crit Moves:	****			****					****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.506
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	0 0	1!	0 0	1 0	0	1 0
Volume Module:												
Base Vol:	30	2080	110	50	460	10	10	0	10	20	0	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	2080	110	50	460	10	10	0	10	20	0	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	2080	110	50	460	10	10	0	10	20	0	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	2080	110	50	460	10	10	0	10	20	0	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	2080	110	50	460	10	10	0	10	20	0	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.85	0.15	1.00	2.94	0.06	0.50	0.00	0.50	1.00	0.00	1.00
Final Sat.:	1600	4559	241	1600	4698	102	800	0	800	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.46	0.46	0.03	0.10	0.10	0.01	0.00	0.01	0.01	0.00	0.01
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.614
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	4 0	2	0 0	0 0	0	1 0	3 1	0
Volume Module:												
Base Vol:	510	2070	0	0	260	230	0	0	0	170	1010	160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	510	2070	0	0	260	230	0	0	0	170	1010	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	510	2070	0	0	260	230	0	0	0	170	1010	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	510	2070	0	0	260	230	0	0	0	170	1010	160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	510	2070	0	0	260	230	0	0	0	170	1010	160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	1.00	3.45	0.55
Final Sat.:	3200	4800	0	0	6400	3200	0	0	0	1600	5525	875
Capacity Analysis Module:												
Vol/Sat:	0.16	0.43	0.00	0.00	0.04	0.07	0.00	0.00	0.00	0.11	0.18	0.18
Crit Moves:		****									****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.710
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 1	0	1 0	3 0	0	1 1	2 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	1160	230	90	340	0	1420	1650	460	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1160	230	90	340	0	1420	1650	460	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1160	230	90	340	0	1420	1650	460	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1160	230	90	340	0	1420	1650	460	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1160	230	90	340	0	1420	1650	460	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.17	0.83	1.00	3.00	0.00	1.85	2.15	2.00	0.00	0.00	0.00
Final Sat.:	0	6676	1324	1600	4800	0	2960	3440	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.06	0.07	0.00	0.48	0.48	0.14	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.596
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	100	1020	0	0	110	130	0	0	0	320	1100	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	1020	0	0	110	130	0	0	0	320	1100	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	1020	0	0	110	130	0	0	0	320	1100	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	1020	0	0	110	130	0	0	0	320	1100	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	1020	0	0	110	130	0	0	0	320	1100	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.83	2.17	0.00	0.00	0.00	1.00	3.48	0.52
Final Sat.:	3200	3200	0	0	2933	3467	0	0	0	1600	5570	830
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.20	0.20	0.28
Crit Moves:		****										****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.416
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2	0 2	0 0	1 1	2	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	330	270	120	280	0	810	1010	200	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	330	270	120	280	0	810	1010	200	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	330	270	120	280	0	810	1010	200	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	330	270	120	280	0	810	1010	200	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	330	270	120	280	0	810	1010	200	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.20	1.80	2.00	2.00	0.00	1.78	2.72	0.50	0.00	0.00	0.00
Final Sat.:	0	3520	2880	3200	3200	0	2848	4358	793	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.09	0.09	0.04	0.09	0.00	0.28	0.23	0.25	0.00	0.00	0.00
Crit Moves:		****		****			****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.630
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Ignore				Include				Ignore			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 2	1	0	2	0 3	0	1	2	0 2	1	0	1	0 3	0	1
Volume Module:																
Base Vol:	90	680	20		350	720	430		930	880	150		50	340	590	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	680	20		350	720	430		930	880	150		50	340	590	
User Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Volume:	90	680	20		350	720	0		930	880	150		50	340	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	90	680	20		350	720	0		930	880	150		50	340	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
FinalVolume:	90	680	20		350	720	0		930	880	150		50	340	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	2.91	0.09		2.00	3.00	1.00		2.00	2.56	0.44		1.00	3.00	1.00	
Final Sat.:	3400	4954	146		3400	5100	1700		3400	4357	743		1700	5100	1700	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.14	0.14		0.10	0.14	0.00		0.27	0.20	0.20		0.03	0.07	0.00	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.721
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	2 0	1 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	210	370	80	110	1010	210	170	660	370	110	330	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	370	80	110	1010	210	170	660	370	110	330	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	370	80	110	1010	210	170	660	370	110	330	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	370	80	110	1010	210	170	660	370	110	330	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	210	370	80	110	1010	210	170	660	370	110	330	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	2.00	1.66	0.34	2.00	2.00	1.00	2.00	2.15	0.85
Final Sat.:	3400	3400	1700	3400	2815	585	3400	3400	1700	3400	3659	1441
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.05	0.03	0.36	0.36	0.05	0.19	0.22	0.03	0.09	0.09
Crit Moves:	****				****				****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.516
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	130	480	150	250	150	70	400	810	80	90	450	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	480	150	250	150	70	400	810	80	90	450	520
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	480	150	250	150	70	400	810	80	90	450	520
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	480	150	250	150	70	400	810	80	90	450	520
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	480	150	250	150	70	400	810	80	90	450	520
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	2.00	2.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	3200	3200
Capacity Analysis Module:												
Vol/Sat:	0.04	0.15	0.09	0.08	0.05	0.04	0.13	0.17	0.05	0.03	0.14	0.16
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	390	50	50	170	40	170	280	40	30	90	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	390	50	50	170	40	170	280	40	30	90	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	390	50	50	170	40	170	280	40	30	90	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	390	50	50	170	40	170	280	40	30	90	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	390	50	50	170	40	170	280	40	30	90	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.89	0.11	1.00	1.00	1.00	1.00	0.88	0.12	1.00	0.50	0.50
Final Sat.:	1600	1418	182	1600	1600	1600	1600	1400	200	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.27	0.28	0.03	0.11	0.03	0.11	0.20	0.20	0.02	0.11	0.11
Crit Moves:			****	****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.801
Loss Time (sec):	0	Average Delay (sec/veh):	23.4
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	80	280	60	80	150	60	80	270	50	10	130	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	280	60	80	150	60	80	270	50	10	130	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	280	60	80	150	60	80	270	50	10	130	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	280	60	80	150	60	80	270	50	10	130	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	280	60	80	150	60	80	270	50	10	130	90
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.19	0.67	0.14	0.27	0.52	0.21	0.20	0.67	0.13	0.04	0.57	0.39
Final Sat.:	100	350	75	131	246	98	103	347	64	20	254	176
Capacity Analysis Module:												
Vol/Sat:	0.80	0.80	0.80	0.61	0.61	0.61	0.78	0.78	0.78	0.51	0.51	0.51
Crit Moves:	****			****					****		****	
Delay/Veh:	28.4	28.4	28.4	18.2	18.2	18.2	26.6	26.6	26.6	15.4	15.4	15.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.4	28.4	28.4	18.2	18.2	18.2	26.6	26.6	26.6	15.4	15.4	15.4
LOS by Move:	D	D	D	C	C	C	D	D	D	C	C	C
ApproachDel:	28.4			18.2			26.6			15.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	28.4			18.2			26.6			15.4		
LOS by Appr:	D			C			D			C		
AllWayAvgQ:	2.7	2.7	2.7	1.1	1.1	1.1	2.4	2.4	2.4	0.7	0.7	0.7

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.381
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	90	1200	370	10	550	40	140	170	100	130	30	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1200	370	10	550	40	140	170	100	130	30	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1200	370	10	550	40	140	170	100	130	30	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1200	370	10	550	40	140	170	100	130	30	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	1200	370	10	550	40	140	170	100	130	30	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.26	0.74	2.00	0.75	0.25
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	2015	1185	3200	1200	400
Capacity Analysis Module:												
Vol/Sat:	0.06	0.25	0.23	0.01	0.11	0.03	0.09	0.08	0.08	0.04	0.03	0.03
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.669
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	110	1420	40	80	610	100	220	70	120	30	30	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1420	40	80	610	100	220	70	120	30	30	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1420	40	80	610	100	220	70	120	30	30	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1420	40	80	610	100	220	70	120	30	30	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1420	40	80	610	100	220	70	120	30	30	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.07	0.44	0.03	0.05	0.19	0.06	0.14	0.04	0.08	0.02	0.04	0.04
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	0	1 0	0	1	0	0 1!	0	0
Volume Module:																
Base Vol:	60	1240	10		70	820	40		140	50	110		20	50	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	60	1240	10		70	820	40		140	50	110		20	50	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	60	1240	10		70	820	40		140	50	110		20	50	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	60	1240	10		70	820	40		140	50	110		20	50	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	60	1240	10		70	820	40		140	50	110		20	50	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.98	0.02		1.00	1.91	0.09		0.74	0.26	1.00		0.10	0.25	0.65	
Final Sat.:	1600	3174	26		1600	3051	149		1179	421	1600		160	400	1040	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.39	0.39		0.04	0.27	0.27		0.09	0.12	0.07		0.01	0.13	0.13	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.512
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	0	0 1!	0	0	0	0 1!	0	0
Volume Module:																
Base Vol:	60	1110	10		30	860	30		70	30	110		20	40	90	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	60	1110	10		30	860	30		70	30	110		20	40	90	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	60	1110	10		30	860	30		70	30	110		20	40	90	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	60	1110	10		30	860	30		70	30	110		20	40	90	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	60	1110	10		30	860	30		70	30	110		20	40	90	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.98	0.02		1.00	1.93	0.07		0.33	0.14	0.53		0.13	0.27	0.60	
Final Sat.:	1600	3171	29		1600	3092	108		533	229	838		213	427	960	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.35	0.35		0.02	0.28	0.28		0.04	0.13	0.13		0.01	0.09	0.09	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.550
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	1 0	1
Volume Module:												
Base Vol:	60	880	20	140	840	30	70	110	50	20	80	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	880	20	140	840	30	70	110	50	20	80	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	880	20	140	840	30	70	110	50	20	80	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	880	20	140	840	30	70	110	50	20	80	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	880	20	140	840	30	70	110	50	20	80	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.93	0.07	1.00	0.69	0.31	1.00	1.00	1.00
Final Sat.:	1600	3129	71	1600	3090	110	1600	1100	500	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.28	0.28	0.09	0.27	0.27	0.04	0.10	0.10	0.01	0.05	0.14
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.572
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	400	550	30	260	430	180	280	550	190	40	370	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	400	550	30	260	430	180	280	550	190	40	370	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	400	550	30	260	430	180	280	550	190	40	370	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	400	550	30	260	430	180	280	550	190	40	370	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	400	550	30	260	430	180	280	550	190	40	370	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.90	0.10	2.00	1.41	0.59	2.00	1.49	0.51	1.00	1.68	0.32
Final Sat.:	3200	3034	166	3200	2256	944	3200	2378	822	1600	2691	509
Capacity Analysis Module:												
Vol/Sat:	0.13	0.18	0.18	0.08	0.19	0.19	0.09	0.23	0.23	0.03	0.14	0.14
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.233
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	0	4	0	1	0	0	1	0	1	1	0	1	0	0
Volume Module:												
Base Vol:	0	0	0	250	1130	10	0	0	10	80	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	250	1130	10	0	0	10	80	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	250	1130	10	0	0	10	80	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	250	1130	10	0	0	10	80	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	250	1130	10	0	0	10	80	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.18	0.01	0.00	0.00	0.01	0.05	0.00	0.00
Crit Moves:					****				****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.459
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	10	870	240	0	0	0	100	150	0	0	70	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	870	240	0	0	0	100	150	0	0	70	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	870	240	0	0	0	100	150	0	0	70	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	870	240	0	0	0	100	150	0	0	70	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	870	240	0	0	0	100	150	0	0	70	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.57	0.43	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.54	0.46
Final Sat.:	1600	2508	692	0	0	0	3200	1600	0	0	862	738
Capacity Analysis Module:												
Vol/Sat:	0.01	0.35	0.35	0.00	0.00	0.00	0.03	0.09	0.00	0.00	0.08	0.08
Crit Moves:		****					****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.325
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0	0 3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	190	480	550	0	880	40	100	250	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	190	480	550	0	880	40	100	250	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	190	480	0	0	880	40	100	250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	190	480	0	0	880	40	100	250	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	190	480	0	0	880	40	100	250	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.83	0.17	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	6122	278	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.10	0.00	0.00	0.14	0.14	0.06	0.08	0.00
Crit Moves:				****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.834
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	112	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 1	0	0	0 0	0	2	0 2	0 0	0	0 2	0 1
Volume Module:												
Base Vol:	150	1580	160	0	0	0	750	310	0	0	220	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1580	160	0	0	0	750	310	0	0	220	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1580	160	0	0	0	750	310	0	0	220	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1580	160	0	0	0	750	310	0	0	220	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1580	160	0	0	0	750	310	0	0	220	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	2.51	0.25	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	381	4013	406	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.39	0.39	0.00	0.00	0.00	0.23	0.10	0.00	0.00	0.07	0.21
Crit Moves:	****						****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.553
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	30	570	50	50	380	90	330	440	70	90	290	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	570	50	50	380	90	330	440	70	90	290	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	570	50	50	380	90	330	440	70	90	290	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	570	50	50	380	90	330	440	70	90	290	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	570	50	50	380	90	330	440	70	90	290	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.62	0.38	1.00	2.00	1.00	1.00	1.49	0.51
Final Sat.:	1600	2942	258	1600	2587	613	1600	3200	1600	1600	2379	821
Capacity Analysis Module:												
Vol/Sat:	0.02	0.19	0.19	0.03	0.15	0.15	0.21	0.14	0.04	0.06	0.12	0.12
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	2	0 0	1	0	1	0 3	0	1	1	0 3	0	1
Volume Module:																
Base Vol:	20	90	20		90	130	30		60	450	160		60	780	710	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	20	90	20		90	130	30		60	450	160		60	780	710	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	20	90	20		90	130	30		60	450	160		60	780	710	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	20	90	20		90	130	30		60	450	160		60	780	710	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	20	90	20		90	130	30		60	450	160		60	780	710	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.64	0.36		2.00	0.81	0.19		1.00	3.00	1.00		1.00	3.00	1.00	
Final Sat.:	1600	2618	582		3200	1300	300		1600	4800	1600		1600	4800	1600	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.03	0.03		0.03	0.10	0.10		0.04	0.09	0.10		0.04	0.16	0.44	
Crit Moves:	****					****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.405
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	2	0 0	0 0	0	0 0	4 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	0	70	0	0	0	0	2450	350	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	70	0	0	0	0	2450	350	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	70	0	0	0	0	2450	350	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	70	0	0	0	0	2450	350	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	70	0	0	0	0	2450	350	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.38	0.22	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.519
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	1	1 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	210	1320	10	10	1500	460	150	10	70	10	10	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	1320	10	10	1500	460	150	10	70	10	10	20
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	210	1320	10	10	1500	0	150	10	0	10	10	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	1320	10	10	1500	0	150	10	0	10	10	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	210	1320	10	10	1500	0	150	10	0	10	10	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	3.00	1.00	1.88	0.12	1.00	0.25	0.25	0.50
Final Sat.:	1600	4764	36	1600	4800	1600	3000	200	1600	400	400	800
Capacity Analysis Module:												
Vol/Sat:	0.13	0.28	0.28	0.01	0.31	0.00	0.05	0.05	0.00	0.03	0.03	0.03
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.449
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	120	1820	70	70	1450	130	50	10	110	20	10	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1820	70	70	1450	130	50	10	110	20	10	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1820	70	70	1450	130	50	10	110	20	10	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1820	70	70	1450	130	50	10	110	20	10	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1820	70	70	1450	130	50	10	110	20	10	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.85	0.15	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6163	237	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.30	0.04	0.30	0.08	0.02	0.01	0.07	0.01	0.01	0.06
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.561
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	30	1450	230	80	1510	170	300	90	10	330	50	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	1450	230	80	1510	170	300	90	10	330	50	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	30	1450	230	80	1510	170	300	90	10	330	50	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	1450	230	80	1510	170	300	90	10	330	50	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	30	1450	230	80	1510	170	300	90	10	330	50	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.50	0.45	0.05	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2400	720	80	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.30	0.14	0.03	0.31	0.11	0.13	0.13	0.13	0.10	0.03	0.00
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.482
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1420	160	110	1390	50	80	0	100	180	0	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1420	160	110	1390	50	80	0	100	180	0	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1420	160	110	1390	50	80	0	100	180	0	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1420	160	110	1390	50	80	0	100	180	0	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1420	160	110	1390	50	80	0	100	180	0	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.70	0.30	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4314	486	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.33	0.03	0.29	0.03	0.05	0.00	0.06	0.06	0.00	0.04
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.844
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	146	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	430	1220	100	80	1470	150	190	290	400	170	490	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	430	1220	100	80	1470	150	190	290	400	170	490	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	430	1220	100	80	1470	150	190	290	400	170	490	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	430	1220	100	80	1470	150	190	290	400	170	490	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	430	1220	100	80	1470	150	190	290	400	170	490	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.77	0.23	1.00	3.00	1.00	1.19	1.81	1.00	1.00	2.00	1.00
Final Sat.:	3200	4436	364	1600	4800	1600	1900	2900	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.27	0.28	0.05	0.31	0.09	0.10	0.10	0.25	0.11	0.15	0.03
Crit Moves:	****				****				****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.602
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	210	2790	220	40	2170	280	200	180	130	310	200	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	2790	220	40	2170	280	200	180	130	310	200	110
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	210	2790	0	40	2170	280	200	180	0	310	200	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	2790	0	40	2170	280	200	180	0	310	200	110
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	210	2790	0	40	2170	280	200	180	0	310	200	110
OvlAdjVol:						180						90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.44	0.00	0.01	0.34	0.17	0.06	0.06	0.00	0.10	0.06	0.07
OvlAdjV/S:						0.11						0.06
Crit Moves:	****			****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.770
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	140	2010	120	580	2290	20	50	290	80	590	580	930
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	2010	120	580	2290	20	50	290	80	590	580	930
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	2010	0	580	2290	0	50	290	80	590	580	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	2010	0	580	2290	0	50	290	80	590	580	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	2010	0	580	2290	0	50	290	80	590	580	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.00	0.18	0.36	0.00	0.02	0.09	0.05	0.18	0.18	0.00
Crit Moves:		****			****				****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.563
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	90	1080	30		60	450	100		250	310	120		10	60	10	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	1080	30		60	450	100		250	310	120		10	60	10	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	90	1080	30		60	450	100		250	310	120		10	60	10	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	90	1080	30		60	450	100		250	310	120		10	60	10	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	90	1080	30		60	450	100		250	310	120		10	60	10	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.95	0.05		1.00	1.64	0.36		1.00	1.44	0.56		1.00	1.71	0.29	
Final Sat.:	3200	3114	86		1600	2618	582		1600	2307	893		1600	2743	457	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.35	0.35		0.04	0.17	0.17		0.16	0.13	0.13		0.01	0.02	0.02	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.446
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	170	680	60		40	420	120		520	270	170		20	60	20	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	170	680	60		40	420	120		520	270	170		20	60	20	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	170	680	60		40	420	120		520	270	170		20	60	20	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	170	680	60		40	420	120		520	270	170		20	60	20	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	170	680	60		40	420	120		520	270	170		20	60	20	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.84	0.16		1.00	1.56	0.44		1.97	1.03	1.00		1.00	1.50	0.50	
Final Sat.:	3200	2941	259		1600	2489	711		3159	1641	1600		1600	2400	800	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.23	0.23		0.03	0.17	0.17		0.16	0.16	0.11		0.01	0.03	0.03	
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.762
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Ignore			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0	2 0 2	0	0	3 0 1
Volume Module:												
Base Vol:	950	0	790	0	0	0	0	1470	730	0	600	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	950	0	790	0	0	0	0	1470	730	0	600	240
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	950	0	0	0	0	0	0	1470	0	0	600	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	950	0	0	0	0	0	0	1470	0	0	600	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	950	0	0	0	0	0	0	1470	0	0	600	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	3.00	1.00
Final Sat.:	3400	0	1700	0	0	0	0	3400	3400	0	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.12	0.00
Crit Moves:	****							****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.531
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	2	0 3	1	0	2	0 4	0	1
Volume Module:																
Base Vol:	140	360	90		420	1000	130		140	750	190		460	760	310	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	140	360	90		420	1000	130		140	750	190		460	760	310	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	140	360	90		420	1000	130		140	750	190		460	760	310	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	140	360	90		420	1000	130		140	750	190		460	760	310	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	140	360	90		420	1000	130		140	750	190		460	760	310	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.20	0.80		2.00	3.54	0.46		2.00	3.19	0.81		2.00	4.00	1.00	
Final Sat.:	3400	5440	1360		3400	6018	782		3400	5426	1374		3400	6800	1700	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.07	0.07		0.12	0.17	0.17		0.04	0.14	0.14		0.14	0.11	0.18	
Crit Moves:	****					****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.615
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	0	1	2	0 1	0	1
Volume Module:																
Base Vol:	140	510	370		240	1140	120		60	110	60		310	290	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	140	510	370		240	1140	120		60	110	60		310	290	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	140	510	370		240	1140	120		60	110	60		310	290	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	140	510	370		240	1140	120		60	110	60		310	290	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	140	510	370		240	1140	120		60	110	60		310	290	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.00	1.00		1.00	2.71	0.29		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	3400	1700		1700	4614	486		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.08	0.15	0.22		0.14	0.25	0.25		0.04	0.03	0.04		0.09	0.17	0.08	
Crit Moves:			****	****					****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.463
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	260	930	310	110	1260	80	20	30	40	190	80	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	930	310	110	1260	80	20	30	40	190	80	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	930	310	110	1260	80	20	30	40	190	80	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	930	310	110	1260	80	20	30	40	190	80	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	260	930	310	110	1260	80	20	30	40	190	80	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.82	0.18	1.00	1.00	1.00	2.00	1.33	0.67
Final Sat.:	3400	5100	1700	3400	4796	304	1700	1700	1700	3400	2267	1133
Capacity Analysis Module:												
Vol/Sat:	0.08	0.18	0.18	0.03	0.26	0.26	0.01	0.02	0.02	0.06	0.04	0.04
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.736
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2 0	2	1 0	2	1 0	2 0	3 0	1
Volume Module:												
Base Vol:	90	80	70	90	860	420	90	560	270	830	1320	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	80	70	90	860	420	90	560	270	830	1320	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	80	70	90	860	420	90	560	270	830	1320	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	80	70	90	860	420	90	560	270	830	1320	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	80	70	90	860	420	90	560	270	830	1320	40
OvlAdjVol:						240						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.07	0.93	2.00	2.00	2.00	1.00	2.02	0.98	2.00	3.00	1.00
Final Sat.:	3400	1813	1587	3400	3400	3400	1700	3441	1659	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.04	0.04	0.03	0.25	0.12	0.05	0.16	0.16	0.24	0.26	0.02
OvlAdjV/S:						0.07						
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.782
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	70	240	40		30	1390	150		50	200	60		230	630	80	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	70	240	40		30	1390	150		50	200	60		230	630	80	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	70	240	40		30	1390	150		50	200	60		230	630	80	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	70	240	40		30	1390	150		50	200	60		230	630	80	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	70	240	40		30	1390	150		50	200	60		230	630	80	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.71	0.29		1.00	1.81	0.19		1.00	1.54	0.46		1.00	1.77	0.23	
Final Sat.:	1700	2914	486		1700	3069	331		1700	2615	785		1700	3017	383	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.08	0.08		0.02	0.45	0.45		0.03	0.08	0.08		0.14	0.21	0.21	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.631
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ignore				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	2	0 1	1	0	2	0 1	2	0	3	0 1	2	0	2	1 0
Volume Module:																
Base Vol:	90	290	80		110	1090	290		160	670	380		350	830	90	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	290	80		110	1090	290		160	670	380		350	830	90	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Volume:	90	290	80		110	1090	290		160	670	0		350	830	90	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	90	290	80		110	1090	290		160	670	0		350	830	90	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
FinalVolume:	90	290	80		110	1090	290		160	670	0		350	830	90	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	2.00	1.00		1.00	2.00	1.00		2.00	3.00	1.00		2.00	2.71	0.29	
Final Sat.:	3400	3400	1700		1700	3400	1700		3400	5100	1700		3400	4601	499	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.09	0.05		0.06	0.32	0.17		0.05	0.13	0.00		0.10	0.18	0.18	
Crit Moves:	****				****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.755
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 4	0 1	2	0 4	0 1	2	1 2	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	140	810	120	400	3350	1540	150	320	120	220	650	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	810	120	400	3350	1540	150	320	120	220	650	230
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	810	0	400	3350	0	150	320	120	220	650	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	810	0	400	3350	0	150	320	120	220	650	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	810	0	400	3350	0	150	320	120	220	650	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.00	0.12	0.49	0.00	0.04	0.06	0.07	0.06	0.13	0.00
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.802
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 4	0	1	2	0 3	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	210	970	160		170	3200	240		60	180	90		260	730	120	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	210	970	160		170	3200	240		60	180	90		260	730	120	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	210	970	160		170	3200	240		60	180	90		260	730	120	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	210	970	160		170	3200	240		60	180	90		260	730	120	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	210	970	160		170	3200	240		60	180	90		260	730	120	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	4.00	1.00		2.00	3.72	0.28		2.00	2.00	1.00		2.00	2.58	0.42	
Final Sat.:	3400	6800	1700		3400	6326	474		3400	3400	1700		3400	4380	720	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.14	0.09		0.05	0.51	0.51		0.02	0.05	0.05		0.08	0.17	0.17	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.662
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	180	1330	40		30	3310	250		30	20	40		30	40	20	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	180	1330	40		30	3310	250		30	20	40		30	40	20	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	180	1330	40		30	3310	250		30	20	40		30	40	20	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	180	1330	40		30	3310	250		30	20	40		30	40	20	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	180	1330	40		30	3310	250		30	20	40		30	40	20	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.88	0.12		2.00	3.72	0.28		1.00	1.00	1.00		1.00	1.33	0.67	
Final Sat.:	3400	6601	199		3400	6322	478		1700	1700	1700		1700	2267	1133	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.20	0.20		0.01	0.52	0.52		0.02	0.01	0.02		0.02	0.02	0.02	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 4	0 1	2	0 4	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	480	1140	400	440	2570	380	120	270	180	520	780	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	480	1140	400	440	2570	380	120	270	180	520	780	120
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	480	1140	0	440	2570	380	120	270	0	520	780	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	480	1140	0	440	2570	380	120	270	0	520	780	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	480	1140	0	440	2570	380	120	270	0	520	780	0
OvlAdjVol:						320						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.14	0.17	0.00	0.13	0.38	0.22	0.04	0.05	0.00	0.15	0.15	0.00
OvlAdjV/S:						0.19						
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 2	0 1	2	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	90	280	30	130	760	500	80	130	40	110	730	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	280	30	130	760	500	80	130	40	110	730	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	90	280	30	130	760	500	80	130	0	110	730	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	280	30	130	760	500	80	130	0	110	730	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	90	280	30	130	760	500	80	130	0	110	730	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.81	0.19	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.68	0.32
Final Sat.:	1700	3071	329	1700	3400	1700	3400	3400	1700	1700	2853	547
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.09	0.08	0.22	0.29	0.02	0.04	0.00	0.06	0.26	0.26
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Scenario Report

Scenario:	2016NP-PM (Base)
Command:	2016NP-PM (Base)
Volume:	2016NP-PM (Base)
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2016NP-PM (Base)

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	C	xxxxx	0.745	C	xxxxx	0.745	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.649	B	xxxxx	0.649	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.657	B	xxxxx	0.657	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	E	xxxxx	0.912	E	xxxxx	0.912	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	C	xxxxx	0.773	C	xxxxx	0.773	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.517	A	xxxxx	0.517	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	D	xxxxx	0.805	D	xxxxx	0.805	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	C	xxxxx	0.781	C	xxxxx	0.781	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	D	xxxxx	0.862	D	xxxxx	0.862	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	B	xxxxx	0.612	B	xxxxx	0.612	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	C	xxxxx	0.722	C	xxxxx	0.722	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.498	A	xxxxx	0.498	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.641	B	xxxxx	0.641	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	B	xxxxx	0.656	B	xxxxx	0.656	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	B	xxxxx	0.682	B	xxxxx	0.682	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.498	A	xxxxx	0.498	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	E	xxxxx	0.916	E	xxxxx	0.916	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	A	xxxxx	0.448	A	xxxxx	0.448	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	B	xxxxx	0.604	B	xxxxx	0.604	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.445	A	xxxxx	0.445	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	C	xxxxx	0.731	C	xxxxx	0.731	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.719	C	xxxxx	0.719	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.492	A	xxxxx	0.492	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.563	A	xxxxx	0.563	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	C	23.5	0.861	C	23.5	0.861	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.584	A	xxxxx	0.584	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	C	xxxxx	0.737	C	xxxxx	0.737	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	C	xxxxx	0.722	C	xxxxx	0.722	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	B	xxxxx	0.653	B	xxxxx	0.653	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	B	xxxxx	0.678	B	xxxxx	0.678	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	C	xxxxx	0.725	C	xxxxx	0.725	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	A	xxxxx	0.578	A	xxxxx	0.578	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.387	A	xxxxx	0.387	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.439	A	xxxxx	0.439	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	A	xxxxx	0.511	A	xxxxx	0.511	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	C	xxxxx	0.706	C	xxxxx	0.706	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	A	xxxxx	0.554	A	xxxxx	0.554	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.419	A	xxxxx	0.419	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.508	A	xxxxx	0.508	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.531	A	xxxxx	0.531	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	A	xxxxx	0.580	A	xxxxx	0.580	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.506	A	xxxxx	0.506	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	C	xxxxx	0.729	C	xxxxx	0.729	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	B	xxxxx	0.600	B	xxxxx	0.600	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	D	xxxxx	0.853	D	xxxxx	0.853	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	B	xxxxx	0.681	B	xxxxx	0.681	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	B	xxxxx	0.634	B	xxxxx	0.634	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	B	xxxxx	0.628	B	xxxxx	0.628	+ 0.000 V/C

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2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 49 RED HILL AVE/DYER RD	D	xxxxx	0.891	D	xxxxx	0.891	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	D	xxxxx	0.817	D	xxxxx	0.817	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	C	xxxxx	0.757	C	xxxxx	0.757	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	E	xxxxx	0.925	E	xxxxx	0.925	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	E	xxxxx	0.918	E	xxxxx	0.918	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	D	xxxxx	0.805	D	xxxxx	0.805	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	E	xxxxx	0.905	E	xxxxx	0.905	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.833	D	xxxxx	0.833	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	B	xxxxx	0.681	B	xxxxx	0.681	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	D	xxxxx	0.863	D	xxxxx	0.863	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	D	xxxxx	0.844	D	xxxxx	0.844	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.745
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	610	1090	620	290	800	70	70	950	620	720	1080	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	610	1090	620	290	800	70	70	950	620	720	1080	520
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	610	1090	0	290	800	70	70	950	620	720	1080	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	610	1090	0	290	800	70	70	950	620	720	1080	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	610	1090	0	290	800	70	70	950	620	720	1080	0
OvlAdjVol:									315			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.18	0.16	0.00	0.09	0.12	0.04	0.04	0.19	0.36	0.21	0.21	0.00
OvlAdjV/S:									0.19			
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.649
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0 0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1960	760	590	1510	0	0	0	0	370	0	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1960	760	590	1510	0	0	0	0	370	0	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1960	760	590	1510	0	0	0	0	370	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1960	760	590	1510	0	0	0	0	370	0	234
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1960	760	590	1510	0	0	0	0	370	0	234
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.22	0.17	0.22	0.00	0.00	0.00	0.00	0.11	0.00	0.14
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.657
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	2170	480	440	1260	190	0	0	0	540	80	550
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2170	480	440	1260	190	0	0	0	540	80	550
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2170	480	440	1260	190	0	0	0	540	80	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2170	480	440	1260	190	0	0	0	540	80	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2170	480	440	1260	190	0	0	0	540	80	0
OvlAdjVol:			210									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.28	0.13	0.19	0.11	0.00	0.00	0.00	0.16	0.05	0.00
OvlAdjV/S:			0.12									
Crit Moves:		****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.912
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	94	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	110	1580	110	510	1280	10	230	80	80	390	70	700
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1580	110	510	1280	10	230	80	80	390	70	700
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1580	110	510	1280	10	230	80	80	390	70	700
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1580	110	510	1280	10	230	80	80	390	70	700
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1580	110	510	1280	10	230	80	80	390	70	700
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.97	0.03	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6747	53	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.06	0.15	0.19	0.19	0.07	0.05	0.05	0.11	0.04	0.41
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.773
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	1 0	4 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	110	1020	40	140	930	580	370	410	90	80	1060	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1020	40	140	930	580	370	410	90	80	1060	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	110	1020	40	140	930	580	370	410	90	80	1060	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1020	40	140	930	580	370	410	90	80	1060	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	110	1020	40	140	930	580	370	410	90	80	1060	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	1.00	4.00	1.00	2.00	2.46	0.54	2.00	3.00	1.00
Final Sat.:	1700	6800	1700	1700	6800	1700	3400	4182	918	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.02	0.08	0.14	0.34	0.11	0.10	0.10	0.02	0.21	0.00
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.517
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	140	690	50	60	810	230	310	180	40	110	500	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	690	50	60	810	230	310	180	40	110	500	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	690	50	60	810	230	310	180	40	110	500	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	690	50	60	810	230	310	180	40	110	500	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	690	50	60	810	230	310	180	40	110	500	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.12	0.88	1.75	1.02	0.23	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	4985	1415	2809	1629	362	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.14	0.03	0.04	0.16	0.16	0.11	0.11	0.11	0.07	0.16	0.00
Crit Moves:	****			****					****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.805
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	4	0 2	0 0	0	0 0	3 0	0	0 1
Volume Module:												
Base Vol:	0	3190	0	0	1870	1020	0	0	0	660	0	390
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3190	0	0	1870	1020	0	0	0	660	0	390
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	3190	0	0	1870	0	0	0	0	660	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3190	0	0	1870	0	0	0	0	660	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	3190	0	0	1870	0	0	0	0	660	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.63	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.13	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 1	1	0 1!	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	1990	0	0	1890	640	1160	0	640	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1990	0	0	1890	640	1160	0	640	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1990	0	0	1890	0	1160	0	640	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1990	0	0	1890	0	1160	0	640	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1990	0	0	1890	0	1160	0	640	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.00	0.00	0.28	0.00	0.34	0.00	0.19	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.862
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	70	2120	280	610	1560	270	860	670	110	270	230	950
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	2120	280	610	1560	270	860	670	110	270	230	950
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	70	2120	280	610	1560	0	860	670	110	270	230	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	2120	280	610	1560	0	860	670	110	270	230	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	70	2120	280	610	1560	0	860	670	110	270	230	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.72	0.28	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2921	479	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.16	0.18	0.23	0.00	0.25	0.23	0.23	0.08	0.07	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.612
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	40	1670	310	190	1490	170	290	590	170	140	260	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	1670	310	190	1490	170	290	590	170	140	260	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	40	1670	310	190	1490	170	290	590	0	140	260	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1670	310	190	1490	170	290	590	0	140	260	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	40	1670	310	190	1490	170	290	590	0	140	260	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.37	0.63	2.00	2.69	0.31	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5735	1065	3400	4578	522	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.29	0.29	0.06	0.33	0.33	0.09	0.17	0.00	0.04	0.08	0.12
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	180	1420	430	270	520	370	600	1000	170	280	910	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1420	430	270	520	370	600	1000	170	280	910	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	180	1420	430	270	520	370	600	1000	0	280	910	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1420	430	270	520	370	600	1000	0	280	910	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	180	1420	430	270	520	370	600	1000	0	280	910	50
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.07	0.93	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4912	1488	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.29	0.29	0.06	0.11	0.23	0.19	0.21	0.00	0.09	0.19	0.03
OvlAdjV/S:												0.00
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.498
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 3	1 1	0	0 0	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	800	2390	0	0	1010	700	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	800	2390	0	0	1010	700	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	800	2390	0	0	1010	700	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	800	2390	0	0	1010	700	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	800	2390	0	0	1010	700	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	3200	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.25	0.50	0.00	0.00	0.21	0.22	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 1	0	0 0	4 0	0	1 1	1 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	2320	90	0	1010	0	870	760	1050	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2320	90	0	1010	0	870	760	1050	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2320	90	0	1010	0	870	760	1050	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2320	90	0	1010	0	870	760	1050	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2320	90	0	1010	0	870	760	1050	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.81	0.19	0.00	4.00	0.00	1.60	1.40	2.00	0.00	0.00	0.00
Final Sat.:	0	7701	299	0	6400	0	2562	2238	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.00	0.16	0.00	0.34	0.34	0.33	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.656
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	60	710	160	240	770	120	160	440	70	180	450	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	710	160	240	770	120	160	440	70	180	450	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	60	710	160	240	770	120	160	440	70	180	450	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	710	160	240	770	120	160	440	70	180	450	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	60	710	160	240	770	120	160	440	70	180	450	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.73	0.27	1.00	1.73	0.27	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2942	458	1700	2933	467	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.21	0.09	0.14	0.26	0.26	0.09	0.15	0.15	0.11	0.13	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.682
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	350	750	0	0	1630	130	0	0	310	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	750	0	0	1630	130	0	0	310	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	350	0	0	0	1630	130	0	0	310	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	0	0	0	1630	130	0	0	310	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	350	0	0	0	1630	130	0	0	310	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.78	0.22	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4445	355	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.00	0.00	0.37	0.37	0.00	0.00	0.10	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.498
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	0 0	1!	0 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	740	60	60	1960	10	10	10	20	80	0	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	740	60	60	1960	10	10	10	20	80	0	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	740	60	60	1960	10	10	10	20	80	0	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	740	60	60	1960	10	10	10	20	80	0	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	740	60	60	1960	10	10	10	20	80	0	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.78	0.22	1.00	2.98	0.02	0.25	0.25	0.50	1.00	0.00	1.00
Final Sat.:	1600	4440	360	1600	4776	24	400	400	800	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.17	0.04	0.41	0.41	0.01	0.03	0.03	0.05	0.00	0.03
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.916
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	0	0	0	0 4	0	2	0	0 0	0	0 0	1	0 3	1	0
Volume Module:																
Base Vol:	510	690	0		0	950	1190		0	0	0		270	2360	100	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	510	690	0		0	950	1190		0	0	0		270	2360	100	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	510	690	0		0	950	1190		0	0	0		270	2360	100	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	510	690	0		0	950	1190		0	0	0		270	2360	100	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	510	690	0		0	950	1190		0	0	0		270	2360	100	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	3.00	0.00		0.00	4.00	2.00		0.00	0.00	0.00		1.00	3.84	0.16	
Final Sat.:	3200	4800	0		0	6400	3200		0	0	0		1600	6140	260	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.14	0.00		0.00	0.15	0.37		0.00	0.00	0.00		0.17	0.38	0.38	
Crit Moves:	****						****							****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.448
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 1	0	1 0	3 0	0	1 1	2 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	740	230	140	1070	0	460	980	590	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	740	230	140	1070	0	460	980	590	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	740	230	140	1070	0	460	980	590	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	740	230	140	1070	0	460	980	590	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	740	230	140	1070	0	460	980	590	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	1.00	1.00	3.00	0.00	1.28	2.72	2.00	0.00	0.00	0.00
Final Sat.:	0	6400	1600	1600	4800	0	2044	4356	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.14	0.09	0.22	0.00	0.23	0.22	0.18	0.00	0.00	0.00
Crit Moves:					****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.604
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	160	310	0	0	470	850	0	0	0	420	1550	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	310	0	0	470	850	0	0	0	420	1550	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	310	0	0	470	850	0	0	0	420	1550	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	310	0	0	470	850	0	0	0	420	1550	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	310	0	0	470	850	0	0	0	420	1550	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.42	2.58	0.00	0.00	0.00	1.00	3.78	0.22
Final Sat.:	3200	3200	0	0	2279	4121	0	0	0	1600	6055	345
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.26	0.26	0.35
Crit Moves:	****				****							****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.445
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2	0 2	0 0	1 1	2	1 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	200	260	260	630	0	280	1060	130	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	200	260	260	630	0	280	1060	130	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	200	260	260	630	0	280	1060	130	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	200	260	260	630	0	280	1060	130	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	200	260	260	630	0	280	1060	130	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	3.67	0.33	0.00	0.00	0.00
Final Sat.:	0	3200	3200	3200	3200	0	1600	5876	524	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.08	0.08	0.20	0.00	0.17	0.18	0.25	0.00	0.00	0.00
Crit Moves:				****					****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.731
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	180	1120	20	340	780	950	710	490	80	60	760	840
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1120	20	340	780	950	710	490	80	60	760	840
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	180	1120	20	340	780	0	710	490	80	60	760	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1120	20	340	780	0	710	490	80	60	760	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	180	1120	20	340	780	0	710	490	80	60	760	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.95	0.05	2.00	3.00	1.00	2.00	2.58	0.42	1.00	3.00	1.00
Final Sat.:	3400	5011	89	3400	5100	1700	3400	4384	716	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.22	0.10	0.15	0.00	0.21	0.11	0.11	0.04	0.15	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.719
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	2 0	1 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	340	1310	100	160	880	160	250	790	260	80	590	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	1310	100	160	880	160	250	790	260	80	590	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	340	1310	100	160	880	160	250	790	260	80	590	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	1310	100	160	880	160	250	790	260	80	590	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	340	1310	100	160	880	160	250	790	260	80	590	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	2.00	1.69	0.31	2.00	2.26	0.74	2.00	2.13	0.87
Final Sat.:	3400	3400	1700	3400	2877	523	3400	3837	1263	3400	3625	1475
Capacity Analysis Module:												
Vol/Sat:	0.10	0.39	0.06	0.05	0.31	0.31	0.07	0.21	0.21	0.02	0.16	0.16
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.492
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	130	170	80	440	470	300	130	510	160	140	1070	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	170	80	440	470	300	130	510	160	140	1070	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	170	80	440	470	300	130	510	160	140	1070	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	170	80	440	470	300	130	510	160	140	1070	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	170	80	440	470	300	130	510	160	140	1070	260
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.05	0.05	0.14	0.15	0.19	0.04	0.11	0.10	0.04	0.22	0.16
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.563
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	180	40	130	390	160	100	140	60	50	310	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	180	40	130	390	160	100	140	60	50	310	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	180	40	130	390	160	100	140	60	50	310	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	180	40	130	390	160	100	140	60	50	310	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	180	40	130	390	160	100	140	60	50	310	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.82	0.18	1.00	1.00	1.00	1.00	0.70	0.30	1.00	0.79	0.21
Final Sat.:	1600	1309	291	1600	1600	1600	1600	1120	480	1600	1272	328
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.14	0.08	0.24	0.10	0.06	0.13	0.13	0.03	0.24	0.24
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.861
Loss Time (sec):	0	Average Delay (sec/veh):	23.5
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	40	160	30	90	320	70	50	170	60	30	230	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	160	30	90	320	70	50	170	60	30	230	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	160	30	90	320	70	50	170	60	30	230	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	160	30	90	320	70	50	170	60	30	230	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	160	30	90	320	70	50	170	60	30	230	60
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.70	0.13	0.19	0.67	0.14	0.18	0.61	0.21	0.09	0.72	0.19
Final Sat.:	81	325	61	104	372	81	86	293	103	47	358	93
Capacity Analysis Module:												
Vol/Sat:	0.49	0.49	0.49	0.86	0.86	0.86	0.58	0.58	0.58	0.64	0.64	0.64
Crit Moves:		****			****				****		****	
Delay/Veh:	15.2	15.2	15.2	34.1	34.1	34.1	17.1	17.1	17.1	19.0	19.0	19.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.2	15.2	15.2	34.1	34.1	34.1	17.1	17.1	17.1	19.0	19.0	19.0
LOS by Move:	C	C	C	D	D	D	C	C	C	C	C	C
ApproachDel:		15.2			34.1			17.1			19.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		15.2			34.1			17.1			19.0	
LOS by Appr:		C			D			C			C	
AllWayAvgQ:	0.7	0.7	0.7	3.8	3.8	3.8	1.0	1.0	1.0	1.3	1.3	1.3

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec): 100 Critical Vol./Cap.(X): 0.584
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	70	590	200	10	1380	220	40	60	150	510	160	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	590	200	10	1380	220	40	60	150	510	160	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	590	200	10	1380	220	40	60	150	510	160	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	590	200	10	1380	220	40	60	150	510	160	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	590	200	10	1380	220	40	60	150	510	160	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	2.00	0.94	0.06
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	1600	1600	3200	1506	94
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.13	0.01	0.29	0.14	0.03	0.04	0.09	0.16	0.11	0.11
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.737
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	90	700	40	50	1800	170	100	40	110	40	50	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	700	40	50	1800	170	100	40	110	40	50	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	700	40	50	1800	170	100	40	110	40	50	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	700	40	50	1800	170	100	40	110	40	50	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	700	40	50	1800	170	100	40	110	40	50	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.56	0.44
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	889	711
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.03	0.03	0.56	0.11	0.06	0.03	0.07	0.03	0.06	0.06
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	90	810	10	110	1640	90	50	50	100	20	60	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	810	10	110	1640	90	50	50	100	20	60	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	810	10	110	1640	90	50	50	100	20	60	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	810	10	110	1640	90	50	50	100	20	60	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	810	10	110	1640	90	50	50	100	20	60	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.90	0.10	0.50	0.50	1.00	0.13	0.40	0.47
Final Sat.:	1600	3161	39	1600	3034	166	800	800	1600	213	640	747
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.07	0.54	0.54	0.03	0.06	0.06	0.01	0.09	0.09
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	80	920	20	50	1520	70	40	30	60	30	40	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	920	20	50	1520	70	40	30	60	30	40	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	920	20	50	1520	70	40	30	60	30	40	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	920	20	50	1520	70	40	30	60	30	40	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	920	20	50	1520	70	40	30	60	30	40	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.91	0.09	0.31	0.23	0.46	0.23	0.31	0.46
Final Sat.:	1600	3132	68	1600	3059	141	492	369	738	369	492	738
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.29	0.03	0.50	0.50	0.03	0.08	0.08	0.02	0.08	0.08
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	730	30	130	1300	90	60	90	60	30	180	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	730	30	130	1300	90	60	90	60	30	180	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	730	30	130	1300	90	60	90	60	30	180	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	730	30	130	1300	90	60	90	60	30	180	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	730	30	130	1300	90	60	90	60	30	180	250
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.92	0.08	1.00	1.87	0.13	1.00	0.60	0.40	1.00	1.00	1.00
Final Sat.:	1600	3074	126	1600	2993	207	1600	960	640	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.24	0.24	0.08	0.43	0.43	0.04	0.09	0.09	0.02	0.11	0.16
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	310	470	60	210	630	370	270	550	240	100	650	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	310	470	60	210	630	370	270	550	240	100	650	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	310	470	60	210	630	370	270	550	240	100	650	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	310	470	60	210	630	370	270	550	240	100	650	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	310	470	60	210	630	370	270	550	240	100	650	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.77	0.23	2.00	1.26	0.74	2.00	1.39	0.61	1.00	1.76	0.24
Final Sat.:	3200	2838	362	3200	2016	1184	3200	2228	972	1600	2811	389
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.17	0.07	0.31	0.31	0.08	0.25	0.25	0.06	0.23	0.23
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.578
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 4	0 1	0	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	0	0	0	250	2500	0	0	10	10	290	10	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	250	2500	0	0	10	10	290	10	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	250	2500	0	0	10	10	290	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	250	2500	0	0	10	10	290	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	250	2500	0	0	10	10	290	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.39	0.00	0.00	0.01	0.01	0.18	0.01	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.387
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	30	400	120	0	0	0	60	190	0	0	270	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	400	120	0	0	0	60	190	0	0	270	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	400	120	0	0	0	60	190	0	0	270	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	400	120	0	0	0	60	190	0	0	270	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	400	120	0	0	0	60	190	0	0	270	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.54	0.46	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.82	0.18
Final Sat.:	1600	2462	738	0	0	0	3200	1600	0	0	1309	291
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.16	0.00	0.00	0.00	0.02	0.12	0.00	0.00	0.21	0.21
Crit Moves:		****					****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.439
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0 0	3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	340	1290	1200	0	610	80	100	340	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	340	1290	1200	0	610	80	100	340	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	340	1290	0	0	610	80	100	340	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	340	1290	0	0	610	80	100	340	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	340	1290	0	0	610	80	100	340	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.54	0.46	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	5658	742	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.27	0.00	0.00	0.11	0.11	0.06	0.11	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.511
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	0	0	2	0	2	0	0	1
Volume Module:												
Base Vol:	150	760	120	0	0	0	550	410	0	0	300	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	760	120	0	0	0	550	410	0	0	300	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	760	120	0	0	0	550	410	0	0	300	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	760	120	0	0	0	550	410	0	0	300	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	760	120	0	0	0	550	410	0	0	300	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.44	2.21	0.35	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	699	3542	559	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.00	0.00	0.00	0.17	0.13	0.00	0.00	0.09	0.13
Crit Moves:	****						****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.706
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	50	480	90	130	690	380	150	500	40	70	710	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	480	90	130	690	380	150	500	40	70	710	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	480	90	130	690	380	150	500	40	70	710	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	480	90	130	690	380	150	500	40	70	710	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	480	90	130	690	380	150	500	40	70	710	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	1.29	0.71	1.00	2.00	1.00	1.00	1.80	0.20
Final Sat.:	1600	2695	505	1600	2064	1136	1600	3200	1600	1600	2876	324
Capacity Analysis Module:												
Vol/Sat:	0.03	0.18	0.18	0.08	0.33	0.33	0.09	0.16	0.03	0.04	0.25	0.25
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.554
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0	1 0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	110	180	180	600	100	100	30	1100	70	40	590	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	180	180	600	100	100	30	1100	70	40	590	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	180	180	600	100	100	30	1100	70	40	590	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	180	180	600	100	100	30	1100	70	40	590	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	180	180	600	100	100	30	1100	70	40	590	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	0.50	0.50	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	800	800	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.19	0.13	0.13	0.02	0.23	0.04	0.03	0.12	0.08
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.419
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 2	0	0 0	0 0	0	0 4	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	0	230	0	0	0	0	2220	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	230	0	0	0	0	2220	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	230	0	0	0	0	2220	150	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	230	0	0	0	0	2220	150	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	230	0	0	0	0	2220	150	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.35	0.09	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.508
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	1 0	1	0 3	0 1	1	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	40	1560	0	0	1930	100	260	0	130	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	1560	0	0	1930	100	260	0	130	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	40	1560	0	0	1930	0	260	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1560	0	0	1930	0	260	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	40	1560	0	0	1930	0	260	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	3.00	1.00	2.00	0.00	1.00	0.00	1.00	0.00
Final Sat.:	1600	4800	0	1600	4800	1600	3200	0	1600	0	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.33	0.00	0.00	0.40	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.531
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	60	1780	60	40	1860	60	80	10	150	20	10	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1780	60	40	1860	60	80	10	150	20	10	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1780	60	40	1860	60	80	10	150	20	10	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1780	60	40	1860	60	80	10	150	20	10	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1780	60	40	1860	60	80	10	150	20	10	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.87	0.13	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6191	209	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.29	0.03	0.39	0.04	0.03	0.01	0.09	0.01	0.01	0.06
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.580
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	40	1660	330	160	1650	380	220	90	20	260	120	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	1660	330	160	1650	380	220	90	20	260	120	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	40	1660	330	160	1650	380	220	90	20	260	120	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1660	330	160	1650	380	220	90	20	260	120	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	40	1660	330	160	1650	380	220	90	20	260	120	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.33	0.55	0.12	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2133	873	194	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.35	0.21	0.05	0.34	0.24	0.10	0.10	0.10	0.08	0.08	0.00
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.506
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1640	190	100	1540	80	40	0	20	220	0	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1640	190	100	1540	80	40	0	20	220	0	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1640	190	100	1540	80	40	0	20	220	0	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1640	190	100	1540	80	40	0	20	220	0	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1640	190	100	1540	80	40	0	20	220	0	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.69	0.31	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4302	498	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.38	0.38	0.03	0.32	0.05	0.03	0.00	0.01	0.07	0.00	0.04
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.729
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2	1	0	1 0 3	0	1	1 1 1	0	1	1 1 1	0	1
Volume Module:												
Base Vol:	350	1830	320	40	1430	80	110	240	290	170	190	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	1830	320	40	1430	80	110	240	290	170	190	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	350	1830	320	40	1430	80	110	240	290	170	190	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	1830	320	40	1430	80	110	240	290	170	190	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	350	1830	320	40	1430	80	110	240	290	170	190	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.55	0.45	1.00	3.00	1.00	1.00	2.00	1.00	1.42	1.58	1.00
Final Sat.:	3200	4086	714	1600	4800	1600	1600	3200	1600	2267	2533	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.45	0.45	0.03	0.30	0.05	0.07	0.08	0.18	0.07	0.08	0.02
Crit Moves:		****		****					****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec): 100 Critical Vol./Cap.(X): 0.600
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	150	2360	170	140	2480	220	230	220	100	310	220	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	2360	170	140	2480	220	230	220	100	310	220	140
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	150	2360	0	140	2480	220	230	220	0	310	220	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	2360	0	140	2480	220	230	220	0	310	220	140
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	150	2360	0	140	2480	220	230	220	0	310	220	140
OvlAdjVol:						105						70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.37	0.00	0.04	0.39	0.14	0.07	0.07	0.00	0.10	0.07	0.09
OvlAdjV/S:						0.07						0.04
Crit Moves:	****				****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.853
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	155	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	90	2040	530	1130	2320	50	30	350	50	230	280	650
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	2040	530	1130	2320	50	30	350	50	230	280	650
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	90	2040	0	1130	2320	0	30	350	50	230	280	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	2040	0	1130	2320	0	30	350	50	230	280	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	90	2040	0	1130	2320	0	30	350	50	230	280	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.00	0.35	0.36	0.00	0.01	0.11	0.03	0.07	0.09	0.00
Crit Moves:		****			****				****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	0	1	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	160	840		10	30	970		290	200		60	80	40	290		70
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Initial Bse:	160	840		10	30	970		290	200		60	80	40	290		70
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
PHF Volume:	160	840		10	30	970		290	200		60	80	40	290		70
Reduct Vol:	0	0		0	0	0		0	0		0	0	0	0		0
Reduced Vol:	160	840		10	30	970		290	200		60	80	40	290		70
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
FinalVolume:	160	840		10	30	970		290	200		60	80	40	290		70
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600		1600	1600	1600	1600		1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Lanes:	2.00	1.98		0.02	1.00	1.54		0.46	1.00		1.00	1.00	1.00	1.61		0.39
Final Sat.:	3200	3162		38	1600	2463		737	1600		1600	1600	1600	2578		622
Capacity Analysis Module:																
Vol/Sat:	0.05	0.27		0.27	0.02	0.39		0.39	0.13		0.04	0.05	0.03	0.11		0.11
Crit Moves:	****					****			****							****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	290	640	20		20	540	400		370	80	90		50	360	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	290	640	20		20	540	400		370	80	90		50	360	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	290	640	20		20	540	400		370	80	90		50	360	70	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	290	640	20		20	540	400		370	80	90		50	360	70	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	290	640	20		20	540	400		370	80	90		50	360	70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.94	0.06		1.00	1.15	0.85		2.00	1.00	1.00		1.00	1.67	0.33	
Final Sat.:	3200	3103	97		1600	1838	1362		3200	1600	1600		1600	2679	521	
Capacity Analysis Module:																
Vol/Sat:	0.09	0.21	0.21		0.01	0.29	0.29		0.12	0.05	0.06		0.03	0.13	0.13	
Crit Moves:	****					****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.628
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Ignore			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0	2 0 2	0	0	3 0 1
Volume Module:												
Base Vol:	740	0	310	0	0	0	0	790	810	0	1840	1090
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	740	0	310	0	0	0	0	790	810	0	1840	1090
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	740	0	0	0	0	0	0	790	0	0	1840	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	740	0	0	0	0	0	0	790	0	0	1840	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	740	0	0	0	0	0	0	790	0	0	1840	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	3.00	1.00
Final Sat.:	3400	0	1700	0	0	0	0	3400	3400	0	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.36	0.00
Crit Moves:	****						****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.891
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	430	1770	370	370	460	140	220	800	60	170	910	600
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	430	1770	370	370	460	140	220	800	60	170	910	600
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	430	1770	370	370	460	140	220	800	60	170	910	600
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	430	1770	370	370	460	140	220	800	60	170	910	600
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	430	1770	370	370	460	140	220	800	60	170	910	600
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.31	0.69	2.00	3.07	0.93	2.00	3.72	0.28	2.00	4.00	1.00
Final Sat.:	3400	5624	1176	3400	5213	1587	3400	6326	474	3400	6800	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.31	0.31	0.11	0.09	0.09	0.06	0.13	0.13	0.05	0.13	0.35
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.817
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	0	1	2	0 1	0	1
Volume Module:																
Base Vol:	40	1940	260		120	700	60		90	270	100		500	160	360	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	40	1940	260		120	700	60		90	270	100		500	160	360	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	40	1940	260		120	700	60		90	270	100		500	160	360	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	40	1940	260		120	700	60		90	270	100		500	160	360	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	40	1940	260		120	700	60		90	270	100		500	160	360	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.65	0.35		1.00	2.76	0.24		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	4497	603		1700	4697	403		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.43	0.43		0.07	0.15	0.15		0.05	0.08	0.06		0.15	0.09	0.21	
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.757
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	130	1940	280	50	1200	30	90	120	300	460	60	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1940	280	50	1200	30	90	120	300	460	60	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1940	280	50	1200	30	90	120	300	460	60	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1940	280	50	1200	30	90	120	300	460	60	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1940	280	50	1200	30	90	120	300	460	60	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.93	0.07	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	3400	5100	1700	3400	4976	124	1700	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.38	0.16	0.01	0.24	0.24	0.05	0.07	0.18	0.14	0.04	0.11
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.925
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	104	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2 0	2	1 0	2	1 0	2 0	3 0	1
Volume Module:												
Base Vol:	440	960	440	50	170	250	490	1290	110	140	820	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	960	440	50	170	250	490	1290	110	140	820	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	440	960	440	50	170	250	490	1290	110	140	820	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	960	440	50	170	250	490	1290	110	140	820	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	440	960	440	50	170	250	490	1290	110	140	820	130
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.37	0.63	2.00	2.00	2.00	1.00	2.76	0.24	2.00	3.00	1.00
Final Sat.:	3400	2331	1069	3400	3400	3400	1700	4699	401	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.41	0.41	0.01	0.05	0.07	0.29	0.27	0.27	0.04	0.16	0.08
OvlAdjV/S:						0.00						
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.918
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	98	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	90	1390	340		100	360	80		100	790	90		70	490	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	1390	340		100	360	80		100	790	90		70	490	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	90	1390	340		100	360	80		100	790	90		70	490	70	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	90	1390	340		100	360	80		100	790	90		70	490	70	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	90	1390	340		100	360	80		100	790	90		70	490	70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.61	0.39		1.00	1.64	0.36		1.00	1.80	0.20		1.00	1.75	0.25	
Final Sat.:	1700	2732	668		1700	2782	618		1700	3052	348		1700	2975	425	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.51	0.51		0.06	0.13	0.13		0.06	0.26	0.26		0.04	0.16	0.16	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.805
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	280	1070	350	140	350	190	470	1370	110	140	950	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	1070	350	140	350	190	470	1370	110	140	950	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	280	1070	350	140	350	190	470	1370	0	140	950	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	1070	350	140	350	190	470	1370	0	140	950	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	280	1070	350	140	350	190	470	1370	0	140	950	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.54	0.46
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4326	774
Capacity Analysis Module:												
Vol/Sat:	0.08	0.31	0.21	0.08	0.10	0.11	0.14	0.27	0.00	0.04	0.22	0.22
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.905
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 1	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	440	2990	190	330	1370	360	950	720	250	160	620	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	2990	190	330	1370	360	950	720	250	160	620	520
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	440	2990	0	330	1370	0	950	720	250	160	620	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	2990	0	330	1370	0	950	720	250	160	620	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	440	2990	0	330	1370	0	950	720	250	160	620	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.84	2.16	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	4835	3665	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.44	0.00	0.10	0.20	0.00	0.20	0.20	0.15	0.05	0.12	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.833
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	3 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	190	2900	260	290	1390	200	440	790	250	230	430	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	2900	260	290	1390	200	440	790	250	230	430	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	2900	260	290	1390	200	440	790	250	230	430	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	2900	260	290	1390	200	440	790	250	230	430	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	2900	260	290	1390	200	440	790	250	230	430	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	3.50	0.50	2.00	2.28	0.72	2.00	2.05	0.95
Final Sat.:	3400	6800	1700	3400	5945	855	3400	3874	1226	3400	3481	1619
Capacity Analysis Module:												
Vol/Sat:	0.06	0.43	0.15	0.09	0.23	0.23	0.13	0.20	0.20	0.07	0.12	0.12
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	100	3010	40	30	1830	80	260	210	200	40	40	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	3010	40	30	1830	80	260	210	200	40	40	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	3010	40	30	1830	80	260	210	200	40	40	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	3010	40	30	1830	80	260	210	200	40	40	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	3010	40	30	1830	80	260	210	200	40	40	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.95	0.05	2.00	3.83	0.17	1.00	1.02	0.98	1.00	1.14	0.86
Final Sat.:	3400	6711	89	3400	6515	285	1700	1741	1659	1700	1943	1457
Capacity Analysis Module:												
Vol/Sat:	0.03	0.45	0.45	0.01	0.28	0.28	0.15	0.12	0.12	0.02	0.02	0.02
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.863
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	360	2340	580	260	1590	230	560	1250	740	500	540	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	360	2340	580	260	1590	230	560	1250	740	500	540	340
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	360	2340	0	260	1590	230	560	1250	0	500	540	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	360	2340	0	260	1590	230	560	1250	0	500	540	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	360	2340	0	260	1590	230	560	1250	0	500	540	0
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.11	0.34	0.00	0.08	0.23	0.14	0.16	0.25	0.00	0.15	0.11	0.00
OvlAdjV/S:						0.00						
Crit Moves:	****			****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.844
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 2	0 1	2	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	50	910	80	290	560	160	480	950	130	90	310	160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	910	80	290	560	160	480	950	130	90	310	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	50	910	80	290	560	160	480	950	0	90	310	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	910	80	290	560	160	480	950	0	90	310	160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	50	910	80	290	560	160	480	950	0	90	310	160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.84	0.16	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.32	0.68
Final Sat.:	1700	3125	275	1700	3400	1700	3400	3400	1700	1700	2243	1157
Capacity Analysis Module:												
Vol/Sat:	0.03	0.29	0.29	0.17	0.16	0.09	0.14	0.28	0.00	0.05	0.14	0.14
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Scenario Report

Scenario:	2021NP-AM (Base)
Command:	2021NP-AM (Base)
Volume:	2021NP-AM (Base)
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2021NP-AM (Base)

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	B	xxxxx	0.624	B	xxxxx	0.624	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.686	B	xxxxx	0.686	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.616	B	xxxxx	0.616	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	C	xxxxx	0.738	C	xxxxx	0.738	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	A	xxxxx	0.584	A	xxxxx	0.584	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.408	A	xxxxx	0.408	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	B	xxxxx	0.695	B	xxxxx	0.695	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	E	xxxxx	0.910	E	xxxxx	0.910	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	C	xxxxx	0.731	C	xxxxx	0.731	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	B	xxxxx	0.618	B	xxxxx	0.618	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	B	xxxxx	0.684	B	xxxxx	0.684	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.546	A	xxxxx	0.546	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.659	B	xxxxx	0.659	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	A	xxxxx	0.553	A	xxxxx	0.553	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	A	xxxxx	0.354	A	xxxxx	0.354	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.525	A	xxxxx	0.525	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	B	xxxxx	0.641	B	xxxxx	0.641	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	C	xxxxx	0.734	C	xxxxx	0.734	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	B	xxxxx	0.612	B	xxxxx	0.612	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.431	A	xxxxx	0.431	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	B	xxxxx	0.653	B	xxxxx	0.653	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.732	C	xxxxx	0.732	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.528	A	xxxxx	0.528	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.550	A	xxxxx	0.550	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	D	26.8	0.839	D	26.8	0.839	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.390	A	xxxxx	0.390	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	B	xxxxx	0.697	B	xxxxx	0.697	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	B	xxxxx	0.666	B	xxxxx	0.666	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	A	xxxxx	0.519	A	xxxxx	0.519	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	A	xxxxx	0.556	A	xxxxx	0.556	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	A	xxxxx	0.597	A	xxxxx	0.597	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	A	xxxxx	0.244	A	xxxxx	0.244	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.469	A	xxxxx	0.469	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.327	A	xxxxx	0.327	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	D	xxxxx	0.836	D	xxxxx	0.836	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	A	xxxxx	0.569	A	xxxxx	0.569	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	B	xxxxx	0.606	B	xxxxx	0.606	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.416	A	xxxxx	0.416	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.531	A	xxxxx	0.531	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.455	A	xxxxx	0.455	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	A	xxxxx	0.567	A	xxxxx	0.567	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.491	A	xxxxx	0.491	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	D	xxxxx	0.858	D	xxxxx	0.858	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	B	xxxxx	0.608	B	xxxxx	0.608	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	C	xxxxx	0.770	C	xxxxx	0.770	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	A	xxxxx	0.581	A	xxxxx	0.581	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	A	xxxxx	0.456	A	xxxxx	0.456	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	C	xxxxx	0.762	C	xxxxx	0.762	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 49 RED HILL AVE/DYER RD	A	xxxxx	0.544	A	xxxxx	0.544	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	C	xxxxx	0.732	C	xxxxx	0.732	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	A	xxxxx	0.474	A	xxxxx	0.474	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	C	xxxxx	0.783	C	xxxxx	0.783	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	D	xxxxx	0.812	D	xxxxx	0.812	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	B	xxxxx	0.653	B	xxxxx	0.653	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	C	xxxxx	0.781	C	xxxxx	0.781	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.835	D	xxxxx	0.835	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	B	xxxxx	0.688	B	xxxxx	0.688	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	C	xxxxx	0.782	C	xxxxx	0.782	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	C	xxxxx	0.706	C	xxxxx	0.706	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.624
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	740	980	1260	500	710	70	60	940	440	230	610	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	740	980	1260	500	710	70	60	940	440	230	610	200
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	740	980	0	500	710	70	60	940	440	230	610	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	740	980	0	500	710	70	60	940	440	230	610	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	740	980	0	500	710	70	60	940	440	230	610	0
OvlAdjVol:									70			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.22	0.14	0.00	0.15	0.10	0.04	0.04	0.18	0.26	0.07	0.12	0.00
OvlAdjV/S:									0.04			
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.686
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1950	310	150	1180	0	0	0	0	820	0	990
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1950	310	150	1180	0	0	0	0	820	0	990
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.52
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1950	310	150	1180	0	0	0	0	820	0	519
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1950	310	150	1180	0	0	0	0	820	0	519
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1950	310	150	1180	0	0	0	0	820	0	519
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.09	0.04	0.17	0.00	0.00	0.00	0.00	0.24	0.00	0.31
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.616
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	1230	340	150	1570	300	0	0	0	1140	140	1060
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1230	340	150	1570	300	0	0	0	1140	140	1060
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	1230	340	150	1570	300	0	0	0	1140	140	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1230	340	150	1570	300	0	0	0	1140	140	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	1230	340	150	1570	300	0	0	0	1140	140	0
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.20	0.04	0.23	0.18	0.00	0.00	0.00	0.34	0.08	0.00
OvlAdjV/S:			0.00									
Crit Moves:				****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.738
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	150	1050	310	1040	1450	20	280	80	70	90	60	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1050	310	1040	1450	20	280	80	70	90	60	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1050	310	1040	1450	20	280	80	70	90	60	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1050	310	1040	1450	20	280	80	70	90	60	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1050	310	1040	1450	20	280	80	70	90	60	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.95	0.05	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6707	93	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.18	0.31	0.22	0.22	0.08	0.05	0.04	0.03	0.04	0.12
Crit Moves:			****	****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.584
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Ignore			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 4	0 1		1	0 4	0 1		2	0 2	1 0		2	0 3	0 1	
Volume Module:																
Base Vol:	60	810	70		280	890	240		660	1080	120		50	230	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	60	810	70		280	890	240		660	1080	120		50	230	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Volume:	60	810	70		280	890	240		660	1080	120		50	230	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	60	810	70		280	890	240		660	1080	120		50	230	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
FinalVolume:	60	810	70		280	890	240		660	1080	120		50	230	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	4.00	1.00		1.00	4.00	1.00		2.00	2.70	0.30		2.00	3.00	1.00	
Final Sat.:	1700	6800	1700		1700	6800	1700		3400	4590	510		3400	5100	1700	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.12	0.04		0.16	0.13	0.14		0.19	0.24	0.24		0.01	0.05	0.00	
Crit Moves:		****				****					****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.408
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Ignore			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 3	0	1	1	0 3	1	0	1	1 0	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	50	790	110		110	660	210		130	340	60		50	150	80	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	50	790	110		110	660	210		130	340	60		50	150	80	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Volume:	50	790	110		110	660	210		130	340	60		50	150	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	50	790	110		110	660	210		130	340	60		50	150	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
FinalVolume:	50	790	110		110	660	210		130	340	60		50	150	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	3.00	1.00		1.00	3.03	0.97		1.00	1.66	0.34		1.00	2.00	1.00	
Final Sat.:	1600	4800	1600		1600	4855	1545		1600	2653	547		1600	3200	1600	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.16	0.07		0.07	0.14	0.14		0.08	0.13	0.11		0.03	0.05	0.00	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.695
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 2	0	0 0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	2080	0	0	2110	1190	0	0	0	1210	0	680
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2080	0	0	2110	1190	0	0	0	1210	0	680
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2080	0	0	2110	0	0	0	0	1210	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2080	0	0	2110	0	0	0	0	1210	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2080	0	0	2110	0	0	0	0	1210	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.41	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.24	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.910
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	93	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 1	1	0 1!	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	870	0	0	3070	250	1210	0	1570	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	870	0	0	3070	250	1210	0	1570	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	870	0	0	3070	0	1210	0	1570	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	870	0	0	3070	0	1210	0	1570	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	870	0	0	3070	0	1210	0	1570	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	1.74	0.00	2.26	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	2960	0	3840	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.00	0.00	0.45	0.00	0.41	0.00	0.41	0.00	0.00	0.00
Crit Moves:	****				****		****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.731
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	210	1410	290	1040	2200	1370	180	140	40	190	390	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	1410	290	1040	2200	1370	180	140	40	190	390	420
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	210	1410	290	1040	2200	0	180	140	40	190	390	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	1410	290	1040	2200	0	180	140	40	190	390	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	210	1410	290	1040	2200	0	180	140	40	190	390	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.56	0.44	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2644	756	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.12	0.21	0.17	0.31	0.32	0.00	0.05	0.05	0.05	0.06	0.11	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.618
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	130	1390	100	200	1620	180	140	180	40	420	400	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1390	100	200	1620	180	140	180	40	420	400	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	130	1390	100	200	1620	180	140	180	0	420	400	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1390	100	200	1620	180	140	180	0	420	400	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	130	1390	100	200	1620	180	140	180	0	420	400	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.73	0.27	2.00	2.70	0.30	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	6344	456	3400	4590	510	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.22	0.22	0.06	0.35	0.35	0.04	0.05	0.00	0.12	0.12	0.05
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.684
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	130	390	240	180	1370	530	340	630	170	390	990	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	390	240	180	1370	530	340	630	170	390	990	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	130	390	240	180	1370	530	340	630	0	390	990	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	390	240	180	1370	530	340	630	0	390	990	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	130	390	240	180	1370	530	340	630	0	390	990	210
OvlAdjVol:												150
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.15	0.04	0.29	0.33	0.11	0.13	0.00	0.12	0.21	0.13
OvlAdjV/S:												0.09
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	0	0	0	0 3	1	1	0	0 0	0	0	0	0 0	0	0
Volume Module:																
Base Vol:	710	2620	0	0	600	350	0		0	0	0		0	0	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	710	2620	0	0	600	350	0		0	0	0		0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	710	2620	0	0	600	350	0		0	0	0		0	0	0	
Reduct Vol:	0	0	0	0	0	0	0		0	0	0		0	0	0	
Reduced Vol:	710	2620	0	0	600	350	0		0	0	0		0	0	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	710	2620	0	0	600	350	0		0	0	0		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	3.00	0.00	0.00	3.16	1.84	0.00		0.00	0.00	0.00		0.00	0.00	0.00	
Final Sat.:	3200	4800	0	0	5053	2947	0		0	0	0		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.22	0.55	0.00	0.00	0.12	0.12	0.00		0.00	0.00	0.00		0.00	0.00	0.00	
Crit Moves:		****														

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 1	0	0 0	4 0	0	1 1	1 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	2000	50	0	590	0	1290	400	1160	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2000	50	0	590	0	1290	400	1160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2000	50	0	590	0	1290	400	1160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2000	50	0	590	0	1290	400	1160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2000	50	0	590	0	1290	400	1160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.88	0.12	0.00	4.00	0.00	2.00	1.00	2.00	0.00	0.00	0.00
Final Sat.:	0	7805	195	0	6400	0	3200	1600	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.00	0.09	0.00	0.40	0.25	0.36	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.553
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	70	710	120	180	750	170	120	300	40	150	370	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	710	120	180	750	170	120	300	40	150	370	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	70	710	120	180	750	170	120	300	40	150	370	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	710	120	180	750	170	120	300	40	150	370	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	70	710	120	180	750	170	120	300	40	150	370	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.63	0.37	1.00	1.76	0.24	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2772	628	1700	3000	400	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.21	0.07	0.11	0.27	0.27	0.07	0.10	0.10	0.09	0.11	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.354
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	260	1740	0	0	460	70	0	0	260	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	1740	0	0	460	70	0	0	260	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	0	0	0	460	70	0	0	260	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	0	0	0	460	70	0	0	260	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	260	0	0	0	460	70	0	0	260	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.60	0.40	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4166	634	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.00	0.00	0.00	0.11	0.11	0.00	0.00	0.08	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	0 0	1!	0 0	1 0	0	1 0
Volume Module:												
Base Vol:	30	2170	110	50	490	10	10	0	10	20	0	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	2170	110	50	490	10	10	0	10	20	0	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	2170	110	50	490	10	10	0	10	20	0	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	2170	110	50	490	10	10	0	10	20	0	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	2170	110	50	490	10	10	0	10	20	0	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	2.94	0.06	0.50	0.00	0.50	1.00	0.00	1.00
Final Sat.:	1600	4568	232	1600	4704	96	800	0	800	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.48	0.47	0.03	0.10	0.10	0.01	0.00	0.01	0.01	0.00	0.01
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	4 0	2	0 0	0 0	0	1 0	3 1	0
Volume Module:												
Base Vol:	510	2170	0	0	260	250	0	0	0	170	1050	160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	510	2170	0	0	260	250	0	0	0	170	1050	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	510	2170	0	0	260	250	0	0	0	170	1050	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	510	2170	0	0	260	250	0	0	0	170	1050	160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	510	2170	0	0	260	250	0	0	0	170	1050	160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	1.00	3.47	0.53
Final Sat.:	3200	4800	0	0	6400	3200	0	0	0	1600	5554	846
Capacity Analysis Module:												
Vol/Sat:	0.16	0.45	0.00	0.00	0.04	0.08	0.00	0.00	0.00	0.11	0.19	0.19
Crit Moves:		****									****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.734
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0 4	1	0	1	0 3	0	0	1	1 2	0	2	0	0 0	0	0
Volume Module:																
Base Vol:	0	1220	230		90	350	0		1460	1720	460		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	1220	230		90	350	0		1460	1720	460		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	1220	230		90	350	0		1460	1720	460		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	1220	230		90	350	0		1460	1720	460		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	1220	230		90	350	0		1460	1720	460		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	4.21	0.79		1.00	3.00	0.00		1.84	2.16	2.00		0.00	0.00	0.00	
Final Sat.:	0	6731	1269		1600	4800	0		2938	3462	3200		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.18	0.18		0.06	0.07	0.00		0.50	0.50	0.14		0.00	0.00	0.00	
Crit Moves:		****				****				****						

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.612
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	110	1060	0	0	110	130	0	0	0	320	1120	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1060	0	0	110	130	0	0	0	320	1120	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1060	0	0	110	130	0	0	0	320	1120	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1060	0	0	110	130	0	0	0	320	1120	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1060	0	0	110	130	0	0	0	320	1120	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.83	2.17	0.00	0.00	0.00	1.00	3.49	0.51
Final Sat.:	3200	3200	0	0	2933	3467	0	0	0	1600	5582	818
Capacity Analysis Module:												
Vol/Sat:	0.03	0.33	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.20	0.20	0.28
Crit Moves:	****											****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.431
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2	0 2	0 0	1 1	2	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	340	290	120	280	0	850	1040	200	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	340	290	120	280	0	850	1040	200	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	340	290	120	280	0	850	1040	200	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	340	290	120	280	0	850	1040	200	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	340	290	120	280	0	850	1040	200	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.16	1.84	2.00	2.00	0.00	1.80	2.72	0.48	0.00	0.00	0.00
Final Sat.:	0	3454	2946	3200	3200	0	2878	4347	774	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.10	0.04	0.09	0.00	0.30	0.24	0.26	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	90	720	20	390	750	430	940	940	150	50	340	610
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	720	20	390	750	430	940	940	150	50	340	610
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	90	720	20	390	750	0	940	940	150	50	340	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	720	20	390	750	0	940	940	150	50	340	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	90	720	20	390	750	0	940	940	150	50	340	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.92	0.08	2.00	3.00	1.00	2.00	2.59	0.41	1.00	3.00	1.00
Final Sat.:	3400	4962	138	3400	5100	1700	3400	4398	702	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.11	0.15	0.00	0.28	0.21	0.21	0.03	0.07	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.732
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 2	0	1	2	0 1	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	210	410	100		110	1030	220		180	710	370		120	400	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	210	410	100		110	1030	220		180	710	370		120	400	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	210	410	100		110	1030	220		180	710	370		120	400	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	210	410	100		110	1030	220		180	710	370		120	400	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	210	410	100		110	1030	220		180	710	370		120	400	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	2.00	1.00		2.00	1.65	0.35		2.00	2.00	1.00		2.00	2.26	0.74	
Final Sat.:	3400	3400	1700		3400	2802	598		3400	3400	1700		3400	3849	1251	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.12	0.06		0.03	0.37	0.37		0.05	0.21	0.22		0.04	0.10	0.10	
Crit Moves:	****					****					****	****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.528
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	130	490	150	250	160	70	410	890	80	100	490	540
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	490	150	250	160	70	410	890	80	100	490	540
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	490	150	250	160	70	410	890	80	100	490	540
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	490	150	250	160	70	410	890	80	100	490	540
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	490	150	250	160	70	410	890	80	100	490	540
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	2.00	2.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	3200	3200
Capacity Analysis Module:												
Vol/Sat:	0.04	0.15	0.09	0.08	0.05	0.04	0.13	0.19	0.05	0.03	0.15	0.17
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.550
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	1 0	1	0 1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	20	410	60	50	170	40	170	290	40	30	90	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	410	60	50	170	40	170	290	40	30	90	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	410	60	50	170	40	170	290	40	30	90	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	410	60	50	170	40	170	290	40	30	90	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	410	60	50	170	40	170	290	40	30	90	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.87	0.13	1.00	1.00	1.00	1.00	0.88	0.12	1.00	0.50	0.50
Final Sat.:	1600	1396	204	1600	1600	1600	1600	1406	194	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.29	0.29	0.03	0.11	0.03	0.11	0.21	0.21	0.02	0.11	0.11
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.839
Loss Time (sec):	0	Average Delay (sec/veh):	26.8
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	80	280	70	80	150	60	90	280	50	10	130	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	280	70	80	150	60	90	280	50	10	130	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	280	70	80	150	60	90	280	50	10	130	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	280	70	80	150	60	90	280	50	10	130	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	280	70	80	150	60	90	280	50	10	130	100
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.19	0.65	0.16	0.27	0.52	0.21	0.21	0.67	0.12	0.04	0.54	0.42
Final Sat.:	95	334	83	126	237	95	108	337	60	18	237	182
Capacity Analysis Module:												
Vol/Sat:	0.84	0.84	0.84	0.63	0.63	0.63	0.83	0.83	0.83	0.55	0.55	0.55
Crit Moves:		****			****			****			****	
Delay/Veh:	32.6	32.6	32.6	19.3	19.3	19.3	31.8	31.8	31.8	16.5	16.5	16.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.6	32.6	32.6	19.3	19.3	19.3	31.8	31.8	31.8	16.5	16.5	16.5
LOS by Move:	D	D	D	C	C	C	D	D	D	C	C	C
ApproachDel:		32.6			19.3			31.8			16.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		32.6			19.3			31.8			16.5	
LOS by Appr:		D			C			D			C	
AllWayAvgQ:	3.3	3.3	3.3	1.2	1.2	1.2	3.1	3.1	3.1	0.8	0.8	0.8

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.390
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	90	1240	410	10	560	40	160	170	100	140	30	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1240	410	10	560	40	160	170	100	140	30	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1240	410	10	560	40	160	170	100	140	30	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1240	410	10	560	40	160	170	100	140	30	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	1240	410	10	560	40	160	170	100	140	30	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.26	0.74	2.00	0.75	0.25
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	2015	1185	3200	1200	400
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.01	0.12	0.03	0.10	0.08	0.08	0.04	0.03	0.03
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.697
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	110	1470	40	80	610	100	240	70	120	30	30	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1470	40	80	610	100	240	70	120	30	30	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1470	40	80	610	100	240	70	120	30	30	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1470	40	80	610	100	240	70	120	30	30	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1470	40	80	610	100	240	70	120	30	30	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.07	0.46	0.03	0.05	0.19	0.06	0.15	0.04	0.08	0.02	0.04	0.04
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.666
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	0	1 0	0	1	0	0 1!	0	0
Volume Module:																
Base Vol:	60	1260	10		70	830	40		160	50	120		20	50	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	60	1260	10		70	830	40		160	50	120		20	50	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	60	1260	10		70	830	40		160	50	120		20	50	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	60	1260	10		70	830	40		160	50	120		20	50	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	60	1260	10		70	830	40		160	50	120		20	50	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.98	0.02		1.00	1.91	0.09		0.76	0.24	1.00		0.10	0.25	0.65	
Final Sat.:	1600	3175	25		1600	3053	147		1219	381	1600		160	400	1040	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.40	0.40		0.04	0.27	0.27		0.10	0.13	0.08		0.01	0.13	0.13	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.519
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	60	1130	10	30	860	30	70	30	110	20	40	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1130	10	30	860	30	70	30	110	20	40	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1130	10	30	860	30	70	30	110	20	40	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1130	10	30	860	30	70	30	110	20	40	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1130	10	30	860	30	70	30	110	20	40	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.93	0.07	0.33	0.14	0.53	0.13	0.27	0.60
Final Sat.:	1600	3172	28	1600	3092	108	533	229	838	213	427	960
Capacity Analysis Module:												
Vol/Sat:	0.04	0.36	0.36	0.02	0.28	0.28	0.04	0.13	0.13	0.01	0.09	0.09
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.556
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	60	900	20	140	850	30	70	120	50	20	80	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	900	20	140	850	30	70	120	50	20	80	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	900	20	140	850	30	70	120	50	20	80	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	900	20	140	850	30	70	120	50	20	80	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	900	20	140	850	30	70	120	50	20	80	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.93	0.07	1.00	0.71	0.29	1.00	1.00	1.00
Final Sat.:	1600	3130	70	1600	3091	109	1600	1129	471	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.29	0.09	0.28	0.27	0.04	0.11	0.11	0.01	0.05	0.14
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.597
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	430	550	30	260	430	180	290	570	220	40	370	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	430	550	30	260	430	180	290	570	220	40	370	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	430	550	30	260	430	180	290	570	220	40	370	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	430	550	30	260	430	180	290	570	220	40	370	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	430	550	30	260	430	180	290	570	220	40	370	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.90	0.10	2.00	1.41	0.59	2.00	1.44	0.56	1.00	1.68	0.32
Final Sat.:	3200	3034	166	3200	2256	944	3200	2309	891	1600	2691	509
Capacity Analysis Module:												
Vol/Sat:	0.13	0.18	0.18	0.08	0.19	0.19	0.09	0.25	0.25	0.03	0.14	0.14
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.244
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1 0	4 0	1	0 0	1 0	1	1 0	1 0	0
Volume Module:												
Base Vol:	0	0	0	300	1130	10	0	0	10	80	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	300	1130	10	0	0	10	80	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	300	1130	10	0	0	10	80	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	300	1130	10	0	0	10	80	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	300	1130	10	0	0	10	80	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.18	0.01	0.00	0.00	0.01	0.05	0.00	0.00
Crit Moves:				****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.469
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	10	880	240	0	0	0	120	180	0	0	70	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	880	240	0	0	0	120	180	0	0	70	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	880	240	0	0	0	120	180	0	0	70	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	880	240	0	0	0	120	180	0	0	70	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	880	240	0	0	0	120	180	0	0	70	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.57	0.43	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.54	0.46
Final Sat.:	1600	2514	686	0	0	0	3200	1600	0	0	862	738
Capacity Analysis Module:												
Vol/Sat:	0.01	0.35	0.35	0.00	0.00	0.00	0.04	0.11	0.00	0.00	0.08	0.08
Crit Moves:		****					****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.327
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0	0 3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	190	480	570	0	890	40	100	250	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	190	480	570	0	890	40	100	250	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	190	480	0	0	890	40	100	250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	190	480	0	0	890	40	100	250	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	190	480	0	0	890	40	100	250	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.83	0.17	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	6125	275	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.10	0.00	0.00	0.15	0.15	0.06	0.08	0.00
Crit Moves:				****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.836
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	114	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 1	0	0	0 0	0	2	0 2	0 0	0	0 2	0 1
Volume Module:												
Base Vol:	150	1580	170	0	0	0	750	320	0	0	220	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1580	170	0	0	0	750	320	0	0	220	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1580	170	0	0	0	750	320	0	0	220	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1580	170	0	0	0	750	320	0	0	220	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1580	170	0	0	0	750	320	0	0	220	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	2.49	0.27	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	379	3992	429	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.40	0.40	0.00	0.00	0.00	0.23	0.10	0.00	0.00	0.07	0.21
Crit Moves:		****					****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.569
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	40	590	60	50	410	100	330	490	70	100	300	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	590	60	50	410	100	330	490	70	100	300	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	590	60	50	410	100	330	490	70	100	300	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	590	60	50	410	100	330	490	70	100	300	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	590	60	50	410	100	330	490	70	100	300	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.82	0.18	1.00	1.61	0.39	1.00	2.00	1.00	1.00	1.46	0.54
Final Sat.:	1600	2905	295	1600	2573	627	1600	3200	1600	1600	2341	859
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.20	0.03	0.16	0.16	0.21	0.15	0.04	0.06	0.13	0.13
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.606
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0	1 0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	20	90	20	110	130	30	60	470	160	60	820	730
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	90	20	110	130	30	60	470	160	60	820	730
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	90	20	110	130	30	60	470	160	60	820	730
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	90	20	110	130	30	60	470	160	60	820	730
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	90	20	110	130	30	60	470	160	60	820	730
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	2.00	0.81	0.19	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	2618	582	3200	1300	300	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.03	0.10	0.10	0.04	0.10	0.10	0.04	0.17	0.46
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.416
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	2	0 0	0 0	0	0 0	4 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	0	70	0	0	0	0	2520	350	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	70	0	0	0	0	2520	350	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	70	0	0	0	0	2520	350	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	70	0	0	0	0	2520	350	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	70	0	0	0	0	2520	350	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.39	0.22	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.531
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	3	0 1	1 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	210	1380	10	10	1530	470	170	10	70	10	10	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	1380	10	10	1530	470	170	10	70	10	10	20
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	210	1380	10	10	1530	0	170	10	0	10	10	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	1380	10	10	1530	0	170	10	0	10	10	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	210	1380	10	10	1530	0	170	10	0	10	10	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	3.00	1.00	1.89	0.11	1.00	0.25	0.25	0.50
Final Sat.:	1600	4765	35	1600	4800	1600	3022	178	1600	400	400	800
Capacity Analysis Module:												
Vol/Sat:	0.13	0.29	0.29	0.01	0.32	0.00	0.06	0.06	0.00	0.03	0.03	0.03
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.455
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	120	1860	70	70	1480	130	50	10	110	20	10	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1860	70	70	1480	130	50	10	110	20	10	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1860	70	70	1480	130	50	10	110	20	10	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1860	70	70	1480	130	50	10	110	20	10	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1860	70	70	1480	130	50	10	110	20	10	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.85	0.15	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6168	232	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.30	0.04	0.31	0.08	0.02	0.01	0.07	0.01	0.01	0.06
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.567
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	30	1480	230	90	1520	190	300	90	10	340	50	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	1480	230	90	1520	190	300	90	10	340	50	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	30	1480	230	90	1520	190	300	90	10	340	50	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	1480	230	90	1520	190	300	90	10	340	50	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	30	1480	230	90	1520	190	300	90	10	340	50	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.50	0.45	0.05	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2400	720	80	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.31	0.14	0.03	0.32	0.12	0.13	0.13	0.13	0.11	0.03	0.00
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.491
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1460	160	110	1410	50	80	0	100	180	0	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1460	160	110	1410	50	80	0	100	180	0	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1460	160	110	1410	50	80	0	100	180	0	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1460	160	110	1410	50	80	0	100	180	0	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1460	160	110	1410	50	80	0	100	180	0	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.70	0.30	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4326	474	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.34	0.03	0.29	0.03	0.05	0.00	0.06	0.06	0.00	0.04
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.858
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	161	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	2	1 0	1	0	3	0 1	1	1	1	0 1	1	1	1	0 1
Volume Module:																
Base Vol:	430	1250	100		80	1480	150		190	290	420		190	490	40	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	430	1250	100		80	1480	150		190	290	420		190	490	40	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	430	1250	100		80	1480	150		190	290	420		190	490	40	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	430	1250	100		80	1480	150		190	290	420		190	490	40	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	430	1250	100		80	1480	150		190	290	420		190	490	40	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	2.78	0.22		1.00	3.00	1.00		1.19	1.81	1.00		1.00	2.00	1.00	
Final Sat.:	3200	4444	356		1600	4800	1600		1900	2900	1600		1600	3200	1600	
Capacity Analysis Module:																
Vol/Sat:	0.13	0.28	0.28		0.05	0.31	0.09		0.10	0.10	0.26		0.12	0.15	0.03	
Crit Moves:	****					****					****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.608
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	210	2810	220	40	2190	280	200	180	130	320	210	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	2810	220	40	2190	280	200	180	130	320	210	110
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	210	2810	0	40	2190	280	200	180	0	320	210	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	2810	0	40	2190	280	200	180	0	320	210	110
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	210	2810	0	40	2190	280	200	180	0	320	210	110
OvlAdjVol:						180						90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.44	0.00	0.01	0.34	0.17	0.06	0.06	0.00	0.10	0.07	0.07
OvlAdjV/S:						0.11						0.06
Crit Moves:	****			****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.770
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	140	2010	120	580	2320	20	50	290	80	590	590	930
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	2010	120	580	2320	20	50	290	80	590	590	930
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	2010	0	580	2320	0	50	290	80	590	590	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	2010	0	580	2320	0	50	290	80	590	590	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	2010	0	580	2320	0	50	290	80	590	590	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.00	0.18	0.36	0.00	0.02	0.09	0.05	0.18	0.18	0.00
Crit Moves:		****			****				****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.581
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	0	1	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	100	1120		30	60	450		110	260	310		120	10	60		10
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	100	1120		30	60	450		110	260	310		120	10	60		10
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	100	1120		30	60	450		110	260	310		120	10	60		10
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	100	1120		30	60	450		110	260	310		120	10	60		10
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	100	1120		30	60	450		110	260	310		120	10	60		10
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	2.00	1.95		0.05	1.00	1.61		0.39	1.00	1.44		0.56	1.00	1.71		0.29
Final Sat.:	3200	3117		83	1600	2571		629	1600	2307		893	1600	2743		457
Capacity Analysis Module:																
Vol/Sat:	0.03	0.36		0.36	0.04	0.18		0.17	0.16	0.13		0.13	0.01	0.02		0.02
Crit Moves:		****			****				****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.456
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	170	700	60		40	420	120		540	270	170		20	60	20	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	170	700	60		40	420	120		540	270	170		20	60	20	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	170	700	60		40	420	120		540	270	170		20	60	20	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	170	700	60		40	420	120		540	270	170		20	60	20	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	170	700	60		40	420	120		540	270	170		20	60	20	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.84	0.16		1.00	1.56	0.44		2.00	1.00	1.00		1.00	1.50	0.50	
Final Sat.:	3200	2947	253		1600	2489	711		3200	1600	1600		1600	2400	800	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.24	0.24		0.03	0.17	0.17		0.17	0.17	0.11		0.01	0.03	0.03	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.762
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Ignore				Include				Ignore				Ignore			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	0	0 1	0	0	0	0 0	0	0	2	0 2	0	0	3	0 1
Volume Module:																
Base Vol:	950	0	800		0	0	0		0	1470	730		0	600	250	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	950	0	800		0	0	0		0	1470	730		0	600	250	
User Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
PHF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
PHF Volume:	950	0	0		0	0	0		0	1470	0		0	600	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	950	0	0		0	0	0		0	1470	0		0	600	0	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
FinalVolume:	950	0	0		0	0	0		0	1470	0		0	600	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	0.00	1.00		0.00	0.00	0.00		0.00	2.00	2.00		0.00	3.00	1.00	
Final Sat.:	3400	0	1700		0	0	0		0	3400	3400		0	5100	1700	
Capacity Analysis Module:																
Vol/Sat:	0.28	0.00	0.00		0.00	0.00	0.00		0.00	0.43	0.00		0.00	0.12	0.00	
Crit Moves:	****									****			****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.544
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	150	380	110	420	1000	150	190	760	210	470	760	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	380	110	420	1000	150	190	760	210	470	760	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	380	110	420	1000	150	190	760	210	470	760	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	380	110	420	1000	150	190	760	210	470	760	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	380	110	420	1000	150	190	760	210	470	760	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.10	0.90	2.00	3.48	0.52	2.00	3.13	0.87	2.00	4.00	1.00
Final Sat.:	3400	5273	1527	3400	5913	887	3400	5328	1472	3400	6800	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.07	0.07	0.12	0.17	0.17	0.06	0.14	0.14	0.14	0.11	0.18
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.732
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	0	1	2	0 1	0	1
Volume Module:																
Base Vol:	160	540	370		240	1150	170		120	210	130		310	430	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	160	540	370		240	1150	170		120	210	130		310	430	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	160	540	370		240	1150	170		120	210	130		310	430	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	160	540	370		240	1150	170		120	210	130		310	430	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	160	540	370		240	1150	170		120	210	130		310	430	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.00	1.00		1.00	2.61	0.39		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	3400	1700		1700	4443	657		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.09	0.16	0.22		0.14	0.26	0.26		0.07	0.06	0.08		0.09	0.25	0.08	
Crit Moves:			****	****					****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.474
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	260	930	320	120	1270	80	20	30	40	220	80	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	930	320	120	1270	80	20	30	40	220	80	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	930	320	120	1270	80	20	30	40	220	80	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	930	320	120	1270	80	20	30	40	220	80	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	260	930	320	120	1270	80	20	30	40	220	80	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.82	0.18	1.00	1.00	1.00	2.00	1.14	0.86
Final Sat.:	3400	5100	1700	3400	4798	302	1700	1700	1700	3400	1943	1457
Capacity Analysis Module:												
Vol/Sat:	0.08	0.18	0.19	0.04	0.26	0.26	0.01	0.02	0.02	0.06	0.04	0.04
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.783
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2 0	2	1 0	2	1 0	2 0	3 0	1
Volume Module:												
Base Vol:	110	120	90	200	1000	420	90	560	270	830	1380	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	120	90	200	1000	420	90	560	270	830	1380	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	120	90	200	1000	420	90	560	270	830	1380	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	120	90	200	1000	420	90	560	270	830	1380	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	120	90	200	1000	420	90	560	270	830	1380	70
OvlAdjVol:						240						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.14	0.86	2.00	2.00	2.00	1.00	2.02	0.98	2.00	3.00	1.00
Final Sat.:	3400	1943	1457	3400	3400	3400	1700	3441	1659	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.06	0.06	0.06	0.29	0.12	0.05	0.16	0.16	0.24	0.27	0.04
OvlAdjV/S:						0.07						
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.812
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	70	300	50		40	1410	170		60	210	60		270	660	90	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	70	300	50		40	1410	170		60	210	60		270	660	90	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	70	300	50		40	1410	170		60	210	60		270	660	90	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	70	300	50		40	1410	170		60	210	60		270	660	90	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	70	300	50		40	1410	170		60	210	60		270	660	90	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.71	0.29		1.00	1.78	0.22		1.00	1.56	0.44		1.00	1.76	0.24	
Final Sat.:	1700	2914	486		1700	3034	366		1700	2644	756		1700	2992	408	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.10	0.10		0.02	0.46	0.46		0.04	0.08	0.08		0.16	0.22	0.22	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	110	340	90	130	1110	290	160	720	380	350	880	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	340	90	130	1110	290	160	720	380	350	880	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	110	340	90	130	1110	290	160	720	0	350	880	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	340	90	130	1110	290	160	720	0	350	880	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	110	340	90	130	1110	290	160	720	0	350	880	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.72	0.28
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4627	473
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.05	0.08	0.33	0.17	0.05	0.14	0.00	0.10	0.19	0.19
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 4	0 1	2	0 4	0 1	2	1 2	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	160	840	130	410	3400	1540	160	340	140	230	700	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	840	130	410	3400	1540	160	340	140	230	700	230
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	160	840	0	410	3400	0	160	340	140	230	700	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	840	0	410	3400	0	160	340	140	230	700	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	160	840	0	410	3400	0	160	340	140	230	700	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.12	0.00	0.12	0.50	0.00	0.05	0.07	0.08	0.07	0.14	0.00
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.835
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 4	0	1	2	0 3	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	210	1020	200		170	3280	260		70	230	100		270	800	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	210	1020	200		170	3280	260		70	230	100		270	800	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	210	1020	200		170	3280	260		70	230	100		270	800	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	210	1020	200		170	3280	260		70	230	100		270	800	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	210	1020	200		170	3280	260		70	230	100		270	800	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	4.00	1.00		2.00	3.71	0.29		2.00	2.09	0.91		2.00	2.58	0.42	
Final Sat.:	3400	6800	1700		3400	6301	499		3400	3555	1545		3400	4387	713	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.15	0.12		0.05	0.52	0.52		0.02	0.06	0.06		0.08	0.18	0.18	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.688
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	200	1390	40		30	3360	300		40	20	40		30	40	20	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	200	1390	40		30	3360	300		40	20	40		30	40	20	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	200	1390	40		30	3360	300		40	20	40		30	40	20	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	200	1390	40		30	3360	300		40	20	40		30	40	20	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	200	1390	40		30	3360	300		40	20	40		30	40	20	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.89	0.11		2.00	3.67	0.33		1.00	1.00	1.00		1.00	1.33	0.67	
Final Sat.:	3400	6610	190		3400	6243	557		1700	1700	1700		1700	2267	1133	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.21	0.21		0.01	0.54	0.54		0.02	0.01	0.02		0.02	0.02	0.02	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.782
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 4	0 1	2	0 4	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	490	1190	400	450	2600	390	140	270	180	520	810	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	490	1190	400	450	2600	390	140	270	180	520	810	130
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	490	1190	0	450	2600	390	140	270	0	520	810	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	490	1190	0	450	2600	390	140	270	0	520	810	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	490	1190	0	450	2600	390	140	270	0	520	810	0
OvlAdjVol:						320						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.14	0.17	0.00	0.13	0.38	0.23	0.04	0.05	0.00	0.15	0.16	0.00
OvlAdjV/S:						0.19						
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.706
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 2	0 1	2	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	90	300	30	140	770	540	90	130	40	110	730	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	300	30	140	770	540	90	130	40	110	730	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	90	300	30	140	770	540	90	130	0	110	730	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	300	30	140	770	540	90	130	0	110	730	150
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	90	300	30	140	770	540	90	130	0	110	730	150
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.82	0.18	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.66	0.34
Final Sat.:	1700	3091	309	1700	3400	1700	3400	3400	1700	1700	2820	580
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.10	0.08	0.23	0.32	0.03	0.04	0.00	0.06	0.26	0.26
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Scenario Report

Scenario:	2021NP-PM (Base)
Command:	2021NP-PM (Base)
Volume:	2021NP-PM (Base)
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2021NP-PM (Base)

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	C	xxxxx	0.774	C	xxxxx	0.774	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.658	B	xxxxx	0.658	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.669	B	xxxxx	0.669	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	E	xxxxx	0.941	E	xxxxx	0.941	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	C	xxxxx	0.798	C	xxxxx	0.798	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.541	A	xxxxx	0.541	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	D	xxxxx	0.823	D	xxxxx	0.823	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	C	xxxxx	0.781	C	xxxxx	0.781	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	E	xxxxx	0.912	E	xxxxx	0.912	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	B	xxxxx	0.629	B	xxxxx	0.629	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	C	xxxxx	0.730	C	xxxxx	0.730	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.510	A	xxxxx	0.510	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.655	B	xxxxx	0.655	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	B	xxxxx	0.679	B	xxxxx	0.679	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	C	xxxxx	0.703	C	xxxxx	0.703	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.517	A	xxxxx	0.517	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	E	xxxxx	0.964	E	xxxxx	0.964	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	A	xxxxx	0.456	A	xxxxx	0.456	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	B	xxxxx	0.632	B	xxxxx	0.632	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.458	A	xxxxx	0.458	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	C	xxxxx	0.751	C	xxxxx	0.751	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.733	C	xxxxx	0.733	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.534	A	xxxxx	0.534	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.581	A	xxxxx	0.581	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	D	25.4	0.887	D	25.4	0.887	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.591	A	xxxxx	0.591	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	C	xxxxx	0.750	C	xxxxx	0.750	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	C	xxxxx	0.725	C	xxxxx	0.725	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	B	xxxxx	0.656	B	xxxxx	0.656	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	B	xxxxx	0.688	B	xxxxx	0.688	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	C	xxxxx	0.744	C	xxxxx	0.744	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	A	xxxxx	0.594	A	xxxxx	0.594	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.403	A	xxxxx	0.403	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.451	A	xxxxx	0.451	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	A	xxxxx	0.515	A	xxxxx	0.515	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	C	xxxxx	0.725	C	xxxxx	0.725	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	A	xxxxx	0.563	A	xxxxx	0.563	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.425	A	xxxxx	0.425	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.530	A	xxxxx	0.530	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.537	A	xxxxx	0.537	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	B	xxxxx	0.602	B	xxxxx	0.602	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.510	A	xxxxx	0.510	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	C	xxxxx	0.744	C	xxxxx	0.744	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	B	xxxxx	0.605	B	xxxxx	0.605	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	D	xxxxx	0.861	D	xxxxx	0.861	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	B	xxxxx	0.694	B	xxxxx	0.694	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	B	xxxxx	0.650	B	xxxxx	0.650	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	B	xxxxx	0.642	B	xxxxx	0.642	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 49 RED HILL AVE/DYER RD	E	xxxxx	0.903	E	xxxxx	0.903	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	D	xxxxx	0.858	D	xxxxx	0.858	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	C	xxxxx	0.766	C	xxxxx	0.766	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	E	xxxxx	0.975	E	xxxxx	0.975	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	E	xxxxx	0.962	E	xxxxx	0.962	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	D	xxxxx	0.826	D	xxxxx	0.826	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	E	xxxxx	0.924	E	xxxxx	0.924	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.861	D	xxxxx	0.861	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	C	xxxxx	0.704	C	xxxxx	0.704	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	D	xxxxx	0.873	D	xxxxx	0.873	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	D	xxxxx	0.856	D	xxxxx	0.856	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.774
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	620	1140	630	290	880	70	70	960	650	720	1100	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	620	1140	630	290	880	70	70	960	650	720	1100	520
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	620	1140	0	290	880	70	70	960	650	720	1100	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	620	1140	0	290	880	70	70	960	650	720	1100	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	620	1140	0	290	880	70	70	960	650	720	1100	0
OvlAdjVol:									340			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.18	0.17	0.00	0.09	0.13	0.04	0.04	0.19	0.38	0.21	0.22	0.00
OvlAdjV/S:									0.20			
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.658
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	2020	760	590	1580	0	0	0	0	390	0	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2020	760	590	1580	0	0	0	0	390	0	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2020	760	590	1580	0	0	0	0	390	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2020	760	590	1580	0	0	0	0	390	0	234
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2020	760	590	1580	0	0	0	0	390	0	234
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.22	0.17	0.23	0.00	0.00	0.00	0.00	0.11	0.00	0.14
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.669
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	2230	480	440	1340	190	0	0	0	550	80	550
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2230	480	440	1340	190	0	0	0	550	80	550
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2230	480	440	1340	190	0	0	0	550	80	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2230	480	440	1340	190	0	0	0	550	80	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2230	480	440	1340	190	0	0	0	550	80	0
OvlAdjVol:			205									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.28	0.13	0.20	0.11	0.00	0.00	0.00	0.16	0.05	0.00
OvlAdjV/S:			0.12									
Crit Moves:		****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.941
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	119	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	110	1580	110	510	1350	20	230	80	80	390	70	750
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1580	110	510	1350	20	230	80	80	390	70	750
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1580	110	510	1350	20	230	80	80	390	70	750
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1580	110	510	1350	20	230	80	80	390	70	750
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1580	110	510	1350	20	230	80	80	390	70	750
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.94	0.06	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6701	99	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.06	0.15	0.20	0.20	0.07	0.05	0.05	0.11	0.04	0.44
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.798
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	1 0	4 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	110	1030	40	140	970	610	370	450	90	80	1100	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1030	40	140	970	610	370	450	90	80	1100	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	110	1030	40	140	970	610	370	450	90	80	1100	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1030	40	140	970	610	370	450	90	80	1100	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	110	1030	40	140	970	610	370	450	90	80	1100	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	1.00	4.00	1.00	2.00	2.50	0.50	2.00	3.00	1.00
Final Sat.:	1700	6800	1700	1700	6800	1700	3400	4250	850	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.02	0.08	0.14	0.36	0.11	0.11	0.11	0.02	0.22	0.00
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.541
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	140	700	60	70	850	260	310	190	50	120	530	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	700	60	70	850	260	310	190	50	120	530	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	700	60	70	850	260	310	190	50	120	530	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	700	60	70	850	260	310	190	50	120	530	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	700	60	70	850	260	310	190	50	120	530	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.06	0.94	1.69	1.04	0.27	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	4901	1499	2703	1660	437	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.04	0.04	0.17	0.17	0.11	0.11	0.11	0.08	0.17	0.00
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.823
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 2	0	0 0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	3250	0	0	1960	1020	0	0	0	690	0	390
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3250	0	0	1960	1020	0	0	0	690	0	390
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	3250	0	0	1960	0	0	0	0	690	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3250	0	0	1960	0	0	0	0	690	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	3250	0	0	1960	0	0	0	0	690	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.64	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.14	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 1	1	0 1!	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	1990	0	0	1970	670	1160	0	660	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1990	0	0	1970	670	1160	0	660	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1990	0	0	1970	0	1160	0	660	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1990	0	0	1970	0	1160	0	660	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1990	0	0	1970	0	1160	0	660	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.00	0.00	0.29	0.00	0.34	0.00	0.19	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.912
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	94	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	70	2260	280	640	1610	290	900	670	110	290	260	1010
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	2260	280	640	1610	290	900	670	110	290	260	1010
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	70	2260	280	640	1610	0	900	670	110	290	260	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	2260	280	640	1610	0	900	670	110	290	260	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	70	2260	280	640	1610	0	900	670	110	290	260	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.72	0.28	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2921	479	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.33	0.16	0.19	0.24	0.00	0.26	0.23	0.23	0.09	0.08	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.629
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	50	1670	370	190	1560	180	290	610	190	150	270	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	1670	370	190	1560	180	290	610	190	150	270	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	50	1670	370	190	1560	180	290	610	0	150	270	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	1670	370	190	1560	180	290	610	0	150	270	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	50	1670	370	190	1560	180	290	610	0	150	270	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.27	0.73	2.00	2.69	0.31	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5567	1233	3400	4572	528	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.30	0.30	0.06	0.34	0.34	0.09	0.18	0.00	0.04	0.08	0.12
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.730
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	210	1440	430	270	550	370	600	1030	170	370	930	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	1440	430	270	550	370	600	1030	170	370	930	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	210	1440	430	270	550	370	600	1030	0	370	930	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	1440	430	270	550	370	600	1030	0	370	930	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	210	1440	430	270	550	370	600	1030	0	370	930	50
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.08	0.92	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4928	1472	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.29	0.29	0.06	0.11	0.23	0.19	0.21	0.00	0.12	0.19	0.03
OvlAdjV/S:												0.00
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.510
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 3	1 1	0 0	0 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	830	2450	0	0	1020	730	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	830	2450	0	0	1020	730	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	830	2450	0	0	1020	730	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	830	2450	0	0	1020	730	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	830	2450	0	0	1020	730	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	3200	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.26	0.51	0.00	0.00	0.21	0.23	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.655
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	1 0	0 0	4	0 0	1 1	1	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	2400	90	0	1010	0	890	760	1080	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2400	90	0	1010	0	890	760	1080	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2400	90	0	1010	0	890	760	1080	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2400	90	0	1010	0	890	760	1080	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2400	90	0	1010	0	890	760	1080	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.82	0.18	0.00	4.00	0.00	1.62	1.38	2.00	0.00	0.00	0.00
Final Sat.:	0	7711	289	0	6400	0	2589	2211	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.31	0.31	0.00	0.16	0.00	0.34	0.34	0.34	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.679
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	60	740	180	250	790	130	170	460	80	180	500	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	740	180	250	790	130	170	460	80	180	500	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	60	740	180	250	790	130	170	460	80	180	500	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	740	180	250	790	130	170	460	80	180	500	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	60	740	180	250	790	130	170	460	80	180	500	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.72	0.28	1.00	1.70	0.30	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2920	480	1700	2896	504	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.22	0.11	0.15	0.27	0.27	0.10	0.16	0.16	0.11	0.15	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.703
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	350	800	0	0	1700	130	0	0	330	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	800	0	0	1700	130	0	0	330	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	350	0	0	0	1700	130	0	0	330	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	0	0	0	1700	130	0	0	330	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	350	0	0	0	1700	130	0	0	330	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.79	0.21	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4459	341	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.10	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.517
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	0	0 1!	0	0	1	0 0	1	0
Volume Module:																
Base Vol:	20	780	60		60	2050	10		10	10	20		80	0	50	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	20	780	60		60	2050	10		10	10	20		80	0	50	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	20	780	60		60	2050	10		10	10	20		80	0	50	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	20	780	60		60	2050	10		10	10	20		80	0	50	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	20	780	60		60	2050	10		10	10	20		80	0	50	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.79	0.21		1.00	2.99	0.01		0.25	0.25	0.50		1.00	0.00	1.00	
Final Sat.:	1600	4457	343		1600	4777	23		400	400	800		1600	0	1600	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.17	0.18		0.04	0.43	0.43		0.01	0.03	0.03		0.05	0.00	0.03	
Crit Moves:	****					****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.964
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	3	0 0	0	0	4	0 2	0	0	0	0 0	1	0	3	1 0
Volume Module:																
Base Vol:	510	740	0	0	950	1280	0	0	0	270	2490	100				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	510	740	0	0	950	1280	0	0	0	270	2490	100				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	510	740	0	0	950	1280	0	0	0	270	2490	100				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	510	740	0	0	950	1280	0	0	0	270	2490	100				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
FinalVolume:	510	740	0	0	950	1280	0	0	0	270	2490	100				
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600				
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Lanes:	2.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	1.00	3.85	0.15				
Final Sat.:	3200	4800	0	0	6400	3200	0	0	0	1600	6153	247				
Capacity Analysis Module:																
Vol/Sat:	0.16	0.15	0.00	0.00	0.15	0.40	0.00	0.00	0.00	0.17	0.40	0.40				
Crit Moves:	****					****						****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.456
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 4	1 0	1	0 3	0 0	1	1 2	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	750	230	140	1070	0	490	1000	590	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	750	230	140	1070	0	490	1000	590	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	750	230	140	1070	0	490	1000	590	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	750	230	140	1070	0	490	1000	590	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	750	230	140	1070	0	490	1000	590	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	1.00	1.00	3.00	0.00	1.32	2.68	2.00	0.00	0.00	0.00
Final Sat.:	0	6400	1600	1600	4800	0	2105	4295	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.14	0.09	0.22	0.00	0.23	0.23	0.18	0.00	0.00	0.00
Crit Moves:					****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.632
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	160	310	0	0	500	890	0	0	0	420	1630	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	310	0	0	500	890	0	0	0	420	1630	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	310	0	0	500	890	0	0	0	420	1630	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	310	0	0	500	890	0	0	0	420	1630	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	310	0	0	500	890	0	0	0	420	1630	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.44	2.56	0.00	0.00	0.00	1.00	3.79	0.21
Final Sat.:	3200	3200	0	0	2302	4098	0	0	0	1600	6071	329
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.00	0.00	0.22	0.22	0.00	0.00	0.00	0.26	0.27	0.36
Crit Moves:	****				****							****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.458
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2	0 2	0 0	1 1	2	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	200	270	260	660	0	280	1080	130	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	200	270	260	660	0	280	1080	130	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	200	270	260	660	0	280	1080	130	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	200	270	260	660	0	280	1080	130	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	200	270	260	660	0	280	1080	130	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	3.68	0.32	0.00	0.00	0.00
Final Sat.:	0	3200	3200	3200	3200	0	1600	5884	516	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.08	0.08	0.21	0.00	0.17	0.18	0.25	0.00	0.00	0.00
Crit Moves:					****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.751
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	180	1150	20	360	810	1010	710	490	80	60	800	850
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1150	20	360	810	1010	710	490	80	60	800	850
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	180	1150	20	360	810	0	710	490	80	60	800	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1150	20	360	810	0	710	490	80	60	800	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	180	1150	20	360	810	0	710	490	80	60	800	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.95	0.05	2.00	3.00	1.00	2.00	2.58	0.42	1.00	3.00	1.00
Final Sat.:	3400	5013	87	3400	5100	1700	3400	4384	716	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.23	0.23	0.11	0.16	0.00	0.21	0.11	0.11	0.04	0.16	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.733
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 2	0	1	2	0 1	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	340	1330		110	160	910		160	260	830		260	80	620		240
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	340	1330		110	160	910		160	260	830		260	80	620		240
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	340	1330		110	160	910		160	260	830		260	80	620		240
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	340	1330		110	160	910		160	260	830		260	80	620		240
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	340	1330		110	160	910		160	260	830		260	80	620		240
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06
Lanes:	2.00	2.00		1.00	2.00	1.70		0.30	2.00	2.28		0.72	2.00	2.16		0.84
Final Sat.:	3400	3400		1700	3400	2892		508	3400	3883		1217	3400	3677		1423
Capacity Analysis Module:																
Vol/Sat:	0.10	0.39		0.06	0.05	0.31		0.31	0.08	0.21		0.21	0.02	0.17		0.17
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.534
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	130	180	80	440	480	310	140	540	170	140	1230	280
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	180	80	440	480	310	140	540	170	140	1230	280
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	180	80	440	480	310	140	540	170	140	1230	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	180	80	440	480	310	140	540	170	140	1230	280
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	180	80	440	480	310	140	540	170	140	1230	280
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.05	0.14	0.15	0.19	0.04	0.11	0.11	0.04	0.26	0.17
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.581
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	190	40	130	400	160	100	140	60	50	330	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	190	40	130	400	160	100	140	60	50	330	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	190	40	130	400	160	100	140	60	50	330	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	190	40	130	400	160	100	140	60	50	330	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	190	40	130	400	160	100	140	60	50	330	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.83	0.17	1.00	1.00	1.00	1.00	0.70	0.30	1.00	0.80	0.20
Final Sat.:	1600	1322	278	1600	1600	1600	1600	1120	480	1600	1288	312
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.14	0.08	0.25	0.10	0.06	0.13	0.13	0.03	0.26	0.26
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.887
Loss Time (sec):	0	Average Delay (sec/veh):	25.4
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	40	160	30	100	320	70	50	180	60	30	230	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	160	30	100	320	70	50	180	60	30	230	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	160	30	100	320	70	50	180	60	30	230	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	160	30	100	320	70	50	180	60	30	230	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	160	30	100	320	70	50	180	60	30	230	60
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.70	0.13	0.20	0.66	0.14	0.17	0.62	0.21	0.09	0.72	0.19
Final Sat.:	81	322	60	113	361	79	83	299	100	46	352	92
Capacity Analysis Module:												
Vol/Sat:	0.50	0.50	0.50	0.89	0.89	0.89	0.60	0.60	0.60	0.65	0.65	0.65
Crit Moves:		****		****			****			****		
Delay/Veh:	15.5	15.5	15.5	38.0	38.0	38.0	18.1	18.1	18.1	19.6	19.6	19.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.5	15.5	15.5	38.0	38.0	38.0	18.1	18.1	18.1	19.6	19.6	19.6
LOS by Move:	C	C	C	E	E	E	C	C	C	C	C	C
ApproachDel:	15.5			38.0			18.1			19.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	15.5			38.0			18.1			19.6		
LOS by Appr:	C			E			C			C		
AllWayAvgQ:	0.7	0.7	0.7	4.4	4.4	4.4	1.1	1.1	1.1	1.3	1.3	1.3

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.591
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	70	600	210	10	1380	220	40	70	150	530	170	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	600	210	10	1380	220	40	70	150	530	170	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	600	210	10	1380	220	40	70	150	530	170	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	600	210	10	1380	220	40	70	150	530	170	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	600	210	10	1380	220	40	70	150	530	170	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	2.00	0.94	0.06
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	1600	1600	3200	1511	89
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.13	0.01	0.29	0.14	0.03	0.04	0.09	0.17	0.11	0.11
Crit Moves:	****				****					****	****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.750
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	0	1	1	0 2	0	1	1	0 1	0	1	1	0 0	1	0
Volume Module:																
Base Vol:	90	720		40	50	1820		170	110		40	110	40		50	40
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	90	720		40	50	1820		170	110		40	110	40		50	40
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Volume:	90	720		40	50	1820		170	110		40	110	40		50	40
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	90	720		40	50	1820		170	110		40	110	40		50	40
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
FinalVolume:	90	720		40	50	1820		170	110		40	110	40		50	40
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600		1600	1600	1600		1600	1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Lanes:	1.00	2.00		1.00	1.00	2.00		1.00	1.00		1.00	1.00	1.00		0.56	0.44
Final Sat.:	1600	3200		1600	1600	3200		1600	1600		1600	1600	1600		889	711
Capacity Analysis Module:																
Vol/Sat:	0.06	0.23		0.03	0.03	0.57		0.11	0.07		0.03	0.07	0.03		0.06	0.06
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	0	1 0	0	1	0	0 1!	0	0
Volume Module:																
Base Vol:	90	820	10		110	1650	90		50	50	100		20	60	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	820	10		110	1650	90		50	50	100		20	60	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	90	820	10		110	1650	90		50	50	100		20	60	70	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	90	820	10		110	1650	90		50	50	100		20	60	70	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	90	820	10		110	1650	90		50	50	100		20	60	70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.98	0.02		1.00	1.90	0.10		0.50	0.50	1.00		0.13	0.40	0.47	
Final Sat.:	1600	3161	39		1600	3034	166		800	800	1600		213	640	747	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.26	0.26		0.07	0.54	0.54		0.03	0.06	0.06		0.01	0.09	0.09	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.656
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	80	930	20	50	1530	70	40	30	60	30	40	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	930	20	50	1530	70	40	30	60	30	40	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	930	20	50	1530	70	40	30	60	30	40	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	930	20	50	1530	70	40	30	60	30	40	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	930	20	50	1530	70	40	30	60	30	40	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.91	0.09	0.31	0.23	0.46	0.23	0.31	0.46
Final Sat.:	1600	3133	67	1600	3060	140	492	369	738	369	492	738
Capacity Analysis Module:												
Vol/Sat:	0.05	0.30	0.30	0.03	0.50	0.50	0.03	0.08	0.08	0.02	0.08	0.08
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.688
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	730	30	140	1310	90	60	90	60	30	190	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	730	30	140	1310	90	60	90	60	30	190	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	730	30	140	1310	90	60	90	60	30	190	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	730	30	140	1310	90	60	90	60	30	190	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	730	30	140	1310	90	60	90	60	30	190	260
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.92	0.08	1.00	1.87	0.13	1.00	0.60	0.40	1.00	1.00	1.00
Final Sat.:	1600	3074	126	1600	2994	206	1600	960	640	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.24	0.24	0.09	0.44	0.44	0.04	0.09	0.09	0.02	0.12	0.16
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.744
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 1	1	0	2	0 1	1	0	2	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	340	480	60		210	630	380		270	550	280		100	650	90	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	340	480	60		210	630	380		270	550	280		100	650	90	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	340	480	60		210	630	380		270	550	280		100	650	90	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	340	480	60		210	630	380		270	550	280		100	650	90	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	340	480	60		210	630	380		270	550	280		100	650	90	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.78	0.22		2.00	1.25	0.75		2.00	1.33	0.67		1.00	1.76	0.24	
Final Sat.:	3200	2844	356		3200	1996	1204		3200	2120	1080		1600	2811	389	
Capacity Analysis Module:																
Vol/Sat:	0.11	0.17	0.17		0.07	0.32	0.32		0.08	0.26	0.26		0.06	0.23	0.23	
Crit Moves:	****					****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1 0	4 0	1	0 0	1	0 1	1 0	1 0	0
Volume Module:												
Base Vol:	0	0	0	250	2520	0	0	10	10	310	10	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	250	2520	0	0	10	10	310	10	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	250	2520	0	0	10	10	310	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	250	2520	0	0	10	10	310	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	250	2520	0	0	10	10	310	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.39	0.00	0.00	0.01	0.01	0.19	0.01	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.403
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	30	410	120	0	0	0	60	190	0	0	290	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	410	120	0	0	0	60	190	0	0	290	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	410	120	0	0	0	60	190	0	0	290	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	410	120	0	0	0	60	190	0	0	290	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	410	120	0	0	0	60	190	0	0	290	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.83	0.17
Final Sat.:	1600	2475	725	0	0	0	3200	1600	0	0	1326	274
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.17	0.00	0.00	0.00	0.02	0.12	0.00	0.00	0.22	0.22
Crit Moves:		****					****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.451
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0	0 3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	340	1310	1240	0	620	80	110	340	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	340	1310	1240	0	620	80	110	340	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	340	1310	0	0	620	80	110	340	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	340	1310	0	0	620	80	110	340	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	340	1310	0	0	620	80	110	340	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.54	0.46	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	5669	731	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.27	0.00	0.00	0.11	0.11	0.07	0.11	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.515
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	0	0	2	0	2	0	0	2
Volume Module:												
Base Vol:	150	760	120	0	0	0	560	410	0	0	300	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	760	120	0	0	0	560	410	0	0	300	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	760	120	0	0	0	560	410	0	0	300	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	760	120	0	0	0	560	410	0	0	300	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	760	120	0	0	0	560	410	0	0	300	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.44	2.21	0.35	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	699	3542	559	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.00	0.00	0.00	0.17	0.13	0.00	0.00	0.09	0.13
Crit Moves:	****						****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 2	0	1	1	0 1	1	0
Volume Module:																
Base Vol:	60	510	100		140	700	380		150	540	40		80	740	80	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	60	510	100		140	700	380		150	540	40		80	740	80	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	60	510	100		140	700	380		150	540	40		80	740	80	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	60	510	100		140	700	380		150	540	40		80	740	80	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	60	510	100		140	700	380		150	540	40		80	740	80	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.67	0.33		1.00	1.30	0.70		1.00	2.00	1.00		1.00	1.80	0.20	
Final Sat.:	1600	2675	525		1600	2074	1126		1600	3200	1600		1600	2888	312	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.19	0.19		0.09	0.34	0.34		0.09	0.17	0.03		0.05	0.26	0.26	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.563
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0	1 0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	110	180	180	600	100	100	30	1140	70	40	610	160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	180	180	600	100	100	30	1140	70	40	610	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	180	180	600	100	100	30	1140	70	40	610	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	180	180	600	100	100	30	1140	70	40	610	160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	180	180	600	100	100	30	1140	70	40	610	160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	0.50	0.50	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	800	800	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.19	0.13	0.13	0.02	0.24	0.04	0.03	0.13	0.10
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.425
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 2	0	0 0	0 0	0	0 4	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	0	230	0	0	0	0	2260	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	230	0	0	0	0	2260	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	230	0	0	0	0	2260	150	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	230	0	0	0	0	2260	150	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	230	0	0	0	0	2260	150	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.35	0.09	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.530
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	3	0 1	1 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	50	1610	0	0	1990	130	270	0	140	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	1610	0	0	1990	130	270	0	140	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	50	1610	0	0	1990	0	270	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	1610	0	0	1990	0	270	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	50	1610	0	0	1990	0	270	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	3.00	1.00	2.00	0.00	1.00	0.00	1.00	0.00
Final Sat.:	1600	4800	0	1600	4800	1600	3200	0	1600	0	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.00	0.00	0.41	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.537
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	60	1840	60	40	1890	60	80	10	150	20	10	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1840	60	40	1890	60	80	10	150	20	10	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1840	60	40	1890	60	80	10	150	20	10	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1840	60	40	1890	60	80	10	150	20	10	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1840	60	40	1890	60	80	10	150	20	10	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.87	0.13	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6198	202	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.30	0.03	0.39	0.04	0.03	0.01	0.09	0.01	0.01	0.06
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.602
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	40	1690	330	160	1660	400	250	90	20	280	130	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	1690	330	160	1660	400	250	90	20	280	130	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	40	1690	330	160	1660	400	250	90	20	280	130	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1690	330	160	1660	400	250	90	20	280	130	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	40	1690	330	160	1660	400	250	90	20	280	130	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.39	0.50	0.11	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2222	800	178	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.35	0.21	0.05	0.35	0.25	0.11	0.11	0.11	0.09	0.08	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.510
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1660	190	100	1560	80	40	0	20	220	0	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1660	190	100	1560	80	40	0	20	220	0	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1660	190	100	1560	80	40	0	20	220	0	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1660	190	100	1560	80	40	0	20	220	0	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1660	190	100	1560	80	40	0	20	220	0	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.69	0.31	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4307	493	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.39	0.03	0.33	0.05	0.03	0.00	0.01	0.07	0.00	0.04
Crit Moves:		****		****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.744
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2	1 0		1 0 3	0 1		1 1 1	0 1		1 1 1	0 1	
Volume Module:												
Base Vol:	380	1840	320	40	1460	80	110	240	310	170	190	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	380	1840	320	40	1460	80	110	240	310	170	190	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	380	1840	320	40	1460	80	110	240	310	170	190	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	380	1840	320	40	1460	80	110	240	310	170	190	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	380	1840	320	40	1460	80	110	240	310	170	190	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.56	0.44	1.00	3.00	1.00	1.00	2.00	1.00	1.42	1.58	1.00
Final Sat.:	3200	4089	711	1600	4800	1600	1600	3200	1600	2267	2533	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.45	0.45	0.03	0.30	0.05	0.07	0.08	0.19	0.07	0.08	0.02
Crit Moves:		****		****					****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	150	2390	170	140	2510	230	230	220	100	310	220	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	2390	170	140	2510	230	230	220	100	310	220	140
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	150	2390	0	140	2510	230	230	220	0	310	220	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	2390	0	140	2510	230	230	220	0	310	220	140
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	150	2390	0	140	2510	230	230	220	0	310	220	140
OvlAdjVol:						115						70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.37	0.00	0.04	0.39	0.14	0.07	0.07	0.00	0.10	0.07	0.09
OvlAdjV/S:						0.07						0.04
Crit Moves:	****				****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.861
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	164	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	90	2070	530	1140	2330	50	30	350	50	230	280	660
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	2070	530	1140	2330	50	30	350	50	230	280	660
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	90	2070	0	1140	2330	0	30	350	50	230	280	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	2070	0	1140	2330	0	30	350	50	230	280	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	90	2070	0	1140	2330	0	30	350	50	230	280	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.00	0.36	0.36	0.00	0.01	0.11	0.03	0.07	0.09	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.694
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	0	1	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	160	860		10	30	1010		290	200		60	80	40		290	70
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	160	860		10	30	1010		290	200		60	80	40		290	70
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Volume:	160	860		10	30	1010		290	200		60	80	40		290	70
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	160	860		10	30	1010		290	200		60	80	40		290	70
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
FinalVolume:	160	860		10	30	1010		290	200		60	80	40		290	70
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600		1600	1600	1600		1600	1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Lanes:	2.00	1.98		0.02	1.00	1.55		0.45	1.00		1.00	1.00	1.00		1.61	0.39
Final Sat.:	3200	3163		37	1600	2486		714	1600		1600	1600	1600		2578	622
Capacity Analysis Module:																
Vol/Sat:	0.05	0.27		0.27	0.02	0.41		0.41	0.13		0.04	0.05	0.03		0.11	0.11
Crit Moves:	****					****			****							****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.650
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	300	650	20		20	550	430		370	80	90		50	360	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	300	650	20		20	550	430		370	80	90		50	360	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	300	650	20		20	550	430		370	80	90		50	360	70	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	300	650	20		20	550	430		370	80	90		50	360	70	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	300	650	20		20	550	430		370	80	90		50	360	70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.94	0.06		1.00	1.12	0.88		2.00	1.00	1.00		1.00	1.67	0.33	
Final Sat.:	3200	3104	96		1600	1796	1404		3200	1600	1600		1600	2679	521	
Capacity Analysis Module:																
Vol/Sat:	0.09	0.21	0.21		0.01	0.31	0.31		0.12	0.05	0.06		0.03	0.13	0.13	
Crit Moves:	****					****				****						****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.642
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Ignore			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0	2 0 2	0	0	3 0 1
Volume Module:												
Base Vol:	740	0	320	0	0	0	0	790	810	0	1910	1100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	740	0	320	0	0	0	0	790	810	0	1910	1100
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	740	0	0	0	0	0	0	790	0	0	1910	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	740	0	0	0	0	0	0	790	0	0	1910	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	740	0	0	0	0	0	0	790	0	0	1910	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	3.00	1.00
Final Sat.:	3400	0	1700	0	0	0	0	3400	3400	0	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.37	0.00
Crit Moves:	****						****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.903
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	88	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	2	0 3	1	0	2	0 4	0	1
Volume Module:																
Base Vol:	430	1770	390		370	470	190		250	800	60		200	910	600	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	430	1770	390		370	470	190		250	800	60		200	910	600	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	430	1770	390		370	470	190		250	800	60		200	910	600	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	430	1770	390		370	470	190		250	800	60		200	910	600	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	430	1770	390		370	470	190		250	800	60		200	910	600	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.28	0.72		2.00	3.00	1.00		2.00	3.72	0.28		2.00	4.00	1.00	
Final Sat.:	3400	5572	1228		3400	5100	1700		3400	6326	474		3400	6800	1700	
Capacity Analysis Module:																
Vol/Sat:	0.13	0.32	0.32		0.11	0.09	0.11		0.07	0.13	0.13		0.06	0.13	0.35	
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.858
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	0	1	2	0 1	0	1
Volume Module:																
Base Vol:	60	1940	260		120	750	150		160	400	100		500	260	360	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	60	1940	260		120	750	150		160	400	100		500	260	360	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	60	1940	260		120	750	150		160	400	100		500	260	360	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	60	1940	260		120	750	150		160	400	100		500	260	360	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	60	1940	260		120	750	150		160	400	100		500	260	360	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.65	0.35		1.00	2.50	0.50		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	4497	603		1700	4250	850		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.43	0.43		0.07	0.18	0.18		0.09	0.12	0.06		0.15	0.15	0.21	
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.766
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	130	1940	280	70	1200	30	90	120	300	470	60	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1940	280	70	1200	30	90	120	300	470	60	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1940	280	70	1200	30	90	120	300	470	60	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1940	280	70	1200	30	90	120	300	470	60	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1940	280	70	1200	30	90	120	300	470	60	190
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.93	0.07	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	3400	5100	1700	3400	4976	124	1700	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.38	0.16	0.02	0.24	0.24	0.05	0.07	0.18	0.14	0.04	0.11
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.975
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	174	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2	0 2	1 0	2	1 0	2 0	3	0 1
Volume Module:												
Base Vol:	440	1080	440	80	230	250	490	1370	150	140	850	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	1080	440	80	230	250	490	1370	150	140	850	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	440	1080	440	80	230	250	490	1370	150	140	850	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	1080	440	80	230	250	490	1370	150	140	850	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	440	1080	440	80	230	250	490	1370	150	140	850	240
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.42	0.58	2.00	2.00	2.00	1.00	2.70	0.30	2.00	3.00	1.00
Final Sat.:	3400	2416	984	3400	3400	3400	1700	4597	503	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.45	0.45	0.02	0.07	0.07	0.29	0.30	0.30	0.04	0.17	0.14
OvlAdjV/S:						0.00						
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.962
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	147	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	90	1440	360		100	410	80		100	830	90		90	510	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	1440	360		100	410	80		100	830	90		90	510	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	90	1440	360		100	410	80		100	830	90		90	510	70	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	90	1440	360		100	410	80		100	830	90		90	510	70	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	90	1440	360		100	410	80		100	830	90		90	510	70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.60	0.40		1.00	1.67	0.33		1.00	1.80	0.20		1.00	1.76	0.24	
Final Sat.:	1700	2720	680		1700	2845	555		1700	3067	333		1700	2990	410	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.53	0.53		0.06	0.14	0.14		0.06	0.27	0.27		0.05	0.17	0.17	
Crit Moves:		****				****					****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.826
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	280	1110	350	140	390	190	470	1410	110	160	990	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	1110	350	140	390	190	470	1410	110	160	990	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	280	1110	350	140	390	190	470	1410	0	160	990	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	1110	350	140	390	190	470	1410	0	160	990	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	280	1110	350	140	390	190	470	1410	0	160	990	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.54	0.46
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4315	785
Capacity Analysis Module:												
Vol/Sat:	0.08	0.33	0.21	0.08	0.11	0.11	0.14	0.28	0.00	0.05	0.23	0.23
Crit Moves:		****		****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.924
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	103	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 1	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	500	3010	210	340	1440	360	950	780	260	170	650	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	500	3010	210	340	1440	360	950	780	260	170	650	520
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	500	3010	0	340	1440	0	950	780	260	170	650	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	500	3010	0	340	1440	0	950	780	260	170	650	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	500	3010	0	340	1440	0	950	780	260	170	650	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.75	2.25	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	4668	3832	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.15	0.44	0.00	0.10	0.21	0.00	0.20	0.20	0.15	0.05	0.13	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.861
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 4	0	1	2	0 3	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	190	2960	280		290	1470	200		470	840	250		260	490	200	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	190	2960	280		290	1470	200		470	840	250		260	490	200	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	190	2960	280		290	1470	200		470	840	250		260	490	200	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	190	2960	280		290	1470	200		470	840	250		260	490	200	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	190	2960	280		290	1470	200		470	840	250		260	490	200	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	4.00	1.00		2.00	3.52	0.48		2.00	2.31	0.69		2.00	2.13	0.87	
Final Sat.:	3400	6800	1700		3400	5986	814		3400	3930	1170		3400	3622	1478	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.44	0.16		0.09	0.25	0.25		0.14	0.21	0.21		0.08	0.14	0.14	
Crit Moves:		****				****					****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.704
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	100	3050	40	30	1910	100	290	210	220	40	40	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	3050	40	30	1910	100	290	210	220	40	40	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	3050	40	30	1910	100	290	210	220	40	40	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	3050	40	30	1910	100	290	210	220	40	40	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	3050	40	30	1910	100	290	210	220	40	40	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.95	0.05	2.00	3.80	0.20	1.00	1.00	1.00	1.00	1.14	0.86
Final Sat.:	3400	6712	88	3400	6462	338	1700	1700	1700	1700	1943	1457
Capacity Analysis Module:												
Vol/Sat:	0.03	0.45	0.45	0.01	0.30	0.30	0.17	0.12	0.13	0.02	0.02	0.02
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.873
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	380	2360	590	270	1640	270	580	1270	770	500	550	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	380	2360	590	270	1640	270	580	1270	770	500	550	350
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	380	2360	0	270	1640	270	580	1270	0	500	550	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	380	2360	0	270	1640	270	580	1270	0	500	550	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	380	2360	0	270	1640	270	580	1270	0	500	550	0
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.11	0.35	0.00	0.08	0.24	0.16	0.17	0.25	0.00	0.15	0.11	0.00
OvlAdjV/S:						0.00						
Crit Moves:	****			****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.856
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 2	0 1	2	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	60	920	80	300	580	180	480	960	140	90	350	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	920	80	300	580	180	480	960	140	90	350	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	60	920	80	300	580	180	480	960	0	90	350	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	920	80	300	580	180	480	960	0	90	350	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	60	920	80	300	580	180	480	960	0	90	350	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.84	0.16	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.32	0.68
Final Sat.:	1700	3128	272	1700	3400	1700	3400	3400	1700	1700	2245	1155
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.29	0.18	0.17	0.11	0.14	0.28	0.00	0.05	0.16	0.16
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Scenario Report

Scenario:	2026NP-AM (Base)
Command:	2026NP-AM (Base)
Volume:	2026NP-AM (Base)
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2026NP-AM (Base)

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	B	xxxxx	0.660	B	xxxxx	0.660	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.692	B	xxxxx	0.692	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.632	B	xxxxx	0.632	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	C	xxxxx	0.774	C	xxxxx	0.774	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	A	xxxxx	0.598	A	xxxxx	0.598	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.425	A	xxxxx	0.425	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	C	xxxxx	0.705	C	xxxxx	0.705	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	E	xxxxx	0.929	E	xxxxx	0.929	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	C	xxxxx	0.776	C	xxxxx	0.776	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	B	xxxxx	0.634	B	xxxxx	0.634	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	B	xxxxx	0.700	B	xxxxx	0.700	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.577	A	xxxxx	0.577	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.686	B	xxxxx	0.686	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	A	xxxxx	0.591	A	xxxxx	0.591	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	A	xxxxx	0.362	A	xxxxx	0.362	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.542	A	xxxxx	0.542	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	B	xxxxx	0.666	B	xxxxx	0.666	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	C	xxxxx	0.758	C	xxxxx	0.758	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	B	xxxxx	0.633	B	xxxxx	0.633	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.448	A	xxxxx	0.448	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	B	xxxxx	0.680	B	xxxxx	0.680	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.743	C	xxxxx	0.743	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.534	A	xxxxx	0.534	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.575	A	xxxxx	0.575	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	E	36.3	0.919	E	36.3	0.919	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.425	A	xxxxx	0.425	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	C	xxxxx	0.725	C	xxxxx	0.725	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	B	xxxxx	0.687	B	xxxxx	0.687	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	A	xxxxx	0.525	A	xxxxx	0.525	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	A	xxxxx	0.559	A	xxxxx	0.559	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	B	xxxxx	0.622	B	xxxxx	0.622	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	A	xxxxx	0.281	A	xxxxx	0.281	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.487	A	xxxxx	0.487	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.327	A	xxxxx	0.327	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	D	xxxxx	0.847	D	xxxxx	0.847	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	A	xxxxx	0.578	A	xxxxx	0.578	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	B	xxxxx	0.619	B	xxxxx	0.619	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.428	A	xxxxx	0.428	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.550	A	xxxxx	0.550	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.461	A	xxxxx	0.461	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	A	xxxxx	0.579	A	xxxxx	0.579	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.499	A	xxxxx	0.499	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	D	xxxxx	0.872	D	xxxxx	0.872	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	B	xxxxx	0.614	B	xxxxx	0.614	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	C	xxxxx	0.775	C	xxxxx	0.775	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	B	xxxxx	0.600	B	xxxxx	0.600	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	A	xxxxx	0.472	A	xxxxx	0.472	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	C	xxxxx	0.762	C	xxxxx	0.762	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 49 RED HILL AVE/DYER RD	A	xxxxx	0.554	A	xxxxx	0.554	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	D	xxxxx	0.872	D	xxxxx	0.872	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	A	xxxxx	0.481	A	xxxxx	0.481	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	D	xxxxx	0.830	D	xxxxx	0.830	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	D	xxxxx	0.826	D	xxxxx	0.826	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	B	xxxxx	0.675	B	xxxxx	0.675	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	D	xxxxx	0.807	D	xxxxx	0.807	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.862	D	xxxxx	0.862	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	C	xxxxx	0.713	C	xxxxx	0.713	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	C	xxxxx	0.796	C	xxxxx	0.796	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	C	xxxxx	0.729	C	xxxxx	0.729	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.660
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	780	980	1260	520	810	70	60	990	450	230	630	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	780	980	1260	520	810	70	60	990	450	230	630	200
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	780	980	0	520	810	70	60	990	450	230	630	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	780	980	0	520	810	70	60	990	450	230	630	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	780	980	0	520	810	70	60	990	450	230	630	0
OvlAdjVol:									60			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.23	0.14	0.00	0.15	0.12	0.04	0.04	0.19	0.26	0.07	0.12	0.00
OvlAdjV/S:									0.04			
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.692
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1990	320	150	1290	0	0	0	0	830	0	990
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1990	320	150	1290	0	0	0	0	830	0	990
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.52
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1990	320	150	1290	0	0	0	0	830	0	519
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1990	320	150	1290	0	0	0	0	830	0	519
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1990	320	150	1290	0	0	0	0	830	0	519
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.09	0.04	0.19	0.00	0.00	0.00	0.00	0.24	0.00	0.31
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.632
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	1270	350	150	1680	320	0	0	0	1140	140	1060
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1270	350	150	1680	320	0	0	0	1140	140	1060
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	1270	350	150	1680	320	0	0	0	1140	140	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1270	350	150	1680	320	0	0	0	1140	140	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	1270	350	150	1680	320	0	0	0	1140	140	0
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.21	0.04	0.25	0.19	0.00	0.00	0.00	0.34	0.08	0.00
OvlAdjV/S:			0.00									
Crit Moves:				****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.774
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	150	1090	340	1040	1450	20	280	80	70	90	60	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1090	340	1040	1450	20	280	80	70	90	60	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1090	340	1040	1450	20	280	80	70	90	60	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1090	340	1040	1450	20	280	80	70	90	60	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1090	340	1040	1450	20	280	80	70	90	60	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.95	0.05	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6707	93	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.20	0.31	0.22	0.22	0.08	0.05	0.04	0.03	0.04	0.14
Crit Moves:			****	****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Ignore			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 4	0	1	1	0 4	0	1	2	0 2	1	0	2	0 3	0	1
Volume Module:																
Base Vol:	70	850	70		280	890	250		710	1120	140		50	250	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	70	850	70		280	890	250		710	1120	140		50	250	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Volume:	70	850	70		280	890	250		710	1120	140		50	250	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	70	850	70		280	890	250		710	1120	140		50	250	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
FinalVolume:	70	850	70		280	890	250		710	1120	140		50	250	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	4.00	1.00		1.00	4.00	1.00		2.00	2.67	0.33		2.00	3.00	1.00	
Final Sat.:	1700	6800	1700		1700	6800	1700		3400	4533	567		3400	5100	1700	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.13	0.04		0.16	0.13	0.15		0.21	0.25	0.25		0.01	0.05	0.00	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.425
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	50	840	120	110	670	210	130	360	60	60	150	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	840	120	110	670	210	130	360	60	60	150	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	50	840	120	110	670	210	130	360	60	60	150	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	840	120	110	670	210	130	360	60	60	150	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	50	840	120	110	670	210	130	360	60	60	150	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.05	0.95	1.00	1.67	0.33	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	4873	1527	1600	2674	526	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.17	0.08	0.07	0.14	0.14	0.08	0.13	0.11	0.04	0.05	0.00
Crit Moves:		****		****				****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.705
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 2	0	0 0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	2120	0	0	2170	1190	0	0	0	1220	0	690
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2120	0	0	2170	1190	0	0	0	1220	0	690
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2120	0	0	2170	0	0	0	0	1220	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2120	0	0	2170	0	0	0	0	1220	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2120	0	0	2170	0	0	0	0	1220	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.42	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.24	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.929
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	108	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	4	0 1	1 0	1!	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	910	0	0	3140	260	1210	0	1630	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	910	0	0	3140	260	1210	0	1630	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	910	0	0	3140	0	1210	0	1630	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	910	0	0	3140	0	1210	0	1630	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	910	0	0	3140	0	1210	0	1630	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	1.70	0.00	2.30	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	2897	0	3903	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.00	0.00	0.46	0.00	0.42	0.00	0.42	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.776
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	220	1480	290	1100	2260	1370	210	150	40	190	420	440
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	220	1480	290	1100	2260	1370	210	150	40	190	420	440
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	220	1480	290	1100	2260	0	210	150	40	190	420	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	1480	290	1100	2260	0	210	150	40	190	420	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	220	1480	290	1100	2260	0	210	150	40	190	420	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.58	0.42	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2684	716	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.22	0.17	0.32	0.33	0.00	0.06	0.06	0.06	0.06	0.12	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ignore				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 2	1	0	2	0 2	0	1	2	0 2	0	1
Volume Module:																
Base Vol:	140	1450	100		200	1620	190		140	180	50		460	410	90	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	140	1450	100		200	1620	190		140	180	50		460	410	90	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Volume:	140	1450	100		200	1620	190		140	180	0		460	410	90	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	140	1450	100		200	1620	190		140	180	0		460	410	90	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
FinalVolume:	140	1450	100		200	1620	190		140	180	0		460	410	90	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.74	0.26		2.00	2.69	0.31		2.00	2.00	1.00		2.00	2.00	1.00	
Final Sat.:	3400	6361	439		3400	4565	535		3400	3400	1700		3400	3400	1700	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.23	0.23		0.06	0.35	0.35		0.04	0.05	0.00		0.14	0.12	0.05	
Crit Moves:	****					****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.700
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	160	440	300	180	1390	530	340	640	210	390	1020	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	440	300	180	1390	530	340	640	210	390	1020	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	160	440	300	180	1390	530	340	640	0	390	1020	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	440	300	180	1390	530	340	640	0	390	1020	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	160	440	300	180	1390	530	340	640	0	390	1020	210
OvlAdjVol:												150
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.19	0.04	0.29	0.33	0.11	0.13	0.00	0.12	0.21	0.13
OvlAdjV/S:												0.09
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.577
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 0	0	0 3	1 1	0	0 0	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	710	2770	0	0	640	380	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	710	2770	0	0	640	380	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	710	2770	0	0	640	380	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	710	2770	0	0	640	380	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	710	2770	0	0	640	380	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.14	1.86	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	5020	2980	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.58	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.686
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 1	0	0 0	4 0	0	1 1	1 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	2040	50	0	630	0	1360	410	1160	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2040	50	0	630	0	1360	410	1160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2040	50	0	630	0	1360	410	1160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2040	50	0	630	0	1360	410	1160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2040	50	0	630	0	1360	410	1160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.88	0.12	0.00	4.00	0.00	2.00	1.00	2.00	0.00	0.00	0.00
Final Sat.:	0	7809	191	0	6400	0	3200	1600	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.00	0.10	0.00	0.43	0.26	0.36	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.591
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	70	730	120	200	790	190	140	370	40	150	380	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	730	120	200	790	190	140	370	40	150	380	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	70	730	120	200	790	190	140	370	40	150	380	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	730	120	200	790	190	140	370	40	150	380	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	70	730	120	200	790	190	140	370	40	150	380	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.61	0.39	1.00	1.80	0.20	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2741	659	1700	3068	332	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.21	0.07	0.12	0.29	0.29	0.08	0.12	0.12	0.09	0.11	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.362
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	260	1850	0	0	490	80	0	0	260	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	1850	0	0	490	80	0	0	260	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	0	0	0	490	80	0	0	260	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	0	0	0	490	80	0	0	260	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	260	0	0	0	490	80	0	0	260	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.58	0.42	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4126	674	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.08	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.542
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	0 0	1!	0 0	1 0	0	1 0
Volume Module:												
Base Vol:	30	2250	110	50	520	10	10	0	10	20	0	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	2250	110	50	520	10	10	0	10	20	0	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	2250	110	50	520	10	10	0	10	20	0	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	2250	110	50	520	10	10	0	10	20	0	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	2250	110	50	520	10	10	0	10	20	0	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	2.94	0.06	0.50	0.00	0.50	1.00	0.00	1.00
Final Sat.:	1600	4576	224	1600	4709	91	800	0	800	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.49	0.49	0.03	0.11	0.11	0.01	0.00	0.01	0.01	0.00	0.01
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.666
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	4 0	2	0 0	0 0	0	1 0	3 1	0
Volume Module:												
Base Vol:	510	2260	0	0	270	270	0	0	0	170	1090	160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	510	2260	0	0	270	270	0	0	0	170	1090	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	510	2260	0	0	270	270	0	0	0	170	1090	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	510	2260	0	0	270	270	0	0	0	170	1090	160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	510	2260	0	0	270	270	0	0	0	170	1090	160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	1.00	3.49	0.51
Final Sat.:	3200	4800	0	0	6400	3200	0	0	0	1600	5581	819
Capacity Analysis Module:												
Vol/Sat:	0.16	0.47	0.00	0.00	0.04	0.08	0.00	0.00	0.00	0.11	0.20	0.20
Crit Moves:		****									****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.758
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	77	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0 4	1	0	1	0 3	0	0	1	1 2	0	2	0	0 0	0	0
Volume Module:																
Base Vol:	0	1280	230		90	350	0		1490	1790	460		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	1280	230		90	350	0		1490	1790	460		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	1280	230		90	350	0		1490	1790	460		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	1280	230		90	350	0		1490	1790	460		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	1280	230		90	350	0		1490	1790	460		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	4.24	0.76		1.00	3.00	0.00		1.82	2.18	2.00		0.00	0.00	0.00	
Final Sat.:	0	6781	1219		1600	4800	0		2907	3493	3200		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.19	0.19		0.06	0.07	0.00		0.51	0.51	0.14		0.00	0.00	0.00	
Crit Moves:		****				****				****						

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.633
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	120	1100	0	0	110	130	0	0	0	320	1150	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1100	0	0	110	130	0	0	0	320	1150	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1100	0	0	110	130	0	0	0	320	1150	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1100	0	0	110	130	0	0	0	320	1150	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1100	0	0	110	130	0	0	0	320	1150	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.83	2.17	0.00	0.00	0.00	1.00	3.48	0.52
Final Sat.:	3200	3200	0	0	2933	3467	0	0	0	1600	5571	829
Capacity Analysis Module:												
Vol/Sat:	0.04	0.34	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.20	0.21	0.29
Crit Moves:		****										****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.448
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	1 1	2	0 2	0 0	1	1 2	1 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	350	320	120	280	0	890	1070	200	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	350	320	120	280	0	890	1070	200	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	350	320	120	280	0	890	1070	200	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	350	320	120	280	0	890	1070	200	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	350	320	120	280	0	890	1070	200	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.09	1.91	2.00	2.00	0.00	1.82	2.71	0.47	0.00	0.00	0.00
Final Sat.:	0	3343	3057	3200	3200	0	2906	4338	756	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.10	0.04	0.09	0.00	0.31	0.25	0.26	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.680
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	90	760	30	440	770	430	950	1010	150	50	340	630
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	760	30	440	770	430	950	1010	150	50	340	630
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	90	760	30	440	770	0	950	1010	150	50	340	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	760	30	440	770	0	950	1010	150	50	340	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	90	760	30	440	770	0	950	1010	150	50	340	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.89	0.11	2.00	3.00	1.00	2.00	2.61	0.39	1.00	3.00	1.00
Final Sat.:	3400	4906	194	3400	5100	1700	3400	4441	659	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.13	0.15	0.00	0.28	0.23	0.23	0.03	0.07	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.743
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	2 0	1 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	210	450	110	110	1040	230	180	750	370	130	460	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	450	110	110	1040	230	180	750	370	130	460	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	450	110	110	1040	230	180	750	370	130	460	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	450	110	110	1040	230	180	750	370	130	460	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	210	450	110	110	1040	230	180	750	370	130	460	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	2.00	1.64	0.36	2.00	2.01	0.99	2.00	2.34	0.66
Final Sat.:	3400	3400	1700	3400	2784	616	3400	3415	1685	3400	3976	1124
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.06	0.03	0.37	0.37	0.05	0.22	0.22	0.04	0.12	0.12
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.534
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	130	510	160	250	160	70	420	970	80	100	530	550
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	510	160	250	160	70	420	970	80	100	530	550
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	510	160	250	160	70	420	970	80	100	530	550
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	510	160	250	160	70	420	970	80	100	530	550
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	510	160	250	160	70	420	970	80	100	530	550
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	2.00	2.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	3200	3200
Capacity Analysis Module:												
Vol/Sat:	0.04	0.16	0.10	0.08	0.05	0.04	0.13	0.20	0.05	0.03	0.17	0.17
Crit Moves:		****		****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.575
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	420	70	50	180	40	170	310	40	30	90	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	420	70	50	180	40	170	310	40	30	90	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	420	70	50	180	40	170	310	40	30	90	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	420	70	50	180	40	170	310	40	30	90	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	420	70	50	180	40	170	310	40	30	90	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.86	0.14	1.00	1.00	1.00	1.00	0.89	0.11	1.00	0.50	0.50
Final Sat.:	1600	1371	229	1600	1600	1600	1600	1417	183	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.31	0.31	0.03	0.11	0.03	0.11	0.22	0.22	0.02	0.11	0.11
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.919
Loss Time (sec):	0	Average Delay (sec/veh):	36.3
Optimal Cycle:	0	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	80	290	80	80	150	60	110	290	50	10	140	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	290	80	80	150	60	110	290	50	10	140	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	290	80	80	150	60	110	290	50	10	140	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	290	80	80	150	60	110	290	50	10	140	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	290	80	80	150	60	110	290	50	10	140	110
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.64	0.18	0.27	0.52	0.21	0.24	0.65	0.11	0.04	0.54	0.42
Final Sat.:	88	317	88	121	226	90	120	315	54	17	235	184
Capacity Analysis Module:												
Vol/Sat:	0.91	0.91	0.91	0.66	0.66	0.66	0.92	0.92	0.92	0.60	0.60	0.60
Crit Moves:		****			****			****			****	
Delay/Veh:	45.1	45.1	45.1	22.0	22.0	22.0	46.4	46.4	46.4	19.4	19.4	19.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.1	45.1	45.1	22.0	22.0	22.0	46.4	46.4	46.4	19.4	19.4	19.4
LOS by Move:	E	E	E	C	C	C	E	E	E	C	C	C
ApproachDel:		45.1			22.0			46.4			19.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		45.1			22.0			46.4			19.4	
LOS by Appr:		E			C			E			C	
AllWayAvgQ:	4.8	4.8	4.8	1.4	1.4	1.4	4.9	4.9	4.9	1.1	1.1	1.1

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.425
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	90	1280	440	10	560	40	190	170	100	140	30	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1280	440	10	560	40	190	170	100	140	30	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1280	440	10	560	40	190	170	100	140	30	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1280	440	10	560	40	190	170	100	140	30	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	1280	440	10	560	40	190	170	100	140	30	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.26	0.74	2.00	0.75	0.25
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	2015	1185	3200	1200	400
Capacity Analysis Module:												
Vol/Sat:	0.06	0.27	0.28	0.01	0.12	0.03	0.12	0.08	0.08	0.04	0.03	0.03
Crit Moves:			****	****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	120	1520	40	80	620	100	260	70	120	30	30	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1520	40	80	620	100	260	70	120	30	30	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1520	40	80	620	100	260	70	120	30	30	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1520	40	80	620	100	260	70	120	30	30	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1520	40	80	620	100	260	70	120	30	30	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.08	0.48	0.03	0.05	0.19	0.06	0.16	0.04	0.08	0.02	0.04	0.04
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.687
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	60	1290	10	70	830	40	180	50	120	20	50	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1290	10	70	830	40	180	50	120	20	50	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1290	10	70	830	40	180	50	120	20	50	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1290	10	70	830	40	180	50	120	20	50	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1290	10	70	830	40	180	50	120	20	50	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.91	0.09	0.78	0.22	1.00	0.10	0.25	0.65
Final Sat.:	1600	3175	25	1600	3053	147	1252	348	1600	160	400	1040
Capacity Analysis Module:												
Vol/Sat:	0.04	0.41	0.41	0.04	0.27	0.27	0.11	0.14	0.08	0.01	0.13	0.13
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	60	1150	10	30	860	30	70	30	110	20	40	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1150	10	30	860	30	70	30	110	20	40	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1150	10	30	860	30	70	30	110	20	40	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1150	10	30	860	30	70	30	110	20	40	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1150	10	30	860	30	70	30	110	20	40	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.93	0.07	0.33	0.14	0.53	0.13	0.27	0.60
Final Sat.:	1600	3172	28	1600	3092	108	533	229	838	213	427	960
Capacity Analysis Module:												
Vol/Sat:	0.04	0.36	0.36	0.02	0.28	0.28	0.04	0.13	0.13	0.01	0.09	0.09
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.559
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 0	1	0	1	0 1	0	1
Volume Module:																
Base Vol:	60	910	20		140	850	30		70	130	50		20	80	220	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	60	910	20		140	850	30		70	130	50		20	80	220	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	60	910	20		140	850	30		70	130	50		20	80	220	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	60	910	20		140	850	30		70	130	50		20	80	220	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	60	910	20		140	850	30		70	130	50		20	80	220	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.96	0.04		1.00	1.93	0.07		1.00	0.72	0.28		1.00	1.00	1.00	
Final Sat.:	1600	3131	69		1600	3091	109		1600	1156	444		1600	1600	1600	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.29	0.29		0.09	0.28	0.27		0.04	0.11	0.11		0.01	0.05	0.14	
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.622
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	470	560	30	260	430	180	300	580	250	40	370	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	470	560	30	260	430	180	300	580	250	40	370	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	470	560	30	260	430	180	300	580	250	40	370	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	470	560	30	260	430	180	300	580	250	40	370	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	470	560	30	260	430	180	300	580	250	40	370	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.90	0.10	2.00	1.41	0.59	2.00	1.40	0.60	1.00	1.68	0.32
Final Sat.:	3200	3037	163	3200	2256	944	3200	2236	964	1600	2691	509
Capacity Analysis Module:												
Vol/Sat:	0.15	0.18	0.18	0.08	0.19	0.19	0.09	0.26	0.26	0.03	0.14	0.14
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.281
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1	0 4	0 1	0	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	0	0	0	360	1140	10	0	0	10	80	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	360	1140	10	0	0	10	80	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	360	1140	10	0	0	10	80	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	360	1140	10	0	0	10	80	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	360	1140	10	0	0	10	80	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.23	0.18	0.01	0.00	0.00	0.01	0.05	0.00	0.00
Crit Moves:				****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.487
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	10	900	240	0	0	0	140	210	0	0	70	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	900	240	0	0	0	140	210	0	0	70	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	900	240	0	0	0	140	210	0	0	70	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	900	240	0	0	0	140	210	0	0	70	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	900	240	0	0	0	140	210	0	0	70	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.58	0.42	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.54	0.46
Final Sat.:	1600	2526	674	0	0	0	3200	1600	0	0	862	738
Capacity Analysis Module:												
Vol/Sat:	0.01	0.36	0.36	0.00	0.00	0.00	0.04	0.13	0.00	0.00	0.08	0.08
Crit Moves:		****						****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.327
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0	0 3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	190	490	580	0	890	40	100	250	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	190	490	580	0	890	40	100	250	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	190	490	0	0	890	40	100	250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	190	490	0	0	890	40	100	250	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	190	490	0	0	890	40	100	250	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.83	0.17	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	6125	275	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.10	0.00	0.00	0.15	0.15	0.06	0.08	0.00
Crit Moves:				****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.847
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	121	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 1	0	0	0 0	0	2	0 2	0 0	0	0 2	0 1
Volume Module:												
Base Vol:	150	1580	190	0	0	0	750	320	0	0	230	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1580	190	0	0	0	750	320	0	0	230	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1580	190	0	0	0	750	320	0	0	230	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1580	190	0	0	0	750	320	0	0	230	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1580	190	0	0	0	750	320	0	0	230	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.23	2.47	0.30	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	375	3950	475	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.40	0.40	0.00	0.00	0.00	0.23	0.10	0.00	0.00	0.07	0.21
Crit Moves:		****					****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.578
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 2	0	1	1	0 1	1	0
Volume Module:																
Base Vol:	50	610	60		50	440	100		330	550	70		100	310	110	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	50	610	60		50	440	100		330	550	70		100	310	110	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	50	610	60		50	440	100		330	550	70		100	310	110	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	50	610	60		50	440	100		330	550	70		100	310	110	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	50	610	60		50	440	100		330	550	70		100	310	110	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.82	0.18		1.00	1.63	0.37		1.00	2.00	1.00		1.00	1.48	0.52	
Final Sat.:	1600	2913	287		1600	2607	593		1600	3200	1600		1600	2362	838	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.21	0.21		0.03	0.17	0.17		0.21	0.17	0.04		0.06	0.13	0.13	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.619
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0	1 0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	20	90	20	130	130	30	60	490	160	60	860	750
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	90	20	130	130	30	60	490	160	60	860	750
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	90	20	130	130	30	60	490	160	60	860	750
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	90	20	130	130	30	60	490	160	60	860	750
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	90	20	130	130	30	60	490	160	60	860	750
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	2.00	0.81	0.19	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	2618	582	3200	1300	300	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.04	0.10	0.10	0.04	0.10	0.10	0.04	0.18	0.47
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.428
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	2	0 0	0 0	0	0 0	4 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	0	70	0	0	0	0	2600	350	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	70	0	0	0	0	2600	350	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	70	0	0	0	0	2600	350	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	70	0	0	0	0	2600	350	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	70	0	0	0	0	2600	350	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.41	0.22	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.550
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	1	1 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	220	1430	10	10	1560	490	190	10	80	10	10	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	220	1430	10	10	1560	490	190	10	80	10	10	20
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	220	1430	10	10	1560	0	190	10	0	10	10	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	1430	10	10	1560	0	190	10	0	10	10	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	220	1430	10	10	1560	0	190	10	0	10	10	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	3.00	1.00	1.90	0.10	1.00	0.25	0.25	0.50
Final Sat.:	1600	4767	33	1600	4800	1600	3040	160	1600	400	400	800
Capacity Analysis Module:												
Vol/Sat:	0.14	0.30	0.30	0.01	0.33	0.00	0.06	0.06	0.00	0.03	0.03	0.03
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.461
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	120	1900	70	70	1510	130	50	10	110	20	10	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1900	70	70	1510	130	50	10	110	20	10	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1900	70	70	1510	130	50	10	110	20	10	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1900	70	70	1510	130	50	10	110	20	10	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1900	70	70	1510	130	50	10	110	20	10	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.86	0.14	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6173	227	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.31	0.31	0.04	0.31	0.08	0.02	0.01	0.07	0.01	0.01	0.06
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.579
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	30	1520	240	90	1530	200	310	90	10	340	50	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	1520	240	90	1530	200	310	90	10	340	50	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	30	1520	240	90	1530	200	310	90	10	340	50	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	1520	240	90	1530	200	310	90	10	340	50	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	30	1520	240	90	1530	200	310	90	10	340	50	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.51	0.44	0.05	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2420	702	78	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.32	0.15	0.03	0.32	0.13	0.13	0.13	0.13	0.11	0.03	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.499
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1500	160	110	1420	50	80	0	100	180	0	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1500	160	110	1420	50	80	0	100	180	0	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1500	160	110	1420	50	80	0	100	180	0	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1500	160	110	1420	50	80	0	100	180	0	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1500	160	110	1420	50	80	0	100	180	0	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.71	0.29	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4337	463	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.35	0.03	0.30	0.03	0.05	0.00	0.06	0.06	0.00	0.04
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.872
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	178	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	430	1290	100	80	1500	150	190	290	430	200	500	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	430	1290	100	80	1500	150	190	290	430	200	500	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	430	1290	100	80	1500	150	190	290	430	200	500	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	430	1290	100	80	1500	150	190	290	430	200	500	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	430	1290	100	80	1500	150	190	290	430	200	500	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.78	0.22	1.00	3.00	1.00	1.19	1.81	1.00	1.00	2.00	1.00
Final Sat.:	3200	4455	345	1600	4800	1600	1900	2900	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.29	0.29	0.05	0.31	0.09	0.10	0.10	0.27	0.13	0.16	0.03
Crit Moves:	****				****				****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.614
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	210	2830	220	40	2210	280	200	180	130	330	210	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	2830	220	40	2210	280	200	180	130	330	210	110
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	210	2830	0	40	2210	280	200	180	0	330	210	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	2830	0	40	2210	280	200	180	0	330	210	110
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	210	2830	0	40	2210	280	200	180	0	330	210	110
OvlAdjVol:						180						90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.44	0.00	0.01	0.35	0.17	0.06	0.06	0.00	0.10	0.07	0.07
OvlAdjV/S:						0.11						0.06
Crit Moves:	****			****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec): 100 Critical Vol./Cap.(X): 0.775
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 101 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Ignore						Ignore						Include						Ignore					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Y+R:	4.0	4.0	4.0				4.0	4.0	4.0				4.0	4.0	4.0				4.0	4.0	4.0			
Lanes:	2	0	4	0	1		2	0	4	0	1		2	0	2	0	1		2	0	2	0	1	
Volume Module:																								
Base Vol:	140	2020	120				590	2360	20				50	290	80				590	600	930			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	140	2020	120				590	2360	20				50	290	80				590	600	930			
User Adj:	1.00	1.00	0.00				1.00	1.00	0.00				1.00	1.00	1.00				1.00	1.00	0.00			
PHF Adj:	1.00	1.00	0.00				1.00	1.00	0.00				1.00	1.00	1.00				1.00	1.00	0.00			
PHF Volume:	140	2020	0				590	2360	0				50	290	80				590	600	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	140	2020	0				590	2360	0				50	290	80				590	600	0			
PCE Adj:	1.00	1.00	0.00				1.00	1.00	0.00				1.00	1.00	1.00				1.00	1.00	0.00			
MLF Adj:	1.00	1.00	0.00				1.00	1.00	0.00				1.00	1.00	1.00				1.00	1.00	0.00			
FinalVolume:	140	2020	0				590	2360	0				50	290	80				590	600	0			
Saturation Flow Module:																								
Sat/Lane:	1600	1600	1600				1600	1600	1600				1600	1600	1600				1600	1600	1600			
Adjustment:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Lanes:	2.00	4.00	1.00				2.00	4.00	1.00				2.00	2.00	1.00				2.00	2.00	1.00			
Final Sat.:	3200	6400	1600				3200	6400	1600				3200	3200	1600				3200	3200	1600			
Capacity Analysis Module:																								
Vol/Sat:	0.04	0.32	0.00				0.18	0.37	0.00				0.02	0.09	0.05				0.18	0.19	0.00			
Crit Moves:		****						****						****						****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	0	1	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	110	1160		30	60	450		120	270	310		120	10	60		10
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	110	1160		30	60	450		120	270	310		120	10	60		10
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	110	1160		30	60	450		120	270	310		120	10	60		10
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	110	1160		30	60	450		120	270	310		120	10	60		10
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	110	1160		30	60	450		120	270	310		120	10	60		10
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	2.00	1.95		0.05	1.00	1.58		0.42	1.00	1.44		0.56	1.00	1.71		0.29
Final Sat.:	3200	3119		81	1600	2526		674	1600	2307		893	1600	2743		457
Capacity Analysis Module:																
Vol/Sat:	0.03	0.37		0.37	0.04	0.18		0.18	0.17	0.13		0.13	0.01	0.02		0.02
Crit Moves:		****			****				****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.472
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	180	730		60	40	420		120	560	270		170	20	60		20
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	180	730		60	40	420		120	560	270		170	20	60		20
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	180	730		60	40	420		120	560	270		170	20	60		20
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	180	730		60	40	420		120	560	270		170	20	60		20
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	180	730		60	40	420		120	560	270		170	20	60		20
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	2.00	1.85		0.15	1.00	1.56		0.44	2.00	1.00		1.00	1.00	1.50		0.50
Final Sat.:	3200	2957		243	1600	2489		711	3200	1600		1600	1600	2400		800
Capacity Analysis Module:																
Vol/Sat:	0.06	0.25		0.25	0.03	0.17		0.17	0.17	0.17		0.11	0.01	0.03		0.03
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.762
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Ignore				Include				Ignore				Ignore			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 0	0	1	0	0 0	0	0	0	0 2	0	2	0	0 3	0	1
Volume Module:																
Base Vol:	950	0	810		0	0	0		0	1470	730		0	600	270	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	950	0	810		0	0	0		0	1470	730		0	600	270	
User Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
PHF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
PHF Volume:	950	0	0		0	0	0		0	1470	0		0	600	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	950	0	0		0	0	0		0	1470	0		0	600	0	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
FinalVolume:	950	0	0		0	0	0		0	1470	0		0	600	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	0.00	1.00		0.00	0.00	0.00		0.00	2.00	2.00		0.00	3.00	1.00	
Final Sat.:	3400	0	1700		0	0	0		0	3400	3400		0	5100	1700	
Capacity Analysis Module:																
Vol/Sat:	0.28	0.00	0.00		0.00	0.00	0.00		0.00	0.43	0.00		0.00	0.12	0.00	
Crit Moves:	****									****			****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.554
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	150	400	120	420	1000	160	240	760	230	490	760	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	400	120	420	1000	160	240	760	230	490	760	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	400	120	420	1000	160	240	760	230	490	760	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	400	120	420	1000	160	240	760	230	490	760	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	400	120	420	1000	160	240	760	230	490	760	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.08	0.92	2.00	3.45	0.55	2.00	3.07	0.93	2.00	4.00	1.00
Final Sat.:	3400	5231	1569	3400	5862	938	3400	5220	1580	3400	6800	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.08	0.12	0.17	0.17	0.07	0.15	0.15	0.14	0.11	0.18
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.872
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	0	1	2	0 1	0	1
Volume Module:																
Base Vol:	170	570	370		240	1160	210		190	320	190		310	580	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	170	570	370		240	1160	210		190	320	190		310	580	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	170	570	370		240	1160	210		190	320	190		310	580	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	170	570	370		240	1160	210		190	320	190		310	580	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	170	570	370		240	1160	210		190	320	190		310	580	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.00	1.00		1.00	2.54	0.46		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	3400	1700		1700	4318	782		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.17	0.22		0.14	0.27	0.27		0.11	0.09	0.11		0.09	0.34	0.08	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.481
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	260	930	330	130	1280	80	20	30	40	240	80	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	930	330	130	1280	80	20	30	40	240	80	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	930	330	130	1280	80	20	30	40	240	80	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	930	330	130	1280	80	20	30	40	240	80	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	260	930	330	130	1280	80	20	30	40	240	80	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.82	0.18	1.00	1.00	1.00	2.00	1.07	0.93
Final Sat.:	3400	5100	1700	3400	4800	300	1700	1700	1700	3400	1813	1587
Capacity Analysis Module:												
Vol/Sat:	0.08	0.18	0.19	0.04	0.27	0.27	0.01	0.02	0.02	0.07	0.04	0.04
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.830
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2 0	2	1 0	2	1 0	2 0	3 0	1
Volume Module:												
Base Vol:	130	160	110	320	1140	420	90	560	270	830	1440	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	160	110	320	1140	420	90	560	270	830	1440	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	160	110	320	1140	420	90	560	270	830	1440	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	160	110	320	1140	420	90	560	270	830	1440	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	160	110	320	1140	420	90	560	270	830	1440	110
OvlAdjVol:						240						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.19	0.81	2.00	2.00	2.00	1.00	2.02	0.98	2.00	3.00	1.00
Final Sat.:	3400	2015	1385	3400	3400	3400	1700	3441	1659	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.08	0.09	0.34	0.12	0.05	0.16	0.16	0.24	0.28	0.06
OvlAdjV/S:						0.07						
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.826
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	70	360	50		60	1430	180		70	230	60		300	690	90	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	70	360	50		60	1430	180		70	230	60		300	690	90	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	70	360	50		60	1430	180		70	230	60		300	690	90	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	70	360	50		60	1430	180		70	230	60		300	690	90	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	70	360	50		60	1430	180		70	230	60		300	690	90	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.76	0.24		1.00	1.78	0.22		1.00	1.59	0.41		1.00	1.77	0.23	
Final Sat.:	1700	2985	415		1700	3020	380		1700	2697	703		1700	3008	392	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.12	0.12		0.04	0.47	0.47		0.04	0.09	0.09		0.18	0.23	0.23	
Crit Moves:	****					****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.675
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 1	1	0 2	0 1	2	0 3	0 1	2	0 2	1 0
Volume Module:												
Base Vol:	130	390	90	150	1130	290	170	770	380	350	940	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	390	90	150	1130	290	170	770	380	350	940	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	130	390	90	150	1130	290	170	770	0	350	940	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	390	90	150	1130	290	170	770	0	350	940	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	130	390	90	150	1130	290	170	770	0	350	940	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.74	0.26
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4654	446
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.05	0.09	0.33	0.17	0.05	0.15	0.00	0.10	0.20	0.20
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.807
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 1	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	180	870	130	420	3450	1540	170	360	170	230	750	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	870	130	420	3450	1540	170	360	170	230	750	230
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	180	870	0	420	3450	0	170	360	170	230	750	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	870	0	420	3450	0	170	360	170	230	750	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	180	870	0	420	3450	0	170	360	170	230	750	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.13	0.00	0.12	0.51	0.00	0.05	0.07	0.10	0.07	0.15	0.00
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.862
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 4	0	1	2	0 3	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	210	1060	230		170	3360	280		70	280	110		280	860	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	210	1060	230		170	3360	280		70	280	110		280	860	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	210	1060	230		170	3360	280		70	280	110		280	860	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	210	1060	230		170	3360	280		70	280	110		280	860	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	210	1060	230		170	3360	280		70	280	110		280	860	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	4.00	1.00		2.00	3.69	0.31		2.00	2.15	0.85		2.00	2.61	0.39	
Final Sat.:	3400	6800	1700		3400	6277	523		3400	3662	1438		3400	4430	670	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.16	0.14		0.05	0.54	0.54		0.02	0.08	0.08		0.08	0.19	0.19	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.713
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	220	1460	40		30	3400	350		50	20	40		30	40	20	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	220	1460	40		30	3400	350		50	20	40		30	40	20	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	220	1460	40		30	3400	350		50	20	40		30	40	20	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	220	1460	40		30	3400	350		50	20	40		30	40	20	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	220	1460	40		30	3400	350		50	20	40		30	40	20	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.89	0.11		2.00	3.63	0.37		1.00	1.00	1.00		1.00	1.33	0.67	
Final Sat.:	3400	6619	181		3400	6165	635		1700	1700	1700		1700	2267	1133	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.22	0.22		0.01	0.55	0.55		0.03	0.01	0.02		0.02	0.02	0.02	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.796
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	490	1240	400	460	2640	400	160	280	190	520	850	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	490	1240	400	460	2640	400	160	280	190	520	850	140
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	490	1240	0	460	2640	400	160	280	0	520	850	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	490	1240	0	460	2640	400	160	280	0	520	850	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	490	1240	0	460	2640	400	160	280	0	520	850	0
OvlAdjVol:						320						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.14	0.18	0.00	0.14	0.39	0.24	0.05	0.05	0.00	0.15	0.17	0.00
OvlAdjV/S:						0.19						
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.729
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 2	0 1	2	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	90	320	30	140	780	570	100	130	40	110	730	160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	320	30	140	780	570	100	130	40	110	730	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	90	320	30	140	780	570	100	130	0	110	730	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	320	30	140	780	570	100	130	0	110	730	160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	90	320	30	140	780	570	100	130	0	110	730	160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.83	0.17	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.64	0.36
Final Sat.:	1700	3109	291	1700	3400	1700	3400	3400	1700	1700	2789	611
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.10	0.08	0.23	0.34	0.03	0.04	0.00	0.06	0.26	0.26
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Scenario Report

Scenario:	2026NP-PM (Base)
Command:	2026NP-PM (Base)
Volume:	2026NP-PM (Base)
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2026NP-PM (Base)

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	C	xxxxx	0.796	C	xxxxx	0.796	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.668	B	xxxxx	0.668	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.679	B	xxxxx	0.679	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	E	xxxxx	0.976	E	xxxxx	0.976	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	D	xxxxx	0.820	D	xxxxx	0.820	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.565	A	xxxxx	0.565	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	D	xxxxx	0.840	D	xxxxx	0.840	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	C	xxxxx	0.781	C	xxxxx	0.781	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	E	xxxxx	0.965	E	xxxxx	0.965	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	B	xxxxx	0.644	B	xxxxx	0.644	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	C	xxxxx	0.739	C	xxxxx	0.739	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.525	A	xxxxx	0.525	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.670	B	xxxxx	0.670	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	B	xxxxx	0.697	B	xxxxx	0.697	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	C	xxxxx	0.723	C	xxxxx	0.723	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.535	A	xxxxx	0.535	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	F	xxxxx	1.009	F	xxxxx	1.009	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	A	xxxxx	0.467	A	xxxxx	0.467	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	B	xxxxx	0.658	B	xxxxx	0.658	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.469	A	xxxxx	0.469	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	C	xxxxx	0.774	C	xxxxx	0.774	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.750	C	xxxxx	0.750	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.568	A	xxxxx	0.568	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.594	A	xxxxx	0.594	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	D	28.1	0.922	D	28.1	0.922	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.597	A	xxxxx	0.597	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	C	xxxxx	0.762	C	xxxxx	0.762	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	C	xxxxx	0.741	C	xxxxx	0.741	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	B	xxxxx	0.662	B	xxxxx	0.662	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	B	xxxxx	0.691	B	xxxxx	0.691	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	C	xxxxx	0.769	C	xxxxx	0.769	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	B	xxxxx	0.608	B	xxxxx	0.608	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.419	A	xxxxx	0.419	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.461	A	xxxxx	0.461	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	A	xxxxx	0.515	A	xxxxx	0.515	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	C	xxxxx	0.744	C	xxxxx	0.744	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	A	xxxxx	0.569	A	xxxxx	0.569	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.430	A	xxxxx	0.430	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.546	A	xxxxx	0.546	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.544	A	xxxxx	0.544	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	B	xxxxx	0.619	B	xxxxx	0.619	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.512	A	xxxxx	0.512	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	C	xxxxx	0.763	C	xxxxx	0.763	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	B	xxxxx	0.609	B	xxxxx	0.609	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	D	xxxxx	0.867	D	xxxxx	0.867	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	C	xxxxx	0.713	C	xxxxx	0.713	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	B	xxxxx	0.659	B	xxxxx	0.659	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	B	xxxxx	0.656	B	xxxxx	0.656	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 49 RED HILL AVE/DYER RD	E	xxxxx	0.915	E	xxxxx	0.915	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	D	xxxxx	0.899	D	xxxxx	0.899	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	C	xxxxx	0.772	C	xxxxx	0.772	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	F	xxxxx	1.062	F	xxxxx	1.062	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	E	xxxxx	0.994	E	xxxxx	0.994	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	D	xxxxx	0.848	D	xxxxx	0.848	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	E	xxxxx	0.937	E	xxxxx	0.937	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.893	D	xxxxx	0.893	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	C	xxxxx	0.728	C	xxxxx	0.728	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	D	xxxxx	0.887	D	xxxxx	0.887	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	D	xxxxx	0.871	D	xxxxx	0.871	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.796
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	630	1190	630	290	950	70	70	970	670	720	1120	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	630	1190	630	290	950	70	70	970	670	720	1120	520
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	630	1190	0	290	950	70	70	970	670	720	1120	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	630	1190	0	290	950	70	70	970	670	720	1120	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	630	1190	0	290	950	70	70	970	670	720	1120	0
OvlAdjVol:									355			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.19	0.17	0.00	0.09	0.14	0.04	0.04	0.19	0.39	0.21	0.22	0.00
OvlAdjV/S:									0.21			
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	2090	760	590	1650	0	0	0	0	410	0	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2090	760	590	1650	0	0	0	0	410	0	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2090	760	590	1650	0	0	0	0	410	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2090	760	590	1650	0	0	0	0	410	0	234
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2090	760	590	1650	0	0	0	0	410	0	234
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.31	0.22	0.17	0.24	0.00	0.00	0.00	0.00	0.12	0.00	0.14
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.679
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	2280	480	440	1430	190	0	0	0	560	80	550
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2280	480	440	1430	190	0	0	0	560	80	550
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2280	480	440	1430	190	0	0	0	560	80	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2280	480	440	1430	190	0	0	0	560	80	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2280	480	440	1430	190	0	0	0	560	80	0
OvlAdjVol:			200									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.28	0.13	0.21	0.11	0.00	0.00	0.00	0.16	0.05	0.00
OvlAdjV/S:			0.12									
Crit Moves:		****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.976
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	177	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	110	1580	120	510	1410	20	230	80	80	390	70	810
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1580	120	510	1410	20	230	80	80	390	70	810
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1580	120	510	1410	20	230	80	80	390	70	810
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1580	120	510	1410	20	230	80	80	390	70	810
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1580	120	510	1410	20	230	80	80	390	70	810
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.94	0.06	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6705	95	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.07	0.15	0.21	0.21	0.07	0.05	0.05	0.11	0.04	0.48
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.820
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	1 0	4 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	110	1040	40	140	1010	630	370	500	100	80	1150	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1040	40	140	1010	630	370	500	100	80	1150	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	110	1040	40	140	1010	630	370	500	100	80	1150	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1040	40	140	1010	630	370	500	100	80	1150	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	110	1040	40	140	1010	630	370	500	100	80	1150	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	1.00	4.00	1.00	2.00	2.50	0.50	2.00	3.00	1.00
Final Sat.:	1700	6800	1700	1700	6800	1700	3400	4250	850	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.02	0.08	0.15	0.37	0.11	0.12	0.12	0.02	0.23	0.00
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.565
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	140	700	70	80	890	290	310	190	50	130	570	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	700	70	80	890	290	310	190	50	130	570	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	700	70	80	890	290	310	190	50	130	570	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	700	70	80	890	290	310	190	50	130	570	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	700	70	80	890	290	310	190	50	130	570	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.02	0.98	1.69	1.04	0.27	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	4827	1573	2703	1660	437	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.04	0.05	0.18	0.18	0.11	0.11	0.11	0.08	0.18	0.00
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.840
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 2	0	0 0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	3310	0	0	2040	1020	0	0	0	720	0	400
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3310	0	0	2040	1020	0	0	0	720	0	400
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	3310	0	0	2040	0	0	0	0	720	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3310	0	0	2040	0	0	0	0	720	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	3310	0	0	2040	0	0	0	0	720	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.65	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.14	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 1	1	0 1!	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	1990	0	0	2040	700	1160	0	680	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1990	0	0	2040	700	1160	0	680	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1990	0	0	2040	0	1160	0	680	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1990	0	0	2040	0	1160	0	680	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1990	0	0	2040	0	1160	0	680	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.00	0.00	0.30	0.00	0.34	0.00	0.20	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.965
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	152	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	70	2400	280	670	1670	300	950	670	110	320	290	1060
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	2400	280	670	1670	300	950	670	110	320	290	1060
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	70	2400	280	670	1670	0	950	670	110	320	290	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	2400	280	670	1670	0	950	670	110	320	290	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	70	2400	280	670	1670	0	950	670	110	320	290	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.72	0.28	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2921	479	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.35	0.16	0.20	0.25	0.00	0.28	0.23	0.23	0.09	0.09	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.644
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	60	1670	430	190	1620	180	290	630	210	150	280	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1670	430	190	1620	180	290	630	210	150	280	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	60	1670	430	190	1620	180	290	630	0	150	280	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1670	430	190	1620	180	290	630	0	150	280	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	60	1670	430	190	1620	180	290	630	0	150	280	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.18	0.82	2.00	2.70	0.30	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5408	1392	3400	4590	510	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.02	0.31	0.31	0.06	0.35	0.35	0.09	0.19	0.00	0.04	0.08	0.12
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.739
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	87	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	230	1460	430	270	570	370	600	1060	170	460	960	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	230	1460	430	270	570	370	600	1060	170	460	960	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	230	1460	430	270	570	370	600	1060	0	460	960	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	230	1460	430	270	570	370	600	1060	0	460	960	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	230	1460	430	270	570	370	600	1060	0	460	960	50
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.09	0.91	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4944	1456	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.30	0.30	0.06	0.12	0.23	0.19	0.22	0.00	0.14	0.20	0.03
OvlAdjV/S:												0.00
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	3	1 1	0 0	0	0 0	0 0	0	0 0
Volume Module:												
Base Vol:	860	2520	0	0	1040	760	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	860	2520	0	0	1040	760	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	860	2520	0	0	1040	760	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	860	2520	0	0	1040	760	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	860	2520	0	0	1040	760	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	3200	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.27	0.53	0.00	0.00	0.22	0.24	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.670
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	1 0	0 0	4	0 0	1 1	1	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	2470	90	0	1020	0	910	770	1100	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2470	90	0	1020	0	910	770	1100	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2470	90	0	1020	0	910	770	1100	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2470	90	0	1020	0	910	770	1100	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2470	90	0	1020	0	910	770	1100	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.82	0.18	0.00	4.00	0.00	1.62	1.38	2.00	0.00	0.00	0.00
Final Sat.:	0	7719	281	0	6400	0	2600	2200	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.32	0.00	0.16	0.00	0.35	0.35	0.34	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.697
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	60	770	200	250	820	140	180	480	90	180	550	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	770	200	250	820	140	180	480	90	180	550	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	60	770	200	250	820	140	180	480	90	180	550	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	770	200	250	820	140	180	480	90	180	550	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	60	770	200	250	820	140	180	480	90	180	550	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.71	0.29	1.00	1.68	0.32	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2904	496	1700	2863	537	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.23	0.12	0.15	0.28	0.28	0.11	0.17	0.17	0.11	0.16	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	350	840	0	0	1780	130	0	0	340	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	840	0	0	1780	130	0	0	340	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	350	0	0	0	1780	130	0	0	340	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	0	0	0	1780	130	0	0	340	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	350	0	0	0	1780	130	0	0	340	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.80	0.20	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4473	327	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.00	0.00	0.40	0.40	0.00	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.535
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	0	0 1!	0	0	1	0 0	1	0
Volume Module:																
Base Vol:	20	830	60		60	2140	10		10	10	20		80	0	50	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	20	830	60		60	2140	10		10	10	20		80	0	50	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	20	830	60		60	2140	10		10	10	20		80	0	50	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	20	830	60		60	2140	10		10	10	20		80	0	50	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	20	830	60		60	2140	10		10	10	20		80	0	50	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.80	0.20		1.00	2.99	0.01		0.25	0.25	0.50		1.00	0.00	1.00	
Final Sat.:	1600	4476	324		1600	4778	22		400	400	800		1600	0	1600	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.19	0.19		0.04	0.45	0.45		0.01	0.03	0.03		0.05	0.00	0.03	
Crit Moves:	****					****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	1.009
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	3	0 0	0	0	4	0 2	0	0	0	0 0	1	0	3	1 0
Volume Module:																
Base Vol:	510	780	0		0	960	1360		0	0	0		270	2620	100	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	510	780	0		0	960	1360		0	0	0		270	2620	100	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	510	780	0		0	960	1360		0	0	0		270	2620	100	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	510	780	0		0	960	1360		0	0	0		270	2620	100	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	510	780	0		0	960	1360		0	0	0		270	2620	100	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	3.00	0.00		0.00	4.00	2.00		0.00	0.00	0.00		1.00	3.85	0.15	
Final Sat.:	3200	4800	0		0	6400	3200		0	0	0		1600	6165	235	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.16	0.00		0.00	0.15	0.43		0.00	0.00	0.00		0.17	0.43	0.42	
Crit Moves:	****						****							****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.467
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 4	1 0	1	0 3	0 0	1	1 2	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	760	230	140	1070	0	530	1030	590	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	760	230	140	1070	0	530	1030	590	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	760	230	140	1070	0	530	1030	590	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	760	230	140	1070	0	530	1030	590	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	760	230	140	1070	0	530	1030	590	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	1.00	1.00	3.00	0.00	1.36	2.64	2.00	0.00	0.00	0.00
Final Sat.:	0	6400	1600	1600	4800	0	2174	4226	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.14	0.09	0.22	0.00	0.24	0.24	0.18	0.00	0.00	0.00
Crit Moves:					****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.658
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	160	320	0	0	530	920	0	0	0	420	1710	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	320	0	0	530	920	0	0	0	420	1710	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	320	0	0	530	920	0	0	0	420	1710	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	320	0	0	530	920	0	0	0	420	1710	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	320	0	0	530	920	0	0	0	420	1710	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.46	2.54	0.00	0.00	0.00	1.00	3.80	0.20
Final Sat.:	3200	3200	0	0	2339	4061	0	0	0	1600	6085	315
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.00	0.00	0.23	0.23	0.00	0.00	0.00	0.26	0.28	0.38
Crit Moves:	****				****							****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.469
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2	0 2	0 0	1 1	2	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	210	280	260	680	0	280	1100	130	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	210	280	260	680	0	280	1100	130	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	210	280	260	680	0	280	1100	130	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	210	280	260	680	0	280	1100	130	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	210	280	260	680	0	280	1100	130	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	3.68	0.32	0.00	0.00	0.00
Final Sat.:	0	3200	3200	3200	3200	0	1600	5893	507	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.09	0.08	0.21	0.00	0.17	0.19	0.26	0.00	0.00	0.00
Crit Moves:					****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.774
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	180	1180	20	390	840	1060	710	490	80	60	840	860
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1180	20	390	840	1060	710	490	80	60	840	860
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	180	1180	20	390	840	0	710	490	80	60	840	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1180	20	390	840	0	710	490	80	60	840	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	180	1180	20	390	840	0	710	490	80	60	840	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.95	0.05	2.00	3.00	1.00	2.00	2.58	0.42	1.00	3.00	1.00
Final Sat.:	3400	5015	85	3400	5100	1700	3400	4384	716	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.24	0.24	0.11	0.16	0.00	0.21	0.11	0.11	0.04	0.16	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.750
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 2	0	1	2	0 1	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	340	1350	110		160	950	160		270	860	260		80	660	240	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	340	1350	110		160	950	160		270	860	260		80	660	240	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	340	1350	110		160	950	160		270	860	260		80	660	240	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	340	1350	110		160	950	160		270	860	260		80	660	240	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	340	1350	110		160	950	160		270	860	260		80	660	240	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	2.00	1.00		2.00	1.71	0.29		2.00	2.30	0.70		2.00	2.20	0.80	
Final Sat.:	3400	3400	1700		3400	2910	490		3400	3916	1184		3400	3740	1360	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.40	0.06		0.05	0.33	0.33		0.08	0.22	0.22		0.02	0.18	0.18	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.568
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	130	180	80	450	490	310	140	560	170	150	1390	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	180	80	450	490	310	140	560	170	150	1390	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	180	80	450	490	310	140	560	170	150	1390	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	180	80	450	490	310	140	560	170	150	1390	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	180	80	450	490	310	140	560	170	150	1390	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.05	0.14	0.15	0.19	0.04	0.12	0.11	0.05	0.29	0.19
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	190	40	130	410	170	100	140	60	50	340	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	190	40	130	410	170	100	140	60	50	340	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	190	40	130	410	170	100	140	60	50	340	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	190	40	130	410	170	100	140	60	50	340	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	190	40	130	410	170	100	140	60	50	340	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.83	0.17	1.00	1.00	1.00	1.00	0.70	0.30	1.00	0.81	0.19
Final Sat.:	1600	1322	278	1600	1600	1600	1600	1120	480	1600	1295	305
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.14	0.08	0.26	0.11	0.06	0.13	0.13	0.03	0.26	0.26
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.922
Loss Time (sec):	0	Average Delay (sec/veh):	28.1
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	40	160	30	100	330	80	50	180	60	30	230	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	160	30	100	330	80	50	180	60	30	230	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	160	30	100	330	80	50	180	60	30	230	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	160	30	100	330	80	50	180	60	30	230	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	160	30	100	330	80	50	180	60	30	230	60
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.70	0.13	0.19	0.65	0.16	0.17	0.62	0.21	0.09	0.72	0.19
Final Sat.:	81	323	61	108	358	87	83	299	100	46	353	92
Capacity Analysis Module:												
Vol/Sat:	0.50	0.50	0.50	0.92	0.92	0.92	0.60	0.60	0.60	0.65	0.65	0.65
Crit Moves:		****				****	****				****	
Delay/Veh:	15.8	15.8	15.8	44.1	44.1	44.1	18.6	18.6	18.6	20.2	20.2	20.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.8	15.8	15.8	44.1	44.1	44.1	18.6	18.6	18.6	20.2	20.2	20.2
LOS by Move:	C	C	C	E	E	E	C	C	C	C	C	C
ApproachDel:		15.8			44.1			18.6			20.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		15.8			44.1			18.6			20.2	
LOS by Appr:		C			E			C			C	
AllWayAvgQ:	0.7	0.7	0.7	5.3	5.3	5.3	1.1	1.1	1.1	1.4	1.4	1.4

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.597
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	70	610	220	10	1380	220	40	70	150	550	170	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	610	220	10	1380	220	40	70	150	550	170	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	610	220	10	1380	220	40	70	150	550	170	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	610	220	10	1380	220	40	70	150	550	170	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	610	220	10	1380	220	40	70	150	550	170	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	2.00	0.94	0.06
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	1600	1600	3200	1511	89
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.14	0.01	0.29	0.14	0.03	0.04	0.09	0.17	0.11	0.11
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.762
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	90	730	40	50	1840	170	120	40	120	40	50	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	730	40	50	1840	170	120	40	120	40	50	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	730	40	50	1840	170	120	40	120	40	50	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	730	40	50	1840	170	120	40	120	40	50	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	730	40	50	1840	170	120	40	120	40	50	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.56	0.44
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	889	711
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.03	0.03	0.57	0.11	0.08	0.03	0.08	0.03	0.06	0.06
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.741
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	100	830	10	110	1660	90	60	50	110	20	60	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	830	10	110	1660	90	60	50	110	20	60	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	830	10	110	1660	90	60	50	110	20	60	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	830	10	110	1660	90	60	50	110	20	60	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	830	10	110	1660	90	60	50	110	20	60	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.90	0.10	0.55	0.45	1.00	0.13	0.40	0.47
Final Sat.:	1600	3162	38	1600	3035	165	873	727	1600	213	640	747
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.07	0.55	0.55	0.04	0.07	0.07	0.01	0.09	0.09
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.662
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	80	940	20	50	1550	70	40	30	60	30	40	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	940	20	50	1550	70	40	30	60	30	40	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	940	20	50	1550	70	40	30	60	30	40	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	940	20	50	1550	70	40	30	60	30	40	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	940	20	50	1550	70	40	30	60	30	40	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.91	0.09	0.31	0.23	0.46	0.23	0.31	0.46
Final Sat.:	1600	3133	67	1600	3062	138	492	369	738	369	492	738
Capacity Analysis Module:												
Vol/Sat:	0.05	0.30	0.30	0.03	0.51	0.51	0.03	0.08	0.08	0.02	0.08	0.08
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec): 100 Critical Vol./Cap.(X): 0.691
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	740	30	140	1320	90	60	90	70	30	190	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	740	30	140	1320	90	60	90	70	30	190	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	740	30	140	1320	90	60	90	70	30	190	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	740	30	140	1320	90	60	90	70	30	190	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	740	30	140	1320	90	60	90	70	30	190	260
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.92	0.08	1.00	1.87	0.13	1.00	0.56	0.44	1.00	1.00	1.00
Final Sat.:	1600	3075	125	1600	2996	204	1600	900	700	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.24	0.24	0.09	0.44	0.44	0.04	0.10	0.10	0.02	0.12	0.16
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.769
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 1	1	0	2	0 1	1	0	2	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	370	480	60		210	640	380		280	550	320		100	650	90	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	370	480	60		210	640	380		280	550	320		100	650	90	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	370	480	60		210	640	380		280	550	320		100	650	90	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	370	480	60		210	640	380		280	550	320		100	650	90	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	370	480	60		210	640	380		280	550	320		100	650	90	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.78	0.22		2.00	1.25	0.75		2.00	1.26	0.74		1.00	1.76	0.24	
Final Sat.:	3200	2844	356		3200	2008	1192		3200	2023	1177		1600	2811	389	
Capacity Analysis Module:																
Vol/Sat:	0.12	0.17	0.17		0.07	0.32	0.32		0.09	0.27	0.27		0.06	0.23	0.23	
Crit Moves:	****					****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.608
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1 0	4 0	1	0 0	1	0 1	1 0	1 0	0
Volume Module:												
Base Vol:	0	0	0	250	2530	0	0	10	10	330	10	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	250	2530	0	0	10	10	330	10	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	250	2530	0	0	10	10	330	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	250	2530	0	0	10	10	330	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	250	2530	0	0	10	10	330	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.40	0.00	0.00	0.01	0.01	0.21	0.01	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.419
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	30	420	120	0	0	0	60	190	0	0	310	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	420	120	0	0	0	60	190	0	0	310	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	420	120	0	0	0	60	190	0	0	310	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	420	120	0	0	0	60	190	0	0	310	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	420	120	0	0	0	60	190	0	0	310	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.56	0.44	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.84	0.16
Final Sat.:	1600	2489	711	0	0	0	3200	1600	0	0	1341	259
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.17	0.00	0.00	0.00	0.02	0.12	0.00	0.00	0.23	0.23
Crit Moves:		****					****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.461
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0 0	3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	340	1330	1280	0	620	80	120	340	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	340	1330	1280	0	620	80	120	340	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	340	1330	0	0	620	80	120	340	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	340	1330	0	0	620	80	120	340	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	340	1330	0	0	620	80	120	340	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.54	0.46	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	5669	731	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.28	0.00	0.00	0.11	0.11	0.08	0.11	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.515
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	0	0	2	0	2	0	0	1
Volume Module:												
Base Vol:	150	760	120	0	0	0	560	410	0	0	300	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	760	120	0	0	0	560	410	0	0	300	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	760	120	0	0	0	560	410	0	0	300	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	760	120	0	0	0	560	410	0	0	300	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	760	120	0	0	0	560	410	0	0	300	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.44	2.21	0.35	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	699	3542	559	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.00	0.00	0.00	0.17	0.13	0.00	0.00	0.09	0.13
Crit Moves:	****						****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.744
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	60	540	100	140	710	380	160	580	40	100	760	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	540	100	140	710	380	160	580	40	100	760	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	540	100	140	710	380	160	580	40	100	760	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	540	100	140	710	380	160	580	40	100	760	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	540	100	140	710	380	160	580	40	100	760	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.69	0.31	1.00	1.30	0.70	1.00	2.00	1.00	1.00	1.79	0.21
Final Sat.:	1600	2700	500	1600	2084	1116	1600	3200	1600	1600	2861	339
Capacity Analysis Module:												
Vol/Sat:	0.04	0.20	0.20	0.09	0.34	0.34	0.10	0.18	0.03	0.06	0.27	0.27
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.569
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0	1 0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	110	180	180	600	100	100	30	1170	70	40	620	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	180	180	600	100	100	30	1170	70	40	620	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	180	180	600	100	100	30	1170	70	40	620	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	180	180	600	100	100	30	1170	70	40	620	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	180	180	600	100	100	30	1170	70	40	620	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	0.50	0.50	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	800	800	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.19	0.13	0.13	0.02	0.24	0.04	0.03	0.13	0.11
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.430
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 2	0	0 0	0 0	0	0 4	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	0	230	0	0	0	0	2290	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	230	0	0	0	0	2290	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	230	0	0	0	0	2290	150	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	230	0	0	0	0	2290	150	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	230	0	0	0	0	2290	150	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.36	0.09	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	3	0 1	1 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	50	1660	0	0	2050	150	280	0	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	1660	0	0	2050	150	280	0	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	50	1660	0	0	2050	0	280	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	1660	0	0	2050	0	280	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	50	1660	0	0	2050	0	280	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	3.00	1.00	2.00	0.00	1.00	0.00	1.00	0.00
Final Sat.:	1600	4800	0	1600	4800	1600	3200	0	1600	0	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.35	0.00	0.00	0.43	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.544
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	60	1900	60	40	1920	60	80	10	150	20	10	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1900	60	40	1920	60	80	10	150	20	10	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1900	60	40	1920	60	80	10	150	20	10	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1900	60	40	1920	60	80	10	150	20	10	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1900	60	40	1920	60	80	10	150	20	10	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.88	0.12	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6204	196	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.31	0.03	0.40	0.04	0.03	0.01	0.09	0.01	0.01	0.06
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.619
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	40	1710	330	160	1670	420	280	90	20	290	140	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	1710	330	160	1670	420	280	90	20	290	140	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	40	1710	330	160	1670	420	280	90	20	290	140	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1710	330	160	1670	420	280	90	20	290	140	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	40	1710	330	160	1670	420	280	90	20	290	140	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.44	0.46	0.10	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2297	738	164	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.36	0.21	0.05	0.35	0.26	0.12	0.12	0.12	0.09	0.09	0.00
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.512
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1670	190	100	1590	80	40	0	20	220	0	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1670	190	100	1590	80	40	0	20	220	0	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1670	190	100	1590	80	40	0	20	220	0	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1670	190	100	1590	80	40	0	20	220	0	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1670	190	100	1590	80	40	0	20	220	0	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.69	0.31	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4310	490	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.39	0.03	0.33	0.05	0.03	0.00	0.01	0.07	0.00	0.04
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.763
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	96	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2	1	0	1 0 3	0	1	1 1 1	0	1	1 1 1	0	1
Volume Module:												
Base Vol:	410	1860	320	40	1480	80	110	240	330	170	200	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	410	1860	320	40	1480	80	110	240	330	170	200	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	410	1860	320	40	1480	80	110	240	330	170	200	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	410	1860	320	40	1480	80	110	240	330	170	200	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	410	1860	320	40	1480	80	110	240	330	170	200	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.56	0.44	1.00	3.00	1.00	1.00	2.00	1.00	1.38	1.62	1.00
Final Sat.:	3200	4095	705	1600	4800	1600	1600	3200	1600	2205	2595	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.45	0.45	0.03	0.31	0.05	0.07	0.08	0.21	0.08	0.08	0.02
Crit Moves:		****		****					****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec): 100 Critical Vol./Cap.(X): 0.609
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 58 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	150	2420	170	140	2540	230	230	220	100	310	220	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	2420	170	140	2540	230	230	220	100	310	220	140
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	150	2420	0	140	2540	230	230	220	0	310	220	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	2420	0	140	2540	230	230	220	0	310	220	140
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	150	2420	0	140	2540	230	230	220	0	310	220	140
OvlAdjVol:						115						70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.38	0.00	0.04	0.40	0.14	0.07	0.07	0.00	0.10	0.07	0.09
OvlAdjV/S:						0.07						0.04
Crit Moves:	****				****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.867
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	172	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Ignore				Ignore				Include				Ignore			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 4	0	1	2	0 4	0	1	2	0 2	0	1	2	0 2	0	1
Volume Module:																
Base Vol:	90	2090	530		1150	2350	50		30	350	50		230	280	660	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	2090	530		1150	2350	50		30	350	50		230	280	660	
User Adj:	1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Adj:	1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Volume:	90	2090	0		1150	2350	0		30	350	50		230	280	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	90	2090	0		1150	2350	0		30	350	50		230	280	0	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
FinalVolume:	90	2090	0		1150	2350	0		30	350	50		230	280	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	4.00	1.00		2.00	4.00	1.00		2.00	2.00	1.00		2.00	2.00	1.00	
Final Sat.:	3200	6400	1600		3200	6400	1600		3200	3200	1600		3200	3200	1600	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.33	0.00		0.36	0.37	0.00		0.01	0.11	0.03		0.07	0.09	0.00	
Crit Moves:		****				****					****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.713
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	79	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	170	870	10	30	1040	290	210	60	80	40	290	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	870	10	30	1040	290	210	60	80	40	290	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	870	10	30	1040	290	210	60	80	40	290	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	870	10	30	1040	290	210	60	80	40	290	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	870	10	30	1040	290	210	60	80	40	290	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.98	0.02	1.00	1.56	0.44	1.00	1.00	1.00	1.00	1.61	0.39
Final Sat.:	3200	3164	36	1600	2502	698	1600	1600	1600	1600	2578	622
Capacity Analysis Module:												
Vol/Sat:	0.05	0.28	0.27	0.02	0.42	0.42	0.13	0.04	0.05	0.03	0.11	0.11
Crit Moves:	****				****		****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	300	660	20		20	560	450		370	80	90		50	360	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	300	660	20		20	560	450		370	80	90		50	360	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	300	660	20		20	560	450		370	80	90		50	360	70	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	300	660	20		20	560	450		370	80	90		50	360	70	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	300	660	20		20	560	450		370	80	90		50	360	70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.94	0.06		1.00	1.11	0.89		2.00	1.00	1.00		1.00	1.67	0.33	
Final Sat.:	3200	3106	94		1600	1774	1426		3200	1600	1600		1600	2679	521	
Capacity Analysis Module:																
Vol/Sat:	0.09	0.21	0.21		0.01	0.32	0.32		0.12	0.05	0.06		0.03	0.13	0.13	
Crit Moves:	****					****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.656
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Ignore			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0	2 0 2	0	0	3 0 1
Volume Module:												
Base Vol:	740	0	340	0	0	0	0	790	810	0	1980	1120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	740	0	340	0	0	0	0	790	810	0	1980	1120
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	740	0	0	0	0	0	0	790	0	0	1980	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	740	0	0	0	0	0	0	790	0	0	1980	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	740	0	0	0	0	0	0	790	0	0	1980	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	3.00	1.00
Final Sat.:	3400	0	1700	0	0	0	0	3400	3400	0	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.39	0.00
Crit Moves:	****						****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.915
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	96	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	2	0 3	1	0	2	0 4	0	1
Volume Module:																
Base Vol:	430	1770	410		370	470	240		280	800	60		220	910	600	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	430	1770	410		370	470	240		280	800	60		220	910	600	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	430	1770	410		370	470	240		280	800	60		220	910	600	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	430	1770	410		370	470	240		280	800	60		220	910	600	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	430	1770	410		370	470	240		280	800	60		220	910	600	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.25	0.75		2.00	3.00	1.00		2.00	3.72	0.28		2.00	4.00	1.00	
Final Sat.:	3400	5521	1279		3400	5100	1700		3400	6326	474		3400	6800	1700	
Capacity Analysis Module:																
Vol/Sat:	0.13	0.32	0.32		0.11	0.09	0.14		0.08	0.13	0.13		0.06	0.13	0.35	
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.899
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	86	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	0	1	2	0 1	0	1
Volume Module:																
Base Vol:	70	1940	260		120	800	240		220	530	100		500	370	360	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	70	1940	260		120	800	240		220	530	100		500	370	360	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	70	1940	260		120	800	240		220	530	100		500	370	360	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	70	1940	260		120	800	240		220	530	100		500	370	360	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	70	1940	260		120	800	240		220	530	100		500	370	360	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.65	0.35		1.00	2.31	0.69		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	4497	603		1700	3923	1177		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.43	0.43		0.07	0.20	0.20		0.13	0.16	0.06		0.15	0.22	0.21	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	130	1940	280	80	1210	30	90	120	300	480	60	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1940	280	80	1210	30	90	120	300	480	60	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1940	280	80	1210	30	90	120	300	480	60	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1940	280	80	1210	30	90	120	300	480	60	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1940	280	80	1210	30	90	120	300	480	60	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.93	0.07	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	3400	5100	1700	3400	4977	123	1700	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.38	0.16	0.02	0.24	0.24	0.05	0.07	0.18	0.14	0.04	0.12
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	1.062
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2	0 2	1 0	2	1 0	2 0	3	0 1
Volume Module:												
Base Vol:	440	1210	440	110	300	250	490	1460	180	140	880	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	1210	440	110	300	250	490	1460	180	140	880	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	440	1210	440	110	300	250	490	1460	180	140	880	350
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	1210	440	110	300	250	490	1460	180	140	880	350
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	440	1210	440	110	300	250	490	1460	180	140	880	350
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.47	0.53	2.00	2.00	2.00	1.00	2.67	0.33	2.00	3.00	1.00
Final Sat.:	3400	2493	907	3400	3400	3400	1700	4540	560	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.49	0.49	0.03	0.09	0.07	0.29	0.32	0.32	0.04	0.17	0.21
OvlAdjV/S:						0.00						
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.994
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	90	1480	370		100	460	90		100	870	90		100	530	80	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	1480	370		100	460	90		100	870	90		100	530	80	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	90	1480	370		100	460	90		100	870	90		100	530	80	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	90	1480	370		100	460	90		100	870	90		100	530	80	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	90	1480	370		100	460	90		100	870	90		100	530	80	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.60	0.40		1.00	1.67	0.33		1.00	1.81	0.19		1.00	1.74	0.26	
Final Sat.:	1700	2720	680		1700	2844	556		1700	3081	319		1700	2954	446	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.54	0.54		0.06	0.16	0.16		0.06	0.28	0.28		0.06	0.18	0.18	
Crit Moves:		****				****					****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.848
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	280	1150	350	140	420	190	470	1450	110	190	1030	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	1150	350	140	420	190	470	1450	110	190	1030	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	280	1150	350	140	420	190	470	1450	0	190	1030	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	1150	350	140	420	190	470	1450	0	190	1030	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	280	1150	350	140	420	190	470	1450	0	190	1030	190
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.53	0.47
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4306	794
Capacity Analysis Module:												
Vol/Sat:	0.08	0.34	0.21	0.08	0.12	0.11	0.14	0.28	0.00	0.06	0.24	0.24
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.937
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	115	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 1	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	570	3020	220	340	1510	360	950	830	270	180	680	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	570	3020	220	340	1510	360	950	830	270	180	680	520
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	570	3020	0	340	1510	0	950	830	270	180	680	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	570	3020	0	340	1510	0	950	830	270	180	680	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	570	3020	0	340	1510	0	950	830	270	180	680	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.67	2.33	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	4537	3963	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.17	0.44	0.00	0.10	0.22	0.00	0.21	0.21	0.16	0.05	0.13	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.893
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 4	0	1	2	0 3	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	190	3030	290		300	1560	200		500	890	250		290	560	200	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	190	3030	290		300	1560	200		500	890	250		290	560	200	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	190	3030	290		300	1560	200		500	890	250		290	560	200	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	190	3030	290		300	1560	200		500	890	250		290	560	200	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	190	3030	290		300	1560	200		500	890	250		290	560	200	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	4.00	1.00		2.00	3.55	0.45		2.00	2.34	0.66		2.00	2.21	0.79	
Final Sat.:	3400	6800	1700		3400	6027	773		3400	3982	1118		3400	3758	1342	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.45	0.17		0.09	0.26	0.26		0.15	0.22	0.22		0.09	0.15	0.15	
Crit Moves:		****				****					****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.728
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	110	3090	40		30	1990	120		320	210	250		40	40	30	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	110	3090	40		30	1990	120		320	210	250		40	40	30	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	110	3090	40		30	1990	120		320	210	250		40	40	30	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	110	3090	40		30	1990	120		320	210	250		40	40	30	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	110	3090	40		30	1990	120		320	210	250		40	40	30	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.95	0.05		2.00	3.77	0.23		1.00	1.00	1.00		1.00	1.14	0.86	
Final Sat.:	3400	6713	87		3400	6413	387		1700	1700	1700		1700	1943	1457	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.46	0.46		0.01	0.31	0.31		0.19	0.12	0.15		0.02	0.02	0.02	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.887
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	80	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	400	2390	590	290	1690	300	600	1290	790	500	560	360
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	400	2390	590	290	1690	300	600	1290	790	500	560	360
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	400	2390	0	290	1690	300	600	1290	0	500	560	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	400	2390	0	290	1690	300	600	1290	0	500	560	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	400	2390	0	290	1690	300	600	1290	0	500	560	0
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.12	0.35	0.00	0.09	0.25	0.18	0.18	0.25	0.00	0.15	0.11	0.00
OvlAdjV/S:						0.00						
Crit Moves:	****			****				****		****		

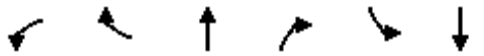
JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 WITHOUT PROJECT CONDITIONS (BASE)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.871
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ignore				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 2	0	1	2	0 2	0	1	1	0 1	1	0
Volume Module:																
Base Vol:	60	940	80		310	600	190		480	970	140		90	380	190	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	60	940	80		310	600	190		480	970	140		90	380	190	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Volume:	60	940	80		310	600	190		480	970	0		90	380	190	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	60	940	80		310	600	190		480	970	0		90	380	190	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
FinalVolume:	60	940	80		310	600	190		480	970	0		90	380	190	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.84	0.16		1.00	2.00	1.00		2.00	2.00	1.00		1.00	1.33	0.67	
Final Sat.:	1700	3133	267		1700	3400	1700		3400	3400	1700		1700	2267	1133	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.30	0.30		0.18	0.18	0.11		0.14	0.29	0.00		0.05	0.17	0.17	
Crit Moves:		****				****				****				****		



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	835	531	2021	326	163	1163
v/c Ratio	0.77	0.71	0.84	0.26	0.49	0.34
Control Delay	29.8	12.6	29.2	3.4	39.1	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.8	12.6	29.2	3.4	39.1	11.5
Queue Length 50th (ft)	193	63	261	0	40	89
Queue Length 95th (ft)	226	155	#434	32	68	133
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	1416	867	2408	1251	431	3441
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.61	0.84	0.26	0.38	0.34

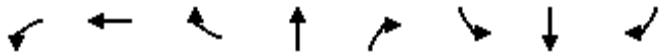
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	810	990	1920	310	150	1070
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.97	0.97	0.95	0.95	0.92	0.92
Growth Factor (vph)	100%	52%	100%	100%	100%	100%
Adj. Flow (vph)	835	531	2021	326	163	1163
RTOR Reduction (vph)	0	250	0	203	0	0
Lane Group Flow (vph)	835	281	2021	123	163	1163
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	25.1	25.1	30.1	30.1	7.7	43.0
Effective Green, g (s)	25.1	25.1	30.1	30.1	7.7	43.0
Actuated g/C Ratio	0.31	0.31	0.38	0.38	0.10	0.54
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	1077	497	2411	1049	330	3444
v/s Ratio Prot	c0.24		c0.32		c0.05	0.18
v/s Ratio Perm		0.18		0.04		
v/c Ratio	0.78	0.56	0.84	0.12	0.49	0.34
Uniform Delay, d1	24.9	22.9	22.7	16.3	34.3	10.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2	0.9	3.7	0.2	0.4	0.3
Delay (s)	28.1	23.8	26.4	16.5	34.7	10.7
Level of Service	C	C	C	B	C	B
Approach Delay (s)	26.4		25.0			13.7
Approach LOS	C		C			B

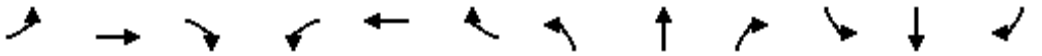
Intersection Summary			
HCM Average Control Delay	22.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1215	151	1140	1227	351	152	1475	293
v/c Ratio	0.82	0.19	0.72	0.53	0.26	0.56	0.49	0.32
Control Delay	35.5	21.1	2.9	32.4	10.8	60.9	22.7	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	21.1	2.9	32.4	10.8	60.9	22.7	3.3
Queue Length 50th (ft)	404	69	0	289	146	59	229	0
Queue Length 95th (ft)	485	111	0	330	276	92	269	49
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	1573	854	1583	2319	1379	458	3040	905
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.18	0.72	0.53	0.25	0.33	0.49	0.32

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1130	140	1060	0	1190	340	150	1460	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.93	0.93	0.93	0.97	0.97	0.97	0.99	0.99	0.99
Adj. Flow (vph)	0	0	0	1215	151	1140	0	1227	351	152	1475	293
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	154
Lane Group Flow (vph)	0	0	0	1215	151	1140	0	1227	351	152	1475	139
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				51.5	51.5	120.0		43.4	94.9	9.5	56.9	56.9
Effective Green, g (s)				51.5	51.5	120.0		43.4	94.9	9.5	56.9	56.9
Actuated g/C Ratio				0.43	0.43	1.00		0.36	0.79	0.08	0.47	0.47
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				1473	800	1583		2318	1252	272	3038	751
v/s Ratio Prot				c0.35	0.08			0.19	0.12	0.04	0.23	
v/s Ratio Perm						c0.72			0.10			0.09
v/c Ratio				0.82	0.19	0.72		0.53	0.28	0.56	0.49	0.18
Uniform Delay, d1				30.3	21.3	0.0		30.2	3.4	53.2	21.6	18.2
Progression Factor				1.00	1.00	1.00		1.01	4.87	1.00	1.00	1.00
Incremental Delay, d2				3.8	0.1	2.9		0.7	0.0	1.4	0.6	0.5
Delay (s)				34.0	21.3	2.9		31.3	16.5	54.6	22.1	18.7
Level of Service				C	C	A		C	B	D	C	B
Approach Delay (s)		0.0			19.1			28.0			24.2	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM Average Control Delay	23.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	5.5
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	1250	698	2181	2135
v/c Ratio	0.99	0.44	0.73	0.57
Control Delay	52.4	0.9	8.2	10.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	52.4	0.9	8.2	10.2
Queue Length 50th (ft)	205	0	252	160
Queue Length 95th (ft)	#299	0	m183	191
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	2997	3776
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.99	0.44	0.73	0.57

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1200	670	2050	0	0	2050
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.96	0.96	0.94	0.94	0.96	0.96
Adj. Flow (vph)	1250	698	2181	0	0	2135
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1250	698	2181	0	0	2135
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	19.0	75.0	44.2			44.2
Effective Green, g (s)	19.0	75.0	44.2			44.2
Actuated g/C Ratio	0.25	1.00	0.59			0.59
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1264	1583	2997			3776
v/s Ratio Prot	c0.25		c0.43			0.33
v/s Ratio Perm		0.44				
v/c Ratio	0.99	0.44	0.73			0.57
Uniform Delay, d1	27.9	0.0	11.1			9.5
Progression Factor	1.00	1.00	0.67			1.00
Incremental Delay, d2	22.4	0.9	0.6			0.6
Delay (s)	50.3	0.9	8.1			10.1
Level of Service	D	A	A			B
Approach Delay (s)	32.6		8.1			10.1
Approach LOS	C		A			B

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

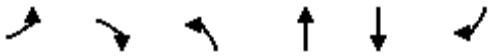
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1497	1346	933	3071	245
v/c Ratio	1.33	1.48	0.36	0.94	0.15
Control Delay	178.2	247.6	11.5	20.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	178.2	247.6	11.5	20.2	0.1
Queue Length 50th (ft)	~474	~511	89	418	0
Queue Length 95th (ft)	#600	#650	116	m454	m0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1129	908	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.33	1.48	0.36	0.94	0.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

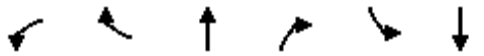
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1520	0	840	3010	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.98	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3385	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3385	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1583	0	933	3071	245
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1497	1346	0	933	3071	245
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1128	908		2597	3272	1583
v/s Ratio Prot	0.44			0.18	c0.48	
v/s Ratio Perm		c0.49				0.15
v/c Ratio	1.33	1.48		0.36	0.94	0.15
Uniform Delay, d1	25.0	25.0		11.0	17.2	0.0
Progression Factor	1.00	1.00		1.00	0.85	1.00
Incremental Delay, d2	153.4	223.0		0.4	4.8	0.1
Delay (s)	178.4	248.0		11.4	19.5	0.1
Level of Service	F	F		B	B	A
Approach Delay (s)	211.4			11.4	18.0	
Approach LOS	F			B	B	

Intersection Summary			
HCM Average Control Delay	94.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	97.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	435	276	2108	817	678	1736
v/c Ratio	0.71	0.54	0.90	0.53	0.74	0.39
Control Delay	41.4	8.2	33.5	2.9	37.3	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.4	8.2	33.5	2.9	37.3	6.6
Queue Length 50th (ft)	121	0	324	0	180	104
Queue Length 95th (ft)	148	50	377	40	#285	145
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	954	639	2342	1537	917	4425
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.43	0.90	0.53	0.74	0.39

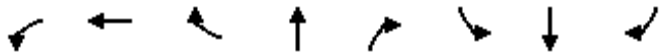
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	370	350	1960	760	590	1510
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.85	0.85	0.93	0.93	0.87	0.87
Growth Factor (vph)	100%	67%	100%	100%	100%	100%
Adj. Flow (vph)	435	276	2108	817	678	1736
RTOR Reduction (vph)	0	227	0	518	0	0
Lane Group Flow (vph)	435	49	2108	299	678	1736
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	16.0	16.0	32.9	32.9	24.0	62.1
Effective Green, g (s)	16.0	16.0	32.9	32.9	24.0	62.1
Actuated g/C Ratio	0.18	0.18	0.37	0.37	0.27	0.69
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	610	281	2342	1019	915	4422
v/s Ratio Prot	c0.13		c0.33		c0.20	0.27
v/s Ratio Perm		0.03		0.11		
v/c Ratio	0.71	0.17	0.90	0.29	0.74	0.39
Uniform Delay, d1	34.8	31.4	27.0	20.3	30.2	5.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.3	0.1	6.1	0.7	2.9	0.3
Delay (s)	38.1	31.5	33.1	21.0	33.0	6.2
Level of Service	D	C	C	C	C	A
Approach Delay (s)	35.6		29.7			13.7
Approach LOS	D		C			B

Intersection Summary			
HCM Average Control Delay	24.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	70.0%	ICU Level of Service	C
Analysis Period (min)	15		

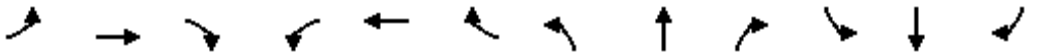
c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	587	87	598	2411	533	494	1416	213
v/c Ratio	0.81	0.22	0.38	0.78	0.45	0.81	0.32	0.18
Control Delay	54.5	40.1	0.7	33.1	15.6	58.0	7.7	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.5	40.1	0.7	33.1	15.6	58.0	7.7	1.2
Queue Length 50th (ft)	220	55	0	507	201	191	119	0
Queue Length 95th (ft)	286	101	0	m525	m379	236	136	22
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	772	419	1583	3080	1197	772	4435	1161
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.21	0.38	0.78	0.45	0.64	0.32	0.18

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	540	80	550	0	2170	480	440	1260	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.92	0.92	0.92	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	587	87	598	0	2411	533	494	1416	213
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	66
Lane Group Flow (vph)	0	0	0	587	87	598	0	2411	533	494	1416	147
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				25.4	25.4	120.0		57.6	83.0	21.4	83.0	83.0
Effective Green, g (s)				25.4	25.4	120.0		57.6	83.0	21.4	83.0	83.0
Actuated g/C Ratio				0.21	0.21	1.00		0.48	0.69	0.18	0.69	0.69
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				727	394	1583		3076	1095	612	4432	1095
v/s Ratio Prot				c0.17	0.05			c0.38	0.10	c0.14	0.22	
v/s Ratio Perm						0.38			0.23			0.09
v/c Ratio				0.81	0.22	0.38		0.78	0.49	0.81	0.32	0.13
Uniform Delay, d1				45.0	39.1	0.0		26.0	8.6	47.3	7.3	6.3
Progression Factor				1.00	1.00	1.00		1.18	2.21	1.00	1.00	1.00
Incremental Delay, d2				6.3	0.1	0.7		1.3	0.1	7.3	0.2	0.3
Delay (s)				51.2	39.3	0.7		31.8	19.1	54.6	7.5	6.5
Level of Service				D	D	A		C	B	D	A	A
Approach Delay (s)		0.0			26.7			29.5			18.4	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	25.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

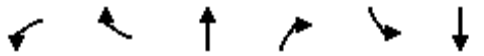
Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	857	506	3255	2078
v/c Ratio	0.74	0.32	1.05	0.53
Control Delay	30.8	0.5	39.3	9.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	30.8	0.5	39.3	9.3
Queue Length 50th (ft)	128	0	~646	152
Queue Length 95th (ft)	138	0	m#627	184
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	3101	3908
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.68	0.32	1.05	0.53

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	660	390	3190	0	0	1870
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.77	0.77	0.98	0.98	0.90	0.90
Adj. Flow (vph)	857	506	3255	0	0	2078
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	857	506	3255	0	0	2078
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	17.5	75.0	45.7			45.7
Effective Green, g (s)	17.5	75.0	45.7			45.7
Actuated g/C Ratio	0.23	1.00	0.61			0.61
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1164	1583	3098			3905
v/s Ratio Prot	c0.17		c0.64			0.32
v/s Ratio Perm		0.32				
v/c Ratio	0.74	0.32	1.05			0.53
Uniform Delay, d1	26.6	0.0	14.6			8.5
Progression Factor	1.00	1.00	0.66			1.00
Incremental Delay, d2	2.5	0.5	26.7			0.5
Delay (s)	29.1	0.5	36.3			9.0
Level of Service	C	A	D			A
Approach Delay (s)	18.5		36.3			9.0
Approach LOS	B		D			A

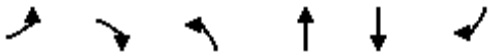
Intersection Summary			
HCM Average Control Delay	24.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1316	619	2031	1969	667
v/c Ratio	1.15	0.68	0.78	0.60	0.42
Control Delay	104.2	25.7	17.7	9.5	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	104.2	25.7	17.7	9.5	0.7
Queue Length 50th (ft)	~379	140	264	140	0
Queue Length 95th (ft)	#505	203	325	161	0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1144	914	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.15	0.68	0.78	0.60	0.42

Intersection Summary

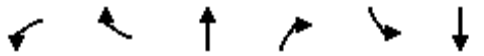
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1160	640	0	1990	1890	640
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.99	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3423	2723		5085	6408	1583
Flt Permitted	0.95	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3423	2723		5085	6408	1583
Peak-hour factor, PHF	0.93	0.93	0.98	0.98	0.96	0.96
Adj. Flow (vph)	1247	688	0	2031	1969	667
RTOR Reduction (vph)	3	6	0	0	0	0
Lane Group Flow (vph)	1313	613	0	2031	1969	667
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1141	908		2597	3272	1583
v/s Ratio Prot	c0.38			c0.40	0.31	
v/s Ratio Perm		0.23				0.42
v/c Ratio	1.15	0.68		0.78	0.60	0.42
Uniform Delay, d1	25.0	21.5		14.9	13.0	0.0
Progression Factor	1.00	1.00		1.00	0.67	1.00
Incremental Delay, d2	78.2	1.8		2.4	0.7	0.7
Delay (s)	103.2	23.3		17.4	9.4	0.7
Level of Service	F	C		B	A	A
Approach Delay (s)	77.6			17.4	7.2	
Approach LOS	E			B	A	

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	845	531	2053	326	163	1283
v/c Ratio	0.78	0.71	0.86	0.26	0.49	0.37
Control Delay	29.7	12.4	30.3	3.5	39.1	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.7	12.4	30.3	3.5	39.1	12.0
Queue Length 50th (ft)	195	63	269	0	40	101
Queue Length 95th (ft)	228	154	#448	32	68	150
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	1416	867	2389	1243	431	3422
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.61	0.86	0.26	0.38	0.37

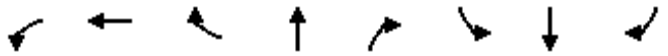
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	820	990	1950	310	150	1180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.97	0.97	0.95	0.95	0.92	0.92
Growth Factor (vph)	100%	52%	100%	100%	100%	100%
Adj. Flow (vph)	845	531	2053	326	163	1283
RTOR Reduction (vph)	0	249	0	205	0	0
Lane Group Flow (vph)	845	282	2053	121	163	1283
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	25.4	25.4	29.8	29.8	7.7	42.7
Effective Green, g (s)	25.4	25.4	29.8	29.8	7.7	42.7
Actuated g/C Ratio	0.32	0.32	0.37	0.37	0.10	0.53
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	1090	503	2387	1038	330	3420
v/s Ratio Prot	c0.25		c0.32		0.05	c0.20
v/s Ratio Perm		0.18		0.04		
v/c Ratio	0.78	0.56	0.86	0.12	0.49	0.38
Uniform Delay, d1	24.7	22.7	23.2	16.5	34.3	10.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2	0.9	4.3	0.2	0.4	0.3
Delay (s)	27.9	23.5	27.5	16.7	34.7	11.2
Level of Service	C	C	C	B	C	B
Approach Delay (s)	26.2		26.0			13.8
Approach LOS	C		C			B

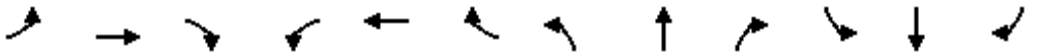
Intersection Summary			
HCM Average Control Delay	22.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	70.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



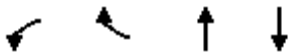
Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1226	151	1140	1268	351	152	1586	303
v/c Ratio	0.83	0.19	0.72	0.55	0.26	0.56	0.52	0.33
Control Delay	35.7	21.1	2.9	32.3	10.7	60.9	23.4	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.7	21.1	2.9	32.3	10.7	60.9	23.4	3.3
Queue Length 50th (ft)	408	68	0	298	145	59	254	0
Queue Length 95th (ft)	491	111	0	340	278	92	295	50
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	1573	854	1583	2309	1377	458	3030	908
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.18	0.72	0.55	0.25	0.33	0.52	0.33

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1140	140	1060	0	1230	340	150	1570	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.93	0.93	0.93	0.97	0.97	0.97	0.99	0.99	0.99
Adj. Flow (vph)	0	0	0	1226	151	1140	0	1268	351	152	1586	303
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	160
Lane Group Flow (vph)	0	0	0	1226	151	1140	0	1268	351	152	1586	143
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				51.7	51.7	120.0		43.2	94.9	9.5	56.7	56.7
Effective Green, g (s)				51.7	51.7	120.0		43.2	94.9	9.5	56.7	56.7
Actuated g/C Ratio				0.43	0.43	1.00		0.36	0.79	0.08	0.47	0.47
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				1479	803	1583		2307	1252	272	3028	748
v/s Ratio Prot				c0.36	0.08			0.20	0.12	0.04	0.25	
v/s Ratio Perm						c0.72			0.10			0.09
v/c Ratio				0.83	0.19	0.72		0.55	0.28	0.56	0.52	0.19
Uniform Delay, d1				30.2	21.2	0.0		30.6	3.4	53.2	22.2	18.4
Progression Factor				1.00	1.00	1.00		0.99	4.85	1.00	1.00	1.00
Incremental Delay, d2				3.8	0.1	2.9		0.7	0.0	1.4	0.7	0.6
Delay (s)				34.1	21.2	2.9		31.2	16.4	54.6	22.8	18.9
Level of Service				C	C	A		C	B	D	C	B
Approach Delay (s)		0.0			19.2			28.0			24.6	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM Average Control Delay	23.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	5.5
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	1260	708	2213	2198
v/c Ratio	1.00	0.45	0.74	0.58
Control Delay	54.3	0.9	8.3	10.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	54.3	0.9	8.3	10.4
Queue Length 50th (ft)	207	0	261	167
Queue Length 95th (ft)	#303	0	m184	199
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	2997	3776
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.00	0.45	0.74	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1210	680	2080	0	0	2110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.96	0.96	0.94	0.94	0.96	0.96
Adj. Flow (vph)	1260	708	2213	0	0	2198
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1260	708	2213	0	0	2198
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	19.0	75.0	44.2			44.2
Effective Green, g (s)	19.0	75.0	44.2			44.2
Actuated g/C Ratio	0.25	1.00	0.59			0.59
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1264	1583	2997			3776
v/s Ratio Prot	c0.25		c0.44			0.34
v/s Ratio Perm		0.45				
v/c Ratio	1.00	0.45	0.74			0.58
Uniform Delay, d1	28.0	0.0	11.2			9.6
Progression Factor	1.00	1.00	0.67			1.00
Incremental Delay, d2	24.4	0.9	0.6			0.7
Delay (s)	52.3	0.9	8.1			10.3
Level of Service	D	A	A			B
Approach Delay (s)	33.8		8.1			10.3
Approach LOS	C		A			B

Intersection Summary			
HCM Average Control Delay	16.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

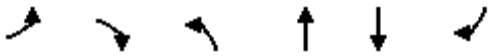
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1522	1373	967	3133	255
v/c Ratio	1.35	1.51	0.37	0.96	0.16
Control Delay	189.4	260.5	11.6	21.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	189.4	260.5	11.6	21.9	0.1
Queue Length 50th (ft)	~487	~527	93	429	0
Queue Length 95th (ft)	#613	#666	121	m#471	m0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1126	908	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.35	1.51	0.37	0.96	0.16

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1570	0	870	3070	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.97	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3380	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3380	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1635	0	967	3133	255
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1522	1373	0	967	3133	255
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1127	908		2597	3272	1583
v/s Ratio Prot	0.45			0.19	c0.49	
v/s Ratio Perm		c0.50				0.16
v/c Ratio	1.35	1.51		0.37	0.96	0.16
Uniform Delay, d1	25.0	25.0		11.1	17.6	0.0
Progression Factor	1.00	1.00		1.00	0.84	1.00
Incremental Delay, d2	163.7	236.2		0.4	6.2	0.1
Delay (s)	188.7	261.2		11.5	21.0	0.1
Level of Service	F	F		B	C	A
Approach Delay (s)	223.0			11.5	19.4	
Approach LOS	F			B	B	

Intersection Summary			
HCM Average Control Delay	99.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	98.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	459	276	2172	817	678	1816
v/c Ratio	0.73	0.53	0.93	0.53	0.76	0.41
Control Delay	41.2	7.9	35.8	2.9	38.7	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.2	7.9	35.8	2.9	38.7	7.0
Queue Length 50th (ft)	128	0	338	0	182	114
Queue Length 95th (ft)	155	49	#406	40	#293	158
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	954	639	2342	1537	893	4380
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.43	0.93	0.53	0.76	0.41

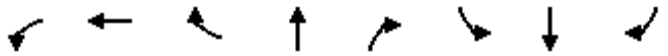
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	390	350	2020	760	590	1580
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.85	0.85	0.93	0.93	0.87	0.87
Growth Factor (vph)	100%	67%	100%	100%	100%	100%
Adj. Flow (vph)	459	276	2172	817	678	1816
RTOR Reduction (vph)	0	225	0	518	0	0
Lane Group Flow (vph)	459	51	2172	299	678	1816
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	16.6	16.6	32.9	32.9	23.4	61.5
Effective Green, g (s)	16.6	16.6	32.9	32.9	23.4	61.5
Actuated g/C Ratio	0.18	0.18	0.37	0.37	0.26	0.68
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	633	292	2342	1019	893	4379
v/s Ratio Prot	c0.13		c0.34		c0.20	0.28
v/s Ratio Perm		0.03		0.11		
v/c Ratio	0.73	0.17	0.93	0.29	0.76	0.41
Uniform Delay, d1	34.6	30.9	27.4	20.3	30.7	6.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.5	0.1	7.9	0.7	3.3	0.3
Delay (s)	38.1	31.0	35.3	21.0	34.0	6.6
Level of Service	D	C	D	C	C	A
Approach Delay (s)	35.4		31.4			14.0
Approach LOS	D		C			B

Intersection Summary			
HCM Average Control Delay	24.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

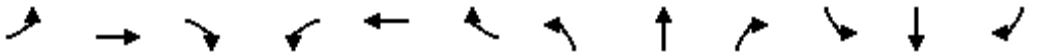
c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	598	87	598	2478	533	494	1506	213
v/c Ratio	0.82	0.22	0.38	0.81	0.45	0.81	0.34	0.18
Control Delay	55.1	40.0	0.7	33.6	15.2	58.0	7.9	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.1	40.0	0.7	33.6	15.2	58.0	7.9	1.2
Queue Length 50th (ft)	225	55	0	527	198	191	129	0
Queue Length 95th (ft)	291	101	0	m531	m367	236	146	22
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	772	419	1583	3073	1196	772	4427	1159
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.21	0.38	0.81	0.45	0.64	0.34	0.18

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	550	80	550	0	2230	480	440	1340	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.92	0.92	0.92	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	598	87	598	0	2478	533	494	1506	213
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	66
Lane Group Flow (vph)	0	0	0	598	87	598	0	2478	533	494	1506	147
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				25.5	25.5	120.0		57.5	83.0	21.4	82.9	82.9
Effective Green, g (s)				25.5	25.5	120.0		57.5	83.0	21.4	82.9	82.9
Actuated g/C Ratio				0.21	0.21	1.00		0.48	0.69	0.18	0.69	0.69
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				730	396	1583		3071	1095	612	4427	1094
v/s Ratio Prot				c0.17	0.05			c0.39	0.10	c0.14	0.24	
v/s Ratio Perm						0.38			0.23			0.09
v/c Ratio				0.82	0.22	0.38		0.81	0.49	0.81	0.34	0.13
Uniform Delay, d1				45.1	39.0	0.0		26.5	8.6	47.3	7.5	6.3
Progression Factor				1.00	1.00	1.00		1.17	2.15	1.00	1.00	1.00
Incremental Delay, d2				6.9	0.1	0.7		1.4	0.1	7.3	0.2	0.3
Delay (s)				51.9	39.2	0.7		32.4	18.6	54.6	7.7	6.6
Level of Service				D	D	A		C	B	D	A	A
Approach Delay (s)		0.0			27.2			29.9			18.1	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	25.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	896	506	3316	2178
v/c Ratio	0.75	0.32	1.08	0.56
Control Delay	31.0	0.5	52.1	9.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	31.0	0.5	52.1	9.8
Queue Length 50th (ft)	134	0	~672	165
Queue Length 95th (ft)	145	0	m#649	197
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	3074	3874
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.71	0.32	1.08	0.56

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	690	390	3250	0	0	1960
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.77	0.77	0.98	0.98	0.90	0.90
Adj. Flow (vph)	896	506	3316	0	0	2178
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	896	506	3316	0	0	2178
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	17.9	75.0	45.3			45.3
Effective Green, g (s)	17.9	75.0	45.3			45.3
Actuated g/C Ratio	0.24	1.00	0.60			0.60
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1191	1583	3071			3870
v/s Ratio Prot	c0.18		c0.65			0.34
v/s Ratio Perm		0.32				
v/c Ratio	0.75	0.32	1.08			0.56
Uniform Delay, d1	26.5	0.0	14.9			8.9
Progression Factor	1.00	1.00	0.68			1.00
Incremental Delay, d2	2.7	0.5	38.8			0.6
Delay (s)	29.2	0.5	48.8			9.5
Level of Service	C	A	D			A
Approach Delay (s)	18.9		48.8			9.5
Approach LOS	B		D			A

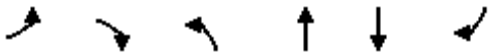
Intersection Summary			
HCM Average Control Delay	30.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1318	639	2031	2052	698
v/c Ratio	1.15	0.70	0.78	0.63	0.44
Control Delay	104.9	26.4	17.7	9.6	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	104.9	26.4	17.7	9.6	0.8
Queue Length 50th (ft)	~381	146	264	147	0
Queue Length 95th (ft)	#507	211	325	165	0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1144	912	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.15	0.70	0.78	0.63	0.44

Intersection Summary

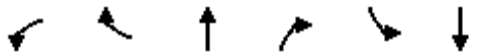
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1160	660	0	1990	1970	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.99	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3423	2723		5085	6408	1583
Flt Permitted	0.95	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3423	2723		5085	6408	1583
Peak-hour factor, PHF	0.93	0.93	0.98	0.98	0.96	0.96
Adj. Flow (vph)	1247	710	0	2031	2052	698
RTOR Reduction (vph)	3	5	0	0	0	0
Lane Group Flow (vph)	1315	634	0	2031	2052	698
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1141	908		2597	3272	1583
v/s Ratio Prot	c0.38			c0.40	0.32	
v/s Ratio Perm		0.23				0.44
v/c Ratio	1.15	0.70		0.78	0.63	0.44
Uniform Delay, d1	25.0	21.7		14.9	13.2	0.0
Progression Factor	1.00	1.00		1.00	0.66	1.00
Incremental Delay, d2	79.1	2.2		2.4	0.7	0.7
Delay (s)	104.1	23.9		17.4	9.5	0.7
Level of Service	F	C		B	A	A
Approach Delay (s)	77.9			17.4	7.3	
Approach LOS	E			B	A	

Intersection Summary			
HCM Average Control Delay	30.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	856	531	2095	337	163	1402
v/c Ratio	0.78	0.70	0.88	0.27	0.49	0.41
Control Delay	29.5	12.2	31.9	3.5	39.1	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.5	12.2	31.9	3.5	39.1	12.4
Queue Length 50th (ft)	197	62	278	0	40	114
Queue Length 95th (ft)	230	153	#463	32	68	168
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	1416	867	2368	1242	431	3401
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.61	0.88	0.27	0.38	0.41

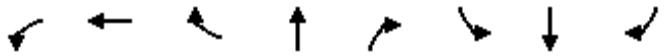
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	830	990	1990	320	150	1290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.97	0.97	0.95	0.95	0.92	0.92
Growth Factor (vph)	100%	52%	100%	100%	100%	100%
Adj. Flow (vph)	856	531	2095	337	163	1402
RTOR Reduction (vph)	0	248	0	212	0	0
Lane Group Flow (vph)	856	283	2095	125	163	1402
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	25.6	25.6	29.6	29.6	7.7	42.5
Effective Green, g (s)	25.6	25.6	29.6	29.6	7.7	42.5
Actuated g/C Ratio	0.32	0.32	0.37	0.37	0.10	0.53
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	1099	507	2371	1031	330	3404
v/s Ratio Prot	c0.25		c0.33		0.05	c0.22
v/s Ratio Perm		0.18		0.04		
v/c Ratio	0.78	0.56	0.88	0.12	0.49	0.41
Uniform Delay, d1	24.6	22.5	23.6	16.6	34.3	11.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2	0.8	5.2	0.2	0.4	0.4
Delay (s)	27.9	23.3	28.8	16.9	34.7	11.6
Level of Service	C	C	C	B	C	B
Approach Delay (s)	26.1		27.2			14.0
Approach LOS	C		C			B

Intersection Summary			
HCM Average Control Delay	23.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

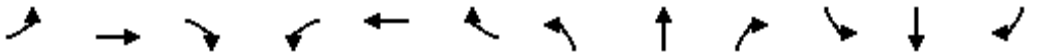
c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1226	151	1140	1309	361	152	1697	323
v/c Ratio	0.83	0.19	0.72	0.57	0.27	0.56	0.56	0.35
Control Delay	35.7	21.1	2.9	32.0	10.8	60.9	24.1	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.7	21.1	2.9	32.0	10.8	60.9	24.1	3.3
Queue Length 50th (ft)	408	68	0	308	151	59	278	0
Queue Length 95th (ft)	491	111	0	349	m283	92	320	52
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	1573	854	1583	2309	1377	458	3030	919
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.18	0.72	0.57	0.26	0.33	0.56	0.35

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1140	140	1060	0	1270	350	150	1680	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.93	0.93	0.93	0.97	0.97	0.97	0.99	0.99	0.99
Adj. Flow (vph)	0	0	0	1226	151	1140	0	1309	361	152	1697	323
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	170
Lane Group Flow (vph)	0	0	0	1226	151	1140	0	1309	361	152	1697	153
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				51.7	51.7	120.0		43.2	94.9	9.5	56.7	56.7
Effective Green, g (s)				51.7	51.7	120.0		43.2	94.9	9.5	56.7	56.7
Actuated g/C Ratio				0.43	0.43	1.00		0.36	0.79	0.08	0.47	0.47
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				1479	803	1583		2307	1252	272	3028	748
v/s Ratio Prot				c0.36	0.08			0.20	0.12	0.04	0.26	
v/s Ratio Perm						c0.72			0.10			0.10
v/c Ratio				0.83	0.19	0.72		0.57	0.29	0.56	0.56	0.20
Uniform Delay, d1				30.2	21.2	0.0		30.9	3.4	53.2	22.7	18.5
Progression Factor				1.00	1.00	1.00		0.98	4.82	1.00	1.00	1.00
Incremental Delay, d2				3.8	0.1	2.9		0.8	0.0	1.4	0.8	0.6
Delay (s)				34.1	21.2	2.9		31.0	16.4	54.6	23.5	19.1
Level of Service				C	C	A		C	B	D	C	B
Approach Delay (s)		0.0			19.2			27.8			25.0	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM Average Control Delay	23.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	5.5
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	1271	719	2255	2260
v/c Ratio	1.01	0.45	0.75	0.60
Control Delay	56.3	0.9	8.4	10.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	56.3	0.9	8.4	10.6
Queue Length 50th (ft)	~211	0	264	175
Queue Length 95th (ft)	#306	0	m185	208
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	2997	3776
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.01	0.45	0.75	0.60

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1220	690	2120	0	0	2170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.96	0.96	0.94	0.94	0.96	0.96
Adj. Flow (vph)	1271	719	2255	0	0	2260
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1271	719	2255	0	0	2260
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	19.0	75.0	44.2			44.2
Effective Green, g (s)	19.0	75.0	44.2			44.2
Actuated g/C Ratio	0.25	1.00	0.59			0.59
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1264	1583	2997			3776
v/s Ratio Prot	c0.25		c0.44			0.35
v/s Ratio Perm		0.45				
v/c Ratio	1.01	0.45	0.75			0.60
Uniform Delay, d1	28.0	0.0	11.4			9.8
Progression Factor	1.00	1.00	0.66			1.00
Incremental Delay, d2	26.7	0.9	0.6			0.7
Delay (s)	54.7	0.9	8.2			10.5
Level of Service	D	A	A			B
Approach Delay (s)	35.3		8.2			10.5
Approach LOS	D		A			B

Intersection Summary			
HCM Average Control Delay	17.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

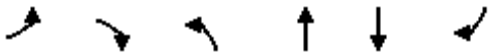
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1549	1409	1011	3204	265
v/c Ratio	1.38	1.55	0.39	0.98	0.17
Control Delay	200.4	277.9	11.8	24.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	200.4	277.9	11.8	24.9	0.1
Queue Length 50th (ft)	~501	~548	98	443	0
Queue Length 95th (ft)	#628	#687	127	m#505	m0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1125	908	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.38	1.55	0.39	0.98	0.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

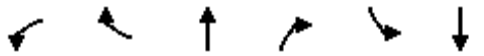
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1630	0	910	3140	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.97	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3375	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3375	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1698	0	1011	3204	265
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1549	1409	0	1011	3204	265
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1125	908		2597	3272	1583
v/s Ratio Prot	0.46			0.20	c0.50	
v/s Ratio Perm		c0.52				0.17
v/c Ratio	1.38	1.55		0.39	0.98	0.17
Uniform Delay, d1	25.0	25.0		11.2	18.0	0.0
Progression Factor	1.00	1.00		1.00	0.83	1.00
Incremental Delay, d2	175.3	253.7		0.4	8.7	0.1
Delay (s)	200.3	278.7		11.6	23.6	0.1
Level of Service	F	F		B	C	A
Approach Delay (s)	237.6			11.6	21.8	
Approach LOS	F			B	C	

Intersection Summary			
HCM Average Control Delay	106.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	100.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	482	276	2247	817	678	1897
v/c Ratio	0.74	0.53	0.96	0.53	0.78	0.44
Control Delay	41.1	7.7	39.8	2.9	40.0	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.1	7.7	39.8	2.9	40.0	7.4
Queue Length 50th (ft)	134	0	357	0	184	124
Queue Length 95th (ft)	161	49	#449	40	#301	171
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	954	639	2342	1537	872	4340
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.43	0.96	0.53	0.78	0.44

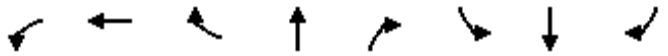
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	410	350	2090	760	590	1650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.85	0.85	0.93	0.93	0.87	0.87
Growth Factor (vph)	100%	67%	100%	100%	100%	100%
Adj. Flow (vph)	482	276	2247	817	678	1897
RTOR Reduction (vph)	0	224	0	518	0	0
Lane Group Flow (vph)	482	52	2247	299	678	1897
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	17.1	17.1	32.9	32.9	22.9	61.0
Effective Green, g (s)	17.1	17.1	32.9	32.9	22.9	61.0
Actuated g/C Ratio	0.19	0.19	0.37	0.37	0.25	0.68
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	652	301	2342	1019	874	4343
v/s Ratio Prot	c0.14		c0.35		c0.20	0.30
v/s Ratio Perm		0.03		0.11		
v/c Ratio	0.74	0.17	0.96	0.29	0.78	0.44
Uniform Delay, d1	34.3	30.5	27.9	20.3	31.2	6.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.8	0.1	11.2	0.7	4.0	0.3
Delay (s)	38.1	30.6	39.1	21.0	35.1	7.0
Level of Service	D	C	D	C	D	A
Approach Delay (s)	35.4		34.3			14.4
Approach LOS	D		C			B

Intersection Summary			
HCM Average Control Delay	26.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

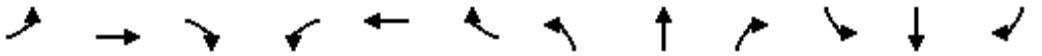
c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	609	87	598	2533	533	494	1607	213
v/c Ratio	0.83	0.22	0.38	0.83	0.45	0.81	0.36	0.18
Control Delay	55.6	39.9	0.7	34.0	14.7	58.0	8.1	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.6	39.9	0.7	34.0	14.7	58.0	8.1	1.2
Queue Length 50th (ft)	230	55	0	546	194	191	141	0
Queue Length 95th (ft)	297	101	0	m531	m354	236	159	22
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	772	419	1583	3063	1193	772	4417	1157
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.21	0.38	0.83	0.45	0.64	0.36	0.18

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	560	80	550	0	2280	480	440	1430	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.92	0.92	0.92	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	609	87	598	0	2533	533	494	1607	213
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	66
Lane Group Flow (vph)	0	0	0	609	87	598	0	2533	533	494	1607	147
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				25.7	25.7	120.0		57.3	83.0	21.4	82.7	82.7
Effective Green, g (s)				25.7	25.7	120.0		57.3	83.0	21.4	82.7	82.7
Actuated g/C Ratio				0.21	0.21	1.00		0.48	0.69	0.18	0.69	0.69
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				735	399	1583		3060	1095	612	4416	1091
v/s Ratio Prot				c0.18	0.05			c0.40	0.10	c0.14	0.25	
v/s Ratio Perm						0.38			0.23			0.09
v/c Ratio				0.83	0.22	0.38		0.83	0.49	0.81	0.36	0.13
Uniform Delay, d1				45.0	38.9	0.0		27.1	8.6	47.3	7.7	6.4
Progression Factor				1.00	1.00	1.00		1.16	2.10	1.00	1.00	1.00
Incremental Delay, d2				7.4	0.1	0.7		1.4	0.1	7.3	0.2	0.3
Delay (s)				52.4	39.0	0.7		32.9	18.1	54.6	8.0	6.6
Level of Service				D	D	A		C	B	D	A	A
Approach Delay (s)		0.0			27.6			30.3			17.8	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	25.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	935	519	3378	2267
v/c Ratio	0.78	0.33	1.10	0.59
Control Delay	31.6	0.6	63.5	10.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	31.6	0.6	63.5	10.1
Queue Length 50th (ft)	141	0	~695	175
Queue Length 95th (ft)	151	0	m#672	209
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	3061	3857
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.74	0.33	1.10	0.59

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	720	400	3310	0	0	2040
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.77	0.77	0.98	0.98	0.90	0.90
Adj. Flow (vph)	935	519	3378	0	0	2267
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	935	519	3378	0	0	2267
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	18.1	75.0	45.1			45.1
Effective Green, g (s)	18.1	75.0	45.1			45.1
Actuated g/C Ratio	0.24	1.00	0.60			0.60
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1204	1583	3058			3853
v/s Ratio Prot	c0.19		c0.66			0.35
v/s Ratio Perm		0.33				
v/c Ratio	0.78	0.33	1.10			0.59
Uniform Delay, d1	26.6	0.0	14.9			9.2
Progression Factor	1.00	1.00	0.69			1.00
Incremental Delay, d2	3.2	0.6	49.6			0.7
Delay (s)	29.8	0.6	59.9			9.9
Level of Service	C	A	E			A
Approach Delay (s)	19.3		59.9			9.9
Approach LOS	B		E			A

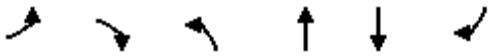
Intersection Summary			
HCM Average Control Delay	35.6	HCM Level of Service	D
HCM Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1320	658	2031	2125	729
v/c Ratio	1.15	0.72	0.78	0.65	0.46
Control Delay	106.1	27.1	17.7	9.7	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	106.1	27.1	17.7	9.7	0.8
Queue Length 50th (ft)	~382	152	264	153	0
Queue Length 95th (ft)	#508	219	325	167	0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1143	912	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.15	0.72	0.78	0.65	0.46

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1160	680	0	1990	2040	700
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.99	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3422	2723		5085	6408	1583
Flt Permitted	0.95	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3422	2723		5085	6408	1583
Peak-hour factor, PHF	0.93	0.93	0.98	0.98	0.96	0.96
Adj. Flow (vph)	1247	731	0	2031	2125	729
RTOR Reduction (vph)	2	4	0	0	0	0
Lane Group Flow (vph)	1318	654	0	2031	2125	729
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1141	908		2597	3272	1583
v/s Ratio Prot	c0.39			c0.40	0.33	
v/s Ratio Perm		0.24				0.46
v/c Ratio	1.16	0.72		0.78	0.65	0.46
Uniform Delay, d1	25.0	21.9		14.9	13.4	0.0
Progression Factor	1.00	1.00		1.00	0.65	1.00
Incremental Delay, d2	80.1	2.7		2.4	0.8	0.7
Delay (s)	105.1	24.6		17.4	9.6	0.7
Level of Service	F	C		B	A	A
Approach Delay (s)	78.3			17.4	7.3	
Approach LOS	E			B	A	

Intersection Summary			
HCM Average Control Delay	30.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX H: WITH PROJECT LOS RESULTS

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Scenario Report

Scenario:	EX+P-AM (12.5)
Command:	EX+P-AM
Volume:	EX+P-AM
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	EX+P-AM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	A	xxxxx	0.586	A	xxxxx	0.586	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.686	B	xxxxx	0.686	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.606	B	xxxxx	0.606	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	C	xxxxx	0.721	C	xxxxx	0.721	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	A	xxxxx	0.557	A	xxxxx	0.557	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.386	A	xxxxx	0.386	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	B	xxxxx	0.685	B	xxxxx	0.685	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	D	xxxxx	0.885	D	xxxxx	0.885	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	B	xxxxx	0.672	B	xxxxx	0.672	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	A	xxxxx	0.586	A	xxxxx	0.586	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	B	xxxxx	0.657	B	xxxxx	0.657	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.498	A	xxxxx	0.498	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.614	B	xxxxx	0.614	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	A	xxxxx	0.518	A	xxxxx	0.518	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	A	xxxxx	0.461	A	xxxxx	0.461	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.521	A	xxxxx	0.521	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	B	xxxxx	0.620	B	xxxxx	0.620	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	C	xxxxx	0.715	C	xxxxx	0.715	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	A	xxxxx	0.589	A	xxxxx	0.589	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.406	A	xxxxx	0.406	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	B	xxxxx	0.624	B	xxxxx	0.624	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.715	C	xxxxx	0.715	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.509	A	xxxxx	0.509	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.519	A	xxxxx	0.519	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	C	21.8	0.775	C	21.8	0.775	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.378	A	xxxxx	0.378	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	B	xxxxx	0.663	B	xxxxx	0.663	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	B	xxxxx	0.641	B	xxxxx	0.641	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	A	xxxxx	0.512	A	xxxxx	0.512	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	A	xxxxx	0.550	A	xxxxx	0.550	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	A	xxxxx	0.553	A	xxxxx	0.553	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	A	xxxxx	0.233	A	xxxxx	0.233	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.459	A	xxxxx	0.459	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.327	A	xxxxx	0.327	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	D	xxxxx	0.835	D	xxxxx	0.835	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	A	xxxxx	0.547	A	xxxxx	0.547	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	A	xxxxx	0.588	A	xxxxx	0.588	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.400	A	xxxxx	0.400	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.505	A	xxxxx	0.505	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.447	A	xxxxx	0.447	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	A	xxxxx	0.558	A	xxxxx	0.558	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.478	A	xxxxx	0.478	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	D	xxxxx	0.834	D	xxxxx	0.834	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	A	xxxxx	0.598	A	xxxxx	0.598	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	C	xxxxx	0.770	C	xxxxx	0.770	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	A	xxxxx	0.550	A	xxxxx	0.550	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	A	xxxxx	0.435	A	xxxxx	0.435	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	C	xxxxx	0.774	C	xxxxx	0.774	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 49 RED HILL AVE/DYER RD	A	xxxxx	0.528	A	xxxxx	0.528	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	A	xxxxx	0.532	A	xxxxx	0.532	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	A	xxxxx	0.459	A	xxxxx	0.459	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	C	xxxxx	0.713	C	xxxxx	0.713	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	C	xxxxx	0.774	C	xxxxx	0.774	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	B	xxxxx	0.620	B	xxxxx	0.620	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	C	xxxxx	0.741	C	xxxxx	0.741	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	C	xxxxx	0.787	C	xxxxx	0.787	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	B	xxxxx	0.653	B	xxxxx	0.653	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	C	xxxxx	0.772	C	xxxxx	0.772	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	B	xxxxx	0.665	B	xxxxx	0.665	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.586
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	690	1000	1260	460	580	70	60	860	470	270	560	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	690	1000	1260	460	580	70	60	860	470	270	560	200
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	690	1000	0	460	580	70	60	860	470	270	560	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	690	1000	0	460	580	70	60	860	470	270	560	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	690	1000	0	460	580	70	60	860	470	270	560	0
OvlAdjVol:									125			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.20	0.15	0.00	0.14	0.09	0.04	0.04	0.17	0.28	0.08	0.11	0.00
OvlAdjV/S:									0.07			
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.686
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1950	310	150	1130	0	0	0	0	840	0	990
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1950	310	150	1130	0	0	0	0	840	0	990
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.52
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1950	310	150	1130	0	0	0	0	840	0	519
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1950	310	150	1130	0	0	0	0	840	0	519
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1950	310	150	1130	0	0	0	0	840	0	519
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.09	0.04	0.17	0.00	0.00	0.00	0.00	0.25	0.00	0.31
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.606
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	1220	380	150	1390	450	0	0	0	1130	190	1060
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1220	380	150	1390	450	0	0	0	1130	190	1060
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	1220	380	150	1390	450	0	0	0	1130	190	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1220	380	150	1390	450	0	0	0	1130	190	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	1220	380	150	1390	450	0	0	0	1130	190	0
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.22	0.04	0.20	0.26	0.00	0.00	0.00	0.33	0.11	0.00
OvlAdjV/S:			0.00									
Crit Moves:		****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.721
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	150	980	260	1040	1450	20	380	140	110	70	100	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	980	260	1040	1450	20	380	140	110	70	100	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	980	260	1040	1450	20	380	140	110	70	100	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	980	260	1040	1450	20	380	140	110	70	100	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	980	260	1040	1450	20	380	140	110	70	100	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.95	0.05	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6707	93	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.14	0.15	0.31	0.22	0.22	0.11	0.08	0.06	0.02	0.06	0.10
Crit Moves:			****	****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.557
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	1 0	4 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	60	740	60	290	920	230	590	1010	90	40	200	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	740	60	290	920	230	590	1010	90	40	200	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	60	740	60	290	920	230	590	1010	90	40	200	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	740	60	290	920	230	590	1010	90	40	200	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	60	740	60	290	920	230	590	1010	90	40	200	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	1.00	4.00	1.00	2.00	2.75	0.25	2.00	3.00	1.00
Final Sat.:	1700	6800	1700	1700	6800	1700	3400	4683	417	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.04	0.17	0.14	0.14	0.17	0.22	0.22	0.01	0.04	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.386
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	40	740	110	100	690	210	120	320	60	30	150	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	740	110	100	690	210	120	320	60	30	150	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	40	740	110	100	690	210	120	320	60	30	150	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	740	110	100	690	210	120	320	60	30	150	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	40	740	110	100	690	210	120	320	60	30	150	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.07	0.93	1.00	1.64	0.36	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	4907	1493	1600	2620	580	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.07	0.06	0.14	0.14	0.08	0.12	0.10	0.02	0.05	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.685
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	4	0 2	0 0	0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	2040	0	0	2020	1190	0	0	0	1200	0	660
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2040	0	0	2020	1190	0	0	0	1200	0	660
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2040	0	0	2020	0	0	0	0	1200	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2040	0	0	2020	0	0	0	0	1200	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2040	0	0	2020	0	0	0	0	1200	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.24	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	79	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 1	1	0 1!	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	840	0	0	2980	240	1210	0	1490	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	840	0	0	2980	240	1210	0	1490	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	840	0	0	2980	0	1210	0	1490	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	840	0	0	2980	0	1210	0	1490	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	840	0	0	2980	0	1210	0	1490	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	1.79	0.00	2.21	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	3047	0	3753	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.00	0.00	0.44	0.00	0.40	0.00	0.40	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	200	1290	270	960	2090	1380	150	130	30	190	360	390
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1290	270	960	2090	1380	150	130	30	190	360	390
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	200	1290	270	960	2090	0	150	130	30	190	360	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1290	270	960	2090	0	150	130	30	190	360	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	200	1290	270	960	2090	0	150	130	30	190	360	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.62	0.38	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2763	638	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.12	0.19	0.16	0.28	0.31	0.00	0.04	0.05	0.05	0.06	0.11	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.586
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	100	1310	100	200	1620	170	130	170	40	360	390	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	1310	100	200	1620	170	130	170	40	360	390	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	100	1310	100	200	1620	170	130	170	0	360	390	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	1310	100	200	1620	170	130	170	0	360	390	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	100	1310	100	200	1620	170	130	170	0	360	390	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.72	0.28	2.00	2.72	0.28	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	6318	482	3400	4616	484	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.21	0.21	0.06	0.35	0.35	0.04	0.05	0.00	0.11	0.11	0.05
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.657
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	70	310	140	180	1320	530	340	610	130	390	950	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	310	140	180	1320	530	340	610	130	390	950	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	70	310	140	180	1320	530	340	610	0	390	950	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	310	140	180	1320	530	340	610	0	390	950	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	70	310	140	180	1320	530	340	610	0	390	950	210
OvlAdjVol:												150
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.06	0.09	0.04	0.28	0.33	0.11	0.13	0.00	0.12	0.20	0.13
OvlAdjV/S:												0.09
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.498
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 3	1 1	0	0 0	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	720	2390	0	0	540	300	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	720	2390	0	0	540	300	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	720	2390	0	0	540	300	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	720	2390	0	0	540	300	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	720	2390	0	0	540	300	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.21	1.79	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	5143	2857	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.23	0.50	0.00	0.00	0.11	0.10	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.614
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 1	0	0 0	4 0	0	1 1	1 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	1940	50	0	550	0	1170	410	1160	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1940	50	0	550	0	1170	410	1160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1940	50	0	550	0	1170	410	1160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1940	50	0	550	0	1170	410	1160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1940	50	0	550	0	1170	410	1160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.87	0.13	0.00	4.00	0.00	2.00	1.00	2.00	0.00	0.00	0.00
Final Sat.:	0	7799	201	0	6400	0	3200	1600	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.00	0.09	0.00	0.37	0.26	0.36	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.518
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	70	690	120	160	680	140	110	240	40	150	370	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	690	120	160	680	140	110	240	40	150	370	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	70	690	120	160	680	140	110	240	40	150	370	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	690	120	160	680	140	110	240	40	150	370	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	70	690	120	160	680	140	110	240	40	150	370	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.66	0.34	1.00	1.71	0.29	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2820	580	1700	2914	486	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.20	0.07	0.09	0.24	0.24	0.06	0.08	0.08	0.09	0.11	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.461
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	0 0	0	2	0 0	0	0 0
Volume Module:												
Base Vol:	380	1570	0	0	420	70	0	0	390	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	380	1570	0	0	420	70	0	0	390	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	380	0	0	0	420	70	0	0	390	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	380	0	0	0	420	70	0	0	390	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	380	0	0	0	420	70	0	0	390	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.57	0.43	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4114	686	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.24	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.521
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	0	0 1!	0	0	1	0 0	1	0
Volume Module:																
Base Vol:	30	2150	110		50	580	10		10	0	10		20	0	20	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	30	2150	110		50	580	10		10	0	10		20	0	20	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	30	2150	110		50	580	10		10	0	10		20	0	20	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	30	2150	110		50	580	10		10	0	10		20	0	20	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	30	2150	110		50	580	10		10	0	10		20	0	20	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.85	0.15		1.00	2.95	0.05		0.50	0.00	0.50		1.00	0.00	1.00	
Final Sat.:	1600	4566	234		1600	4719	81		800	0	800		1600	0	1600	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.47	0.47		0.03	0.12	0.12		0.01	0.00	0.01		0.01	0.00	0.01	
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.620
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	4 0	2	0 0	0 0	0	1 0	3 1	0
Volume Module:												
Base Vol:	510	2100	0	0	280	330	0	0	0	170	990	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	510	2100	0	0	280	330	0	0	0	170	990	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	510	2100	0	0	280	330	0	0	0	170	990	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	510	2100	0	0	280	330	0	0	0	170	990	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	510	2100	0	0	280	330	0	0	0	170	990	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	1.00	3.38	0.62
Final Sat.:	3200	4800	0	0	6400	3200	0	0	0	1600	5415	985
Capacity Analysis Module:												
Vol/Sat:	0.16	0.44	0.00	0.00	0.04	0.10	0.00	0.00	0.00	0.11	0.18	0.18
Crit Moves:		****									****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.715
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 1	0	1 0	3 0	0	1 1	2 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	1150	230	100	350	0	1460	1610	460	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1150	230	100	350	0	1460	1610	460	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1150	230	100	350	0	1460	1610	460	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1150	230	100	350	0	1460	1610	460	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1150	230	100	350	0	1460	1610	460	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.17	0.83	1.00	3.00	0.00	1.90	2.10	2.00	0.00	0.00	0.00
Final Sat.:	0	6667	1333	1600	4800	0	3044	3356	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.06	0.07	0.00	0.48	0.48	0.14	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.589
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2		0 0	0 0 1		1 2	0 0 0		0 0	1 1 2		1 0
Volume Module:												
Base Vol:	100	990	0	0	110	120	0	0	0	320	1110	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	990	0	0	110	120	0	0	0	320	1110	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	990	0	0	110	120	0	0	0	320	1110	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	990	0	0	110	120	0	0	0	320	1110	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	990	0	0	110	120	0	0	0	320	1110	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.91	2.09	0.00	0.00	0.00	1.00	3.49	0.51
Final Sat.:	3200	3200	0	0	3061	3339	0	0	0	1600	5576	824
Capacity Analysis Module:												
Vol/Sat:	0.03	0.31	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.20	0.20	0.28
Crit Moves:		****										****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.406
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2	0 2	0 0	1 1	2	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	320	250	120	280	0	790	1000	200	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	320	250	120	280	0	790	1000	200	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	320	250	120	280	0	790	1000	200	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	320	250	120	280	0	790	1000	200	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	320	250	120	280	0	790	1000	200	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.25	1.75	2.00	2.00	0.00	1.77	2.73	0.50	0.00	0.00	0.00
Final Sat.:	0	3593	2807	3200	3200	0	2825	4375	800	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.09	0.09	0.04	0.09	0.00	0.28	0.23	0.25	0.00	0.00	0.00
Crit Moves:		****		****			****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.624
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	90	650	20	340	700	430	930	870	150	50	350	590
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	650	20	340	700	430	930	870	150	50	350	590
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	90	650	20	340	700	0	930	870	150	50	350	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	650	20	340	700	0	930	870	150	50	350	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	90	650	20	340	700	0	930	870	150	50	350	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.91	0.09	2.00	3.00	1.00	2.00	2.56	0.44	1.00	3.00	1.00
Final Sat.:	3400	4948	152	3400	5100	1700	3400	4350	750	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.13	0.10	0.14	0.00	0.27	0.20	0.20	0.03	0.07	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.715
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	2 0	1 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	210	350	70	110	1000	200	170	670	370	110	310	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	350	70	110	1000	200	170	670	370	110	310	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	350	70	110	1000	200	170	670	370	110	310	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	350	70	110	1000	200	170	670	370	110	310	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	210	350	70	110	1000	200	170	670	370	110	310	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	2.00	1.67	0.33	2.00	2.00	1.00	2.00	2.11	0.89
Final Sat.:	3400	3400	1700	3400	2833	567	3400	3400	1700	3400	3593	1507
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.04	0.03	0.35	0.35	0.05	0.20	0.22	0.03	0.09	0.09
Crit Moves:	****				****				****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.509
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	120	470	150	250	150	70	390	790	80	90	440	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	470	150	250	150	70	390	790	80	90	440	520
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	470	150	250	150	70	390	790	80	90	440	520
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	470	150	250	150	70	390	790	80	90	440	520
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	470	150	250	150	70	390	790	80	90	440	520
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	2.00	2.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	3200	3200
Capacity Analysis Module:												
Vol/Sat:	0.04	0.15	0.09	0.08	0.05	0.04	0.12	0.16	0.05	0.03	0.14	0.16
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.519
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	1 0	1	0 1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	20	380	50	50	170	40	170	270	40	30	90	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	380	50	50	170	40	170	270	40	30	90	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	380	50	50	170	40	170	270	40	30	90	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	380	50	50	170	40	170	270	40	30	90	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	380	50	50	170	40	170	270	40	30	90	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.88	0.12	1.00	1.00	1.00	1.00	0.87	0.13	1.00	0.50	0.50
Final Sat.:	1600	1414	186	1600	1600	1600	1600	1394	206	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.27	0.27	0.03	0.11	0.03	0.11	0.19	0.19	0.02	0.11	0.11
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	0	Average Delay (sec/veh):	21.8
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	80	270	60	80	150	60	70	270	50	10	130	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	270	60	80	150	60	70	270	50	10	130	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	270	60	80	150	60	70	270	50	10	130	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	270	60	80	150	60	70	270	50	10	130	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	270	60	80	150	60	70	270	50	10	130	90
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.19	0.66	0.15	0.27	0.52	0.21	0.18	0.69	0.13	0.04	0.57	0.39
Final Sat.:	103	348	77	134	251	100	93	359	66	20	259	179
Capacity Analysis Module:												
Vol/Sat:	0.78	0.78	0.78	0.60	0.60	0.60	0.75	0.75	0.75	0.50	0.50	0.50
Crit Moves:			****	****					****		****	
Delay/Veh:	26.0	26.0	26.0	17.6	17.6	17.6	24.5	24.5	24.5	15.1	15.1	15.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.0	26.0	26.0	17.6	17.6	17.6	24.5	24.5	24.5	15.1	15.1	15.1
LOS by Move:	D	D	D	C	C	C	C	C	C	C	C	C
ApproachDel:	26.0			17.6			24.5			15.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	26.0			17.6			24.5			15.1		
LOS by Appr:	D			C			C			C		
AllWayAvgQ:	2.4	2.4	2.4	1.1	1.1	1.1	2.1	2.1	2.1	0.7	0.7	0.7

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.378
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	90	1200	350	10	560	40	140	160	100	130	30	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1200	350	10	560	40	140	160	100	130	30	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1200	350	10	560	40	140	160	100	130	30	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1200	350	10	560	40	140	160	100	130	30	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	1200	350	10	560	40	140	160	100	130	30	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.23	0.77	2.00	0.75	0.25
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	1969	1231	3200	1200	400
Capacity Analysis Module:												
Vol/Sat:	0.06	0.25	0.22	0.01	0.12	0.03	0.09	0.08	0.08	0.04	0.03	0.03
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	100	1400	40	80	610	110	220	70	120	30	30	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	1400	40	80	610	110	220	70	120	30	30	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	1400	40	80	610	110	220	70	120	30	30	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	1400	40	80	610	110	220	70	120	30	30	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	1400	40	80	610	110	220	70	120	30	30	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.06	0.44	0.03	0.05	0.19	0.07	0.14	0.04	0.08	0.02	0.04	0.04
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	50	1240	10	70	830	40	130	50	110	20	50	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	1240	10	70	830	40	130	50	110	20	50	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	1240	10	70	830	40	130	50	110	20	50	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	1240	10	70	830	40	130	50	110	20	50	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	1240	10	70	830	40	130	50	110	20	50	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.91	0.09	0.72	0.28	1.00	0.10	0.25	0.65
Final Sat.:	1600	3174	26	1600	3053	147	1156	444	1600	160	400	1040
Capacity Analysis Module:												
Vol/Sat:	0.03	0.39	0.39	0.04	0.27	0.27	0.08	0.11	0.07	0.01	0.13	0.13
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.512
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	60	1110	10	30	860	30	70	30	110	20	40	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1110	10	30	860	30	70	30	110	20	40	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1110	10	30	860	30	70	30	110	20	40	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1110	10	30	860	30	70	30	110	20	40	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1110	10	30	860	30	70	30	110	20	40	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.93	0.07	0.33	0.14	0.53	0.13	0.27	0.60
Final Sat.:	1600	3171	29	1600	3092	108	533	229	838	213	427	960
Capacity Analysis Module:												
Vol/Sat:	0.04	0.35	0.35	0.02	0.28	0.28	0.04	0.13	0.13	0.01	0.09	0.09
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.550
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0	0 1	0	1	0	1	0 1
Volume Module:																
Base Vol:	60	880	20		140	850	30		70	110	50		20	70	220	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	60	880	20		140	850	30		70	110	50		20	70	220	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	60	880	20		140	850	30		70	110	50		20	70	220	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	60	880	20		140	850	30		70	110	50		20	70	220	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	60	880	20		140	850	30		70	110	50		20	70	220	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.96	0.04		1.00	1.93	0.07		1.00	0.69	0.31		1.00	1.00	1.00	
Final Sat.:	1600	3129	71		1600	3091	109		1600	1100	500		1600	1600	1600	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.28	0.28		0.09	0.28	0.27		0.04	0.10	0.10		0.01	0.04	0.14	
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.553
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	380	550	30	260	430	170	280	540	170	40	370	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	380	550	30	260	430	170	280	540	170	40	370	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	380	550	30	260	430	170	280	540	170	40	370	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	380	550	30	260	430	170	280	540	170	40	370	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	380	550	30	260	430	170	280	540	170	40	370	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.90	0.10	2.00	1.43	0.57	2.00	1.52	0.48	1.00	1.68	0.32
Final Sat.:	3200	3034	166	3200	2293	907	3200	2434	766	1600	2691	509
Capacity Analysis Module:												
Vol/Sat:	0.12	0.18	0.18	0.08	0.19	0.19	0.09	0.22	0.22	0.03	0.14	0.14
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.233
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1 0	4 0	1	0 0	1 0	1	1 0	1 0	0
Volume Module:												
Base Vol:	0	0	0	220	1130	10	0	0	10	80	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	220	1130	10	0	0	10	80	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	220	1130	10	0	0	10	80	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	220	1130	10	0	0	10	80	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	220	1130	10	0	0	10	80	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.18	0.01	0.00	0.00	0.01	0.05	0.00	0.00
Crit Moves:					****				****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.459
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	10	870	250	0	0	0	90	130	0	0	70	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	870	250	0	0	0	90	130	0	0	70	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	870	250	0	0	0	90	130	0	0	70	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	870	250	0	0	0	90	130	0	0	70	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	870	250	0	0	0	90	130	0	0	70	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.54	0.46
Final Sat.:	1600	2486	714	0	0	0	3200	1600	0	0	862	738
Capacity Analysis Module:												
Vol/Sat:	0.01	0.35	0.35	0.00	0.00	0.00	0.03	0.08	0.00	0.00	0.08	0.08
Crit Moves:		****					****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.327
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0	0 3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	190	470	550	0	890	40	100	250	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	190	470	550	0	890	40	100	250	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	190	470	0	0	890	40	100	250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	190	470	0	0	890	40	100	250	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	190	470	0	0	890	40	100	250	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.83	0.17	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	6125	275	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.10	0.00	0.00	0.15	0.15	0.06	0.08	0.00
Crit Moves:				****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.835
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	113	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	1	1 0	0 0	0	0 0	2 0	2	0 0	0 0	2	0 1
Volume Module:												
Base Vol:	150	1580	150	0	0	0	760	310	0	0	220	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1580	150	0	0	0	760	310	0	0	220	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1580	150	0	0	0	760	310	0	0	220	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1580	150	0	0	0	760	310	0	0	220	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1580	150	0	0	0	760	310	0	0	220	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	2.52	0.24	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	383	4034	383	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.39	0.39	0.00	0.00	0.00	0.24	0.10	0.00	0.00	0.07	0.21
Crit Moves:	****						****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.547
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	20	560	50	50	360	90	330	420	70	80	280	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	560	50	50	360	90	330	420	70	80	280	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	560	50	50	360	90	330	420	70	80	280	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	560	50	50	360	90	330	420	70	80	280	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	560	50	50	360	90	330	420	70	80	280	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.60	0.40	1.00	2.00	1.00	1.00	1.47	0.53
Final Sat.:	1600	2938	262	1600	2560	640	1600	3200	1600	1600	2358	842
Capacity Analysis Module:												
Vol/Sat:	0.01	0.19	0.19	0.03	0.14	0.14	0.21	0.13	0.04	0.05	0.12	0.12
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.588
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0 1	0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	20	90	20	80	130	30	60	460	160	60	770	700
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	90	20	80	130	30	60	460	160	60	770	700
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	90	20	80	130	30	60	460	160	60	770	700
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	90	20	80	130	30	60	460	160	60	770	700
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	90	20	80	130	30	60	460	160	60	770	700
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	2.00	0.81	0.19	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	2618	582	3200	1300	300	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.03	0.10	0.10	0.04	0.10	0.10	0.04	0.16	0.44
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.400
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	2	0 0	0 0	0	0 0	4 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	0	70	0	0	0	0	2420	350	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	70	0	0	0	0	2420	350	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	70	0	0	0	0	2420	350	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	70	0	0	0	0	2420	350	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	70	0	0	0	0	2420	350	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.38	0.22	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.505
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	1	1 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	200	1290	10	10	1480	460	140	10	60	10	10	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1290	10	10	1480	460	140	10	60	10	10	20
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	200	1290	10	10	1480	0	140	10	0	10	10	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1290	10	10	1480	0	140	10	0	10	10	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	200	1290	10	10	1480	0	140	10	0	10	10	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	3.00	1.00	1.87	0.13	1.00	0.25	0.25	0.50
Final Sat.:	1600	4763	37	1600	4800	1600	2987	213	1600	400	400	800
Capacity Analysis Module:												
Vol/Sat:	0.13	0.27	0.27	0.01	0.31	0.00	0.05	0.05	0.00	0.03	0.03	0.03
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.447
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	120	1800	70	70	1440	130	50	10	110	20	10	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1800	70	70	1440	130	50	10	110	20	10	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1800	70	70	1440	130	50	10	110	20	10	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1800	70	70	1440	130	50	10	110	20	10	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1800	70	70	1440	130	50	10	110	20	10	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.85	0.15	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6160	240	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.29	0.29	0.04	0.30	0.08	0.02	0.01	0.07	0.01	0.01	0.06
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.558
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	30	1430	220	80	1510	160	300	90	10	320	50	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	1430	220	80	1510	160	300	90	10	320	50	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	30	1430	220	80	1510	160	300	90	10	320	50	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	1430	220	80	1510	160	300	90	10	320	50	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	30	1430	220	80	1510	160	300	90	10	320	50	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.50	0.45	0.05	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2400	720	80	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.30	0.14	0.03	0.31	0.10	0.13	0.13	0.13	0.10	0.03	0.00
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.478
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1400	160	110	1390	50	80	0	100	180	0	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1400	160	110	1390	50	80	0	100	180	0	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1400	160	110	1390	50	80	0	100	180	0	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1400	160	110	1390	50	80	0	100	180	0	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1400	160	110	1390	50	80	0	100	180	0	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.69	0.31	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4308	492	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.33	0.03	0.29	0.03	0.05	0.00	0.06	0.06	0.00	0.03
Crit Moves:			****	****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.834
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	138	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	420	1200	100	80	1470	150	190	290	390	160	490	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	420	1200	100	80	1470	150	190	290	390	160	490	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	420	1200	100	80	1470	150	190	290	390	160	490	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	420	1200	100	80	1470	150	190	290	390	160	490	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	420	1200	100	80	1470	150	190	290	390	160	490	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.77	0.23	1.00	3.00	1.00	1.19	1.81	1.00	1.00	2.00	1.00
Final Sat.:	3200	4431	369	1600	4800	1600	1900	2900	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.27	0.27	0.05	0.31	0.09	0.10	0.10	0.24	0.10	0.15	0.03
Crit Moves:	****				****				****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	210	2790	220	40	2160	280	200	180	130	300	200	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	2790	220	40	2160	280	200	180	130	300	200	100
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	210	2790	0	40	2160	280	200	180	0	300	200	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	2790	0	40	2160	280	200	180	0	300	200	100
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	210	2790	0	40	2160	280	200	180	0	300	200	100
OvlAdjVol:						180						80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.44	0.00	0.01	0.34	0.17	0.06	0.06	0.00	0.09	0.06	0.06
OvlAdjV/S:						0.11						0.05
Crit Moves:	****			****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.770
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	140	2010	120	580	2280	20	50	290	80	590	570	920
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	2010	120	580	2280	20	50	290	80	590	570	920
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	2010	0	580	2280	0	50	290	80	590	570	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	2010	0	580	2280	0	50	290	80	590	570	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	2010	0	580	2280	0	50	290	80	590	570	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.00	0.18	0.36	0.00	0.02	0.09	0.05	0.18	0.18	0.00
Crit Moves:		****			****				****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.550
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	80	1060	30		60	450	90		240	310	120		10	60	10	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	80	1060	30		60	450	90		240	310	120		10	60	10	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	80	1060	30		60	450	90		240	310	120		10	60	10	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	80	1060	30		60	450	90		240	310	120		10	60	10	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	80	1060	30		60	450	90		240	310	120		10	60	10	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.94	0.06		1.00	1.67	0.33		1.00	1.44	0.56		1.00	1.71	0.29	
Final Sat.:	3200	3112	88		1600	2667	533		1600	2307	893		1600	2743	457	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.34	0.34		0.04	0.17	0.17		0.15	0.13	0.13		0.01	0.02	0.02	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.435
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	170	660		60	40	420		120	500	270		170	20	60		20
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	170	660		60	40	420		120	500	270		170	20	60		20
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	170	660		60	40	420		120	500	270		170	20	60		20
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	170	660		60	40	420		120	500	270		170	20	60		20
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	170	660		60	40	420		120	500	270		170	20	60		20
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	2.00	1.83		0.17	1.00	1.56		0.44	1.95	1.05		1.00	1.00	1.50		0.50
Final Sat.:	3200	2933		267	1600	2489		711	3117	1683		1600	1600	2400		800
Capacity Analysis Module:																
Vol/Sat:	0.05	0.23		0.22	0.03	0.17		0.17	0.16	0.16		0.11	0.01	0.03		0.03
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.774
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Ignore			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0 2	0 2	0	0 3	0 1
Volume Module:												
Base Vol:	960	0	780	0	0	0	0	1500	730	0	610	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	960	0	780	0	0	0	0	1500	730	0	610	230
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	960	0	0	0	0	0	0	1500	0	0	610	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	960	0	0	0	0	0	0	1500	0	0	610	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	960	0	0	0	0	0	0	1500	0	0	610	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	3.00	1.00
Final Sat.:	3400	0	1700	0	0	0	0	3400	3400	0	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.12	0.00
Crit Moves:	****							****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.528
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	140	350	80	420	1020	120	110	750	180	450	760	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	350	80	420	1020	120	110	750	180	450	760	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	350	80	420	1020	120	110	750	180	450	760	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	350	80	420	1020	120	110	750	180	450	760	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	350	80	420	1020	120	110	750	180	450	760	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.26	0.74	2.00	3.58	0.42	2.00	3.23	0.77	2.00	4.00	1.00
Final Sat.:	3400	5535	1265	3400	6084	716	3400	5484	1316	3400	6800	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.12	0.17	0.17	0.03	0.14	0.14	0.13	0.11	0.18
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.532
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	0	1	2	0 1	0	1
Volume Module:																
Base Vol:	140	500	370		240	1150	90		10	40	20		310	200	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	140	500	370		240	1150	90		10	40	20		310	200	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	140	500	370		240	1150	90		10	40	20		310	200	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	140	500	370		240	1150	90		10	40	20		310	200	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	140	500	370		240	1150	90		10	40	20		310	200	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.00	1.00		1.00	2.78	0.22		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	3400	1700		1700	4730	370		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.08	0.15	0.22		0.14	0.24	0.24		0.01	0.01	0.01		0.09	0.12	0.08	
Crit Moves:			****		****				****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.459
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	260	940	300	110	1270	80	20	30	40	170	80	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	940	300	110	1270	80	20	30	40	170	80	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	940	300	110	1270	80	20	30	40	170	80	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	940	300	110	1270	80	20	30	40	170	80	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	260	940	300	110	1270	80	20	30	40	170	80	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.82	0.18	1.00	1.00	1.00	2.00	1.45	0.55
Final Sat.:	3400	5100	1700	3400	4798	302	1700	1700	1700	3400	2473	927
Capacity Analysis Module:												
Vol/Sat:	0.08	0.18	0.18	0.03	0.26	0.26	0.01	0.02	0.02	0.05	0.03	0.03
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.713
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2 0	2	1 0	2	1 0	2 0	3 0	1
Volume Module:												
Base Vol:	80	60	60	10	790	420	90	560	270	830	1280	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	60	60	10	790	420	90	560	270	830	1280	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	60	60	10	790	420	90	560	270	830	1280	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	60	60	10	790	420	90	560	270	830	1280	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	60	60	10	790	420	90	560	270	830	1280	20
OvlAdjVol:						240						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.00	1.00	2.00	2.00	2.00	1.00	2.02	0.98	2.00	3.00	1.00
Final Sat.:	3400	1700	1700	3400	3400	3400	1700	3441	1659	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.02	0.04	0.04	0.00	0.23	0.12	0.05	0.16	0.16	0.24	0.25	0.01
OvlAdjV/S:						0.07						
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.774
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	70	210	40		20	1380	150		50	190	60		210	610	80	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	70	210	40		20	1380	150		50	190	60		210	610	80	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	70	210	40		20	1380	150		50	190	60		210	610	80	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	70	210	40		20	1380	150		50	190	60		210	610	80	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	70	210	40		20	1380	150		50	190	60		210	610	80	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.68	0.32		1.00	1.80	0.20		1.00	1.52	0.48		1.00	1.77	0.23	
Final Sat.:	1700	2856	544		1700	3067	333		1700	2584	816		1700	3006	394	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.07	0.07		0.01	0.45	0.45		0.03	0.07	0.07		0.12	0.20	0.20	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.620
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	80	260	80	100	1080	300	160	640	370	350	820	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	260	80	100	1080	300	160	640	370	350	820	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	80	260	80	100	1080	300	160	640	0	350	820	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	260	80	100	1080	300	160	640	0	350	820	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	80	260	80	100	1080	300	160	640	0	350	820	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.70	0.30
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4596	504
Capacity Analysis Module:												
Vol/Sat:	0.02	0.08	0.05	0.06	0.32	0.18	0.05	0.13	0.00	0.10	0.18	0.18
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.741
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 1	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	120	810	120	390	3330	1540	150	300	100	220	620	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	810	120	390	3330	1540	150	300	100	220	620	230
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	120	810	0	390	3330	0	150	300	100	220	620	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	810	0	390	3330	0	150	300	100	220	620	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	120	810	0	390	3330	0	150	300	100	220	620	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.00	0.11	0.49	0.00	0.04	0.06	0.06	0.06	0.12	0.00
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.787
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 4	0	1	2	0 3	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	210	960	140		160	3160	230		60	150	90		260	690	120	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	210	960	140		160	3160	230		60	150	90		260	690	120	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	210	960	140		160	3160	230		60	150	90		260	690	120	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	210	960	140		160	3160	230		60	150	90		260	690	120	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	210	960	140		160	3160	230		60	150	90		260	690	120	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	4.00	1.00		2.00	3.73	0.27		2.00	2.00	1.00		2.00	2.56	0.44	
Final Sat.:	3400	6800	1700		3400	6339	461		3400	3400	1700		3400	4344	756	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.14	0.08		0.05	0.50	0.50		0.02	0.04	0.05		0.08	0.16	0.16	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	170	1300	40	30	3300	220	30	20	40	30	40	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	1300	40	30	3300	220	30	20	40	30	40	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	1300	40	30	3300	220	30	20	40	30	40	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	1300	40	30	3300	220	30	20	40	30	40	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	1300	40	30	3300	220	30	20	40	30	40	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.88	0.12	2.00	3.75	0.25	1.00	1.00	1.00	1.00	1.33	0.67
Final Sat.:	3400	6597	203	3400	6375	425	1700	1700	1700	1700	2267	1133
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.20	0.01	0.52	0.52	0.02	0.01	0.02	0.02	0.02	0.02
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	480	1130	400	440	2550	390	110	270	170	520	770	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	480	1130	400	440	2550	390	110	270	170	520	770	120
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	480	1130	0	440	2550	390	110	270	0	520	770	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	480	1130	0	440	2550	390	110	270	0	520	770	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	480	1130	0	440	2550	390	110	270	0	520	770	0
OvlAdjVol:						335						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.14	0.17	0.00	0.13	0.38	0.23	0.03	0.05	0.00	0.15	0.15	0.00
OvlAdjV/S:						0.20						
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.665
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	2 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	90	270	20	130	750	480	80	140	40	110	740	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	270	20	130	750	480	80	140	40	110	740	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	90	270	20	130	750	480	80	140	0	110	740	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	270	20	130	750	480	80	140	0	110	740	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	90	270	20	130	750	480	80	140	0	110	740	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.86	0.14	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.70	0.30
Final Sat.:	1700	3166	234	1700	3400	1700	3400	3400	1700	1700	2892	508
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.09	0.08	0.22	0.28	0.02	0.04	0.00	0.06	0.26	0.26
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Scenario Report

Scenario:	EX+P-PM (12.5)
Command:	EX+P-PM
Volume:	EX+P-PM
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	EX+P-PM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	C	xxxxx	0.758	C	xxxxx	0.758	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.651	B	xxxxx	0.651	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.659	B	xxxxx	0.659	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	E	xxxxx	0.921	E	xxxxx	0.921	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	C	xxxxx	0.775	C	xxxxx	0.775	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.498	A	xxxxx	0.498	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	C	xxxxx	0.799	C	xxxxx	0.799	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	C	xxxxx	0.785	C	xxxxx	0.785	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	D	xxxxx	0.843	D	xxxxx	0.843	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	B	xxxxx	0.604	B	xxxxx	0.604	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	C	xxxxx	0.722	C	xxxxx	0.722	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.490	A	xxxxx	0.490	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.640	B	xxxxx	0.640	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	B	xxxxx	0.662	B	xxxxx	0.662	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	C	xxxxx	0.772	C	xxxxx	0.772	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.521	A	xxxxx	0.521	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	E	xxxxx	0.928	E	xxxxx	0.928	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	A	xxxxx	0.454	A	xxxxx	0.454	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	A	xxxxx	0.590	A	xxxxx	0.590	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.444	A	xxxxx	0.444	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	C	xxxxx	0.725	C	xxxxx	0.725	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.712	C	xxxxx	0.712	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.481	A	xxxxx	0.481	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.550	A	xxxxx	0.550	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	C	23.5	0.862	C	23.5	0.862	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.588	A	xxxxx	0.588	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	C	xxxxx	0.741	C	xxxxx	0.741	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	C	xxxxx	0.722	C	xxxxx	0.722	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	B	xxxxx	0.653	B	xxxxx	0.653	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	B	xxxxx	0.678	B	xxxxx	0.678	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	C	xxxxx	0.722	C	xxxxx	0.722	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	A	xxxxx	0.572	A	xxxxx	0.572	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.381	A	xxxxx	0.381	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.441	A	xxxxx	0.441	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	A	xxxxx	0.515	A	xxxxx	0.515	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	B	xxxxx	0.694	B	xxxxx	0.694	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	A	xxxxx	0.554	A	xxxxx	0.554	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.417	A	xxxxx	0.417	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.502	A	xxxxx	0.502	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.531	A	xxxxx	0.531	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	A	xxxxx	0.571	A	xxxxx	0.571	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.503	A	xxxxx	0.503	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	C	xxxxx	0.723	C	xxxxx	0.723	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	A	xxxxx	0.595	A	xxxxx	0.595	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	D	xxxxx	0.848	D	xxxxx	0.848	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	B	xxxxx	0.662	B	xxxxx	0.662	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	B	xxxxx	0.625	B	xxxxx	0.625	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	B	xxxxx	0.623	B	xxxxx	0.623	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 49 RED HILL AVE/DYER RD	D	xxxxx	0.885	D	xxxxx	0.885	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	C	xxxxx	0.795	C	xxxxx	0.795	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	C	xxxxx	0.756	C	xxxxx	0.756	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	D	xxxxx	0.895	D	xxxxx	0.895	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	D	xxxxx	0.894	D	xxxxx	0.894	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	C	xxxxx	0.787	C	xxxxx	0.787	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	E	xxxxx	0.901	E	xxxxx	0.901	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.819	D	xxxxx	0.819	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	B	xxxxx	0.668	B	xxxxx	0.668	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	D	xxxxx	0.856	D	xxxxx	0.856	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	D	xxxxx	0.838	D	xxxxx	0.838	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec): 100 Critical Vol./Cap.(X): 0.758
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	630	1090	620	290	790	70	70	950	640	750	1060	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	630	1090	620	290	790	70	70	950	640	750	1060	520
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	630	1090	0	290	790	70	70	950	640	750	1060	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	630	1090	0	290	790	70	70	950	640	750	1060	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	630	1090	0	290	790	70	70	950	640	750	1060	0
OvlAdjVol:									325			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.19	0.16	0.00	0.09	0.12	0.04	0.04	0.19	0.38	0.22	0.21	0.00
OvlAdjV/S:									0.19			
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.651
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1970	770	590	1560	0	0	0	0	410	0	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1970	770	590	1560	0	0	0	0	410	0	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1970	770	590	1560	0	0	0	0	410	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1970	770	590	1560	0	0	0	0	410	0	234
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1970	770	590	1560	0	0	0	0	410	0	234
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.23	0.17	0.23	0.00	0.00	0.00	0.00	0.12	0.00	0.14
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	2200	520	440	1200	320	0	0	0	530	140	550
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2200	520	440	1200	320	0	0	0	530	140	550
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2200	520	440	1200	320	0	0	0	530	140	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2200	520	440	1200	320	0	0	0	530	140	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2200	520	440	1200	320	0	0	0	530	140	0
OvlAdjVol:			255									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.31	0.13	0.18	0.19	0.00	0.00	0.00	0.16	0.08	0.00
OvlAdjV/S:			0.15									
Crit Moves:	****			****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.921
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	110	1580	110	510	1240	10	340	160	110	390	120	660
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1580	110	510	1240	10	340	160	110	390	120	660
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1580	110	510	1240	10	340	160	110	390	120	660
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1580	110	510	1240	10	340	160	110	390	120	660
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1580	110	510	1240	10	340	160	110	390	120	660
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.97	0.03	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6746	54	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.06	0.15	0.18	0.18	0.10	0.09	0.06	0.11	0.07	0.39
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	1 0	4 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	130	1020	30	150	920	570	370	380	90	80	1040	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1020	30	150	920	570	370	380	90	80	1040	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	130	1020	30	150	920	570	370	380	90	80	1040	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1020	30	150	920	570	370	380	90	80	1040	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	130	1020	30	150	920	570	370	380	90	80	1040	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	1.00	4.00	1.00	2.00	2.43	0.57	2.00	3.00	1.00
Final Sat.:	1700	6800	1700	1700	6800	1700	3400	4123	977	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.02	0.09	0.14	0.34	0.11	0.09	0.09	0.02	0.20	0.00
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.498
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	130	700	40	50	810	210	310	180	40	110	470	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	700	40	50	810	210	310	180	40	110	470	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	130	700	40	50	810	210	310	180	40	110	470	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	700	40	50	810	210	310	180	40	110	470	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	130	700	40	50	810	210	310	180	40	110	470	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.18	0.82	1.75	1.02	0.23	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	5082	1318	2809	1629	362	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.03	0.03	0.16	0.16	0.11	0.11	0.11	0.07	0.15	0.00
Crit Moves:	****			****					****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.799
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	4	0 2	0 0	0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	3170	0	0	1830	1020	0	0	0	650	0	390
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3170	0	0	1830	1020	0	0	0	650	0	390
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	3170	0	0	1830	0	0	0	0	650	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3170	0	0	1830	0	0	0	0	650	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	3170	0	0	1830	0	0	0	0	650	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.62	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.13	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.785
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 1	1	0 1!	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	2010	0	0	1850	630	1160	0	620	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2010	0	0	1850	630	1160	0	620	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2010	0	0	1850	0	1160	0	620	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2010	0	0	1850	0	1160	0	620	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2010	0	0	1850	0	1160	0	620	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.00	0.00	0.27	0.00	0.34	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.843
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	70	2030	280	600	1520	270	860	690	100	250	220	920
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	2030	280	600	1520	270	860	690	100	250	220	920
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	70	2030	280	600	1520	0	860	690	100	250	220	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	2030	280	600	1520	0	860	690	100	250	220	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	70	2030	280	600	1520	0	860	690	100	250	220	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.75	0.25	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2970	430	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.16	0.18	0.22	0.00	0.25	0.23	0.23	0.07	0.06	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.604
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	40	1670	280	190	1460	160	290	580	160	140	260	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	1670	280	190	1460	160	290	580	160	140	260	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	40	1670	280	190	1460	160	290	580	0	140	260	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1670	280	190	1460	160	290	580	0	140	260	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	40	1670	280	190	1460	160	290	580	0	140	260	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.43	0.57	2.00	2.70	0.30	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5824	976	3400	4596	504	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.29	0.29	0.06	0.32	0.32	0.09	0.17	0.00	0.04	0.08	0.12
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	170	1400	430	270	510	370	610	1000	170	230	910	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	1400	430	270	510	370	610	1000	170	230	910	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	170	1400	430	270	510	370	610	1000	0	230	910	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	1400	430	270	510	370	610	1000	0	230	910	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	170	1400	430	270	510	370	610	1000	0	230	910	50
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.06	0.94	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4896	1504	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.29	0.06	0.11	0.23	0.19	0.21	0.00	0.07	0.19	0.03
OvlAdjV/S:												0.00
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.490
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 3	1 1	0	0 0	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	790	2350	0	0	1000	680	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	790	2350	0	0	1000	680	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	790	2350	0	0	1000	680	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	790	2350	0	0	1000	680	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	790	2350	0	0	1000	680	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	3200	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.25	0.49	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.640
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	1 0	0 0	4	0 0	1 1	1	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	2280	90	0	1010	0	870	780	1050	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2280	90	0	1010	0	870	780	1050	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2280	90	0	1010	0	870	780	1050	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2280	90	0	1010	0	870	780	1050	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2280	90	0	1010	0	870	780	1050	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.81	0.19	0.00	4.00	0.00	1.58	1.42	2.00	0.00	0.00	0.00
Final Sat.:	0	7696	304	0	6400	0	2531	2269	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.00	0.16	0.00	0.34	0.34	0.33	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.662
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	60	680	150	240	750	120	170	490	70	180	460	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	680	150	240	750	120	170	490	70	180	460	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	60	680	150	240	750	120	170	490	70	180	460	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	680	150	240	750	120	170	490	70	180	460	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	60	680	150	240	750	120	170	490	70	180	460	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.72	0.28	1.00	1.75	0.25	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2931	469	1700	2975	425	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.20	0.09	0.14	0.26	0.26	0.10	0.16	0.16	0.11	0.14	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	420	720	0	0	1580	160	0	0	470	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	420	720	0	0	1580	160	0	0	470	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	420	0	0	0	1580	160	0	0	470	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	420	0	0	0	1580	160	0	0	470	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	420	0	0	0	1580	160	0	0	470	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.72	0.28	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4359	441	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.26	0.00	0.00	0.00	0.36	0.36	0.00	0.00	0.15	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.521
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	0	0 1!	0	0	1	0 0	1	0
Volume Module:																
Base Vol:	20	780	60		60	2070	10		10	10	20		80	0	50	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	20	780	60		60	2070	10		10	10	20		80	0	50	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	20	780	60		60	2070	10		10	10	20		80	0	50	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	20	780	60		60	2070	10		10	10	20		80	0	50	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	20	780	60		60	2070	10		10	10	20		80	0	50	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.79	0.21		1.00	2.99	0.01		0.25	0.25	0.50		1.00	0.00	1.00	
Final Sat.:	1600	4457	343		1600	4777	23		400	400	800		1600	0	1600	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.17	0.18		0.04	0.43	0.43		0.01	0.03	0.03		0.05	0.00	0.03	
Crit Moves:	****					****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec): 100 Critical Vol./Cap.(X): 0.928
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Permitted						Permitted						Permitted					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Y+R:	4.0	4.0	4.0				4.0	4.0	4.0				4.0	4.0	4.0				4.0	4.0	4.0			
Lanes:	2	0	3	0	0		0	0	4	0	2		0	0	0	0	0		1	0	3	1	0	
Volume Module:																								
Base Vol:	510	720	0				0	990	1260				0	0	0				270	2280	120			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	510	720	0				0	990	1260				0	0	0				270	2280	120			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	510	720	0				0	990	1260				0	0	0				270	2280	120			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	510	720	0				0	990	1260				0	0	0				270	2280	120			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	510	720	0				0	990	1260				0	0	0				270	2280	120			
Saturation Flow Module:																								
Sat/Lane:	1600	1600	1600				1600	1600	1600				1600	1600	1600				1600	1600	1600			
Adjustment:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Lanes:	2.00	3.00	0.00				0.00	4.00	2.00				0.00	0.00	0.00				1.00	3.80	0.20			
Final Sat.:	3200	4800	0				0	6400	3200				0	0	0				1600	6080	320			
Capacity Analysis Module:																								
Vol/Sat:	0.16	0.15	0.00				0.00	0.15	0.39				0.00	0.00	0.00				0.17	0.38	0.38			
Crit Moves:	****							****												****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.454
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0	4	1 0	1	0	3	0 0	1	1	2	0 2	0	0	0	0 0
Volume Module:																
Base Vol:	0	750	230		170	1100	0		480	960	590		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	750	230		170	1100	0		480	960	590		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	750	230		170	1100	0		480	960	590		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	750	230		170	1100	0		480	960	590		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	750	230		170	1100	0		480	960	590		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	4.00	1.00		1.00	3.00	0.00		1.33	2.67	2.00		0.00	0.00	0.00	
Final Sat.:	0	6400	1600		1600	4800	0		2133	4267	3200		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.12	0.14		0.11	0.23	0.00		0.23	0.22	0.18		0.00	0.00	0.00	
Crit Moves:						****				****						

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	160	300	0	0	450	830	0	0	0	420	1520	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	300	0	0	450	830	0	0	0	420	1520	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	300	0	0	450	830	0	0	0	420	1520	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	300	0	0	450	830	0	0	0	420	1520	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	300	0	0	450	830	0	0	0	420	1520	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.41	2.59	0.00	0.00	0.00	1.00	3.80	0.20
Final Sat.:	3200	3200	0	0	2250	4150	0	0	0	1600	6076	324
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.26	0.25	0.34
Crit Moves:	****				****							****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.444
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2 0	2	0 0	1 1	2	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	200	260	250	620	0	270	1070	130	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	200	260	250	620	0	270	1070	130	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	200	260	250	620	0	270	1070	130	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	200	260	250	620	0	270	1070	130	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	200	260	250	620	0	270	1070	130	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	3.68	0.32	0.00	0.00	0.00
Final Sat.:	0	3200	3200	3200	3200	0	1600	5880	520	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.08	0.08	0.19	0.00	0.17	0.18	0.25	0.00	0.00	0.00
Crit Moves:				****					****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Ignore				Include				Ignore			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 2	1	0	2	0 3	0	1	2	0 2	1	0	1	0 3	0	1
Volume Module:																
Base Vol:	180	1100	20		340	760	920		710	500	80		60	750	850	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	180	1100	20		340	760	920		710	500	80		60	750	850	
User Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Volume:	180	1100	20		340	760	0		710	500	80		60	750	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	180	1100	20		340	760	0		710	500	80		60	750	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00	
FinalVolume:	180	1100	20		340	760	0		710	500	80		60	750	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	2.95	0.05		2.00	3.00	1.00		2.00	2.59	0.41		1.00	3.00	1.00	
Final Sat.:	3400	5009	91		3400	5100	1700		3400	4397	703		1700	5100	1700	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.22	0.22		0.10	0.15	0.00		0.21	0.11	0.11		0.04	0.15	0.00	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.712
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	2 0	1 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	340	1290	100	160	850	160	240	800	250	80	600	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	1290	100	160	850	160	240	800	250	80	600	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	340	1290	100	160	850	160	240	800	250	80	600	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	1290	100	160	850	160	240	800	250	80	600	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	340	1290	100	160	850	160	240	800	250	80	600	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	2.00	1.68	0.32	2.00	2.29	0.71	2.00	2.14	0.86
Final Sat.:	3400	3400	1700	3400	2861	539	3400	3886	1214	3400	3643	1457
Capacity Analysis Module:												
Vol/Sat:	0.10	0.38	0.06	0.05	0.30	0.30	0.07	0.21	0.21	0.02	0.16	0.16
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.481
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	130	170	80	440	460	300	130	510	160	140	1020	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	170	80	440	460	300	130	510	160	140	1020	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	170	80	440	460	300	130	510	160	140	1020	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	170	80	440	460	300	130	510	160	140	1020	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	170	80	440	460	300	130	510	160	140	1020	250
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.05	0.05	0.14	0.14	0.19	0.04	0.11	0.10	0.04	0.21	0.16
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.550
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	180	40	130	380	160	100	140	60	50	300	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	180	40	130	380	160	100	140	60	50	300	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	180	40	130	380	160	100	140	60	50	300	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	180	40	130	380	160	100	140	60	50	300	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	180	40	130	380	160	100	140	60	50	300	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.82	0.18	1.00	1.00	1.00	1.00	0.70	0.30	1.00	0.79	0.21
Final Sat.:	1600	1309	291	1600	1600	1600	1600	1120	480	1600	1263	337
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.14	0.08	0.24	0.10	0.06	0.13	0.13	0.03	0.24	0.24
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec): 100 Critical Vol./Cap.(X): 0.862
Loss Time (sec): 0 Average Delay (sec/veh): 23.5
Optimal Cycle: 0 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	40	160	30	90	320	70	50	170	60	30	240	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	160	30	90	320	70	50	170	60	30	240	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	160	30	90	320	70	50	170	60	30	240	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	160	30	90	320	70	50	170	60	30	240	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	160	30	90	320	70	50	170	60	30	240	50
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.70	0.13	0.19	0.67	0.14	0.18	0.61	0.21	0.09	0.75	0.16
Final Sat.:	81	325	61	104	371	81	86	292	103	47	373	78
Capacity Analysis Module:												
Vol/Sat:	0.49	0.49	0.49	0.86	0.86	0.86	0.58	0.58	0.58	0.64	0.64	0.64
Crit Moves:		****			****			****			****	
Delay/Veh:	15.2	15.2	15.2	34.2	34.2	34.2	17.2	17.2	17.2	19.1	19.1	19.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.2	15.2	15.2	34.2	34.2	34.2	17.2	17.2	17.2	19.1	19.1	19.1
LOS by Move:	C	C	C	D	D	D	C	C	C	C	C	C
ApproachDel:	15.2			34.2			17.2			19.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	15.2			34.2			17.2			19.1		
LOS by Appr:	C			D			C			C		
AllWayAvgQ:	0.7	0.7	0.7	3.8	3.8	3.8	1.0	1.0	1.0	1.3	1.3	1.3

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.588
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	70	600	190	10	1410	230	50	60	150	500	160	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	600	190	10	1410	230	50	60	150	500	160	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	600	190	10	1410	230	50	60	150	500	160	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	600	190	10	1410	230	50	60	150	500	160	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	600	190	10	1410	230	50	60	150	500	160	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	2.00	0.94	0.06
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	1600	1600	3200	1506	94
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.12	0.01	0.29	0.14	0.03	0.04	0.09	0.16	0.11	0.11
Crit Moves:	****				****					****	****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.741
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	90	700	40	50	1810	180	100	40	110	40	50	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	700	40	50	1810	180	100	40	110	40	50	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	700	40	50	1810	180	100	40	110	40	50	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	700	40	50	1810	180	100	40	110	40	50	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	700	40	50	1810	180	100	40	110	40	50	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.56	0.44
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	889	711
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.03	0.03	0.57	0.11	0.06	0.03	0.07	0.03	0.06	0.06
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	90	810	10	110	1640	90	50	50	90	20	60	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	810	10	110	1640	90	50	50	90	20	60	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	810	10	110	1640	90	50	50	90	20	60	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	810	10	110	1640	90	50	50	90	20	60	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	810	10	110	1640	90	50	50	90	20	60	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.90	0.10	0.50	0.50	1.00	0.13	0.40	0.47
Final Sat.:	1600	3161	39	1600	3034	166	800	800	1600	213	640	747
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.07	0.54	0.54	0.03	0.06	0.06	0.01	0.09	0.09
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	80	910	20	50	1520	70	40	30	60	30	40	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	910	20	50	1520	70	40	30	60	30	40	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	910	20	50	1520	70	40	30	60	30	40	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	910	20	50	1520	70	40	30	60	30	40	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	910	20	50	1520	70	40	30	60	30	40	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.91	0.09	0.31	0.23	0.46	0.23	0.31	0.46
Final Sat.:	1600	3131	69	1600	3059	141	492	369	738	369	492	738
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.29	0.03	0.50	0.50	0.03	0.08	0.08	0.02	0.08	0.08
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	730	30	130	1300	90	60	90	60	30	180	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	730	30	130	1300	90	60	90	60	30	180	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	730	30	130	1300	90	60	90	60	30	180	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	730	30	130	1300	90	60	90	60	30	180	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	730	30	130	1300	90	60	90	60	30	180	250
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.92	0.08	1.00	1.87	0.13	1.00	0.60	0.40	1.00	1.00	1.00
Final Sat.:	1600	3074	126	1600	2993	207	1600	960	640	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.24	0.24	0.08	0.43	0.43	0.04	0.09	0.09	0.02	0.11	0.16
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	290	470	60	210	630	380	270	550	220	100	650	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	290	470	60	210	630	380	270	550	220	100	650	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	290	470	60	210	630	380	270	550	220	100	650	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	290	470	60	210	630	380	270	550	220	100	650	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	290	470	60	210	630	380	270	550	220	100	650	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.77	0.23	2.00	1.25	0.75	2.00	1.43	0.57	1.00	1.76	0.24
Final Sat.:	3200	2838	362	3200	1996	1204	3200	2286	914	1600	2811	389
Capacity Analysis Module:												
Vol/Sat:	0.09	0.17	0.17	0.07	0.32	0.32	0.08	0.24	0.24	0.06	0.23	0.23
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.572
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	0	4	0	1	0	0	1	0	1	1	0	1	0	0
Volume Module:												
Base Vol:	0	0	0	250	2500	0	0	10	10	280	10	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	250	2500	0	0	10	10	280	10	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	250	2500	0	0	10	10	280	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	250	2500	0	0	10	10	280	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	250	2500	0	0	10	10	280	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.39	0.00	0.00	0.01	0.01	0.17	0.01	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.381
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	30	400	120	0	0	0	60	190	0	10	250	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	400	120	0	0	0	60	190	0	10	250	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	400	120	0	0	0	60	190	0	10	250	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	400	120	0	0	0	60	190	0	10	250	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	400	120	0	0	0	60	190	0	10	250	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.54	0.46	0.00	0.00	0.00	2.00	1.00	0.00	0.03	0.78	0.19
Final Sat.:	1600	2462	738	0	0	0	3200	1600	0	50	1250	300
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.16	0.00	0.00	0.00	0.02	0.12	0.00	0.01	0.20	0.20
Crit Moves:	****						****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.441
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0	0 3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	340	1290	1180	0	620	80	100	340	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	340	1290	1180	0	620	80	100	340	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	340	1290	0	0	620	80	100	340	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	340	1290	0	0	620	80	100	340	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	340	1290	0	0	620	80	100	340	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.54	0.46	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	5669	731	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.27	0.00	0.00	0.11	0.11	0.06	0.11	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.515
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	0	0	2	0	2	0	0	1
Volume Module:												
Base Vol:	150	760	120	0	0	0	560	410	0	0	300	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	760	120	0	0	0	560	410	0	0	300	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	760	120	0	0	0	560	410	0	0	300	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	760	120	0	0	0	560	410	0	0	300	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	760	120	0	0	0	560	410	0	0	300	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.44	2.21	0.35	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	699	3542	559	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.00	0.00	0.00	0.17	0.13	0.00	0.00	0.09	0.13
Crit Moves:	****						****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.694
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	50	460	90	120	690	370	140	490	30	50	700	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	460	90	120	690	370	140	490	30	50	700	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	460	90	120	690	370	140	490	30	50	700	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	460	90	120	690	370	140	490	30	50	700	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	460	90	120	690	370	140	490	30	50	700	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.67	0.33	1.00	1.30	0.70	1.00	2.00	1.00	1.00	1.79	0.21
Final Sat.:	1600	2676	524	1600	2083	1117	1600	3200	1600	1600	2872	328
Capacity Analysis Module:												
Vol/Sat:	0.03	0.17	0.17	0.08	0.33	0.33	0.09	0.15	0.02	0.03	0.24	0.24
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.554
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0	1 0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	110	180	180	600	100	100	30	1100	70	40	600	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	180	180	600	100	100	30	1100	70	40	600	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	180	180	600	100	100	30	1100	70	40	600	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	180	180	600	100	100	30	1100	70	40	600	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	180	180	600	100	100	30	1100	70	40	600	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	0.50	0.50	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	800	800	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.19	0.13	0.13	0.02	0.23	0.04	0.03	0.13	0.08
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.417
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 2	0	0 0	0 0	0	0 4	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	0	230	0	0	0	0	2210	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	230	0	0	0	0	2210	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	230	0	0	0	0	2210	150	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	230	0	0	0	0	2210	150	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	230	0	0	0	0	2210	150	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.35	0.09	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.502
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	1 0	1	0 3	0 1	1	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	40	1530	0	0	1900	90	260	0	130	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	1530	0	0	1900	90	260	0	130	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	40	1530	0	0	1900	0	260	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1530	0	0	1900	0	260	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	40	1530	0	0	1900	0	260	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	3.00	1.00	2.00	0.00	1.00	0.00	1.00	0.00
Final Sat.:	1600	4800	0	1600	4800	1600	3200	0	1600	0	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.00	0.00	0.40	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.531
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	60	1750	60	40	1860	60	80	10	150	20	10	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1750	60	40	1860	60	80	10	150	20	10	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1750	60	40	1860	60	80	10	150	20	10	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1750	60	40	1860	60	80	10	150	20	10	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1750	60	40	1860	60	80	10	150	20	10	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.87	0.13	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6188	212	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.28	0.28	0.03	0.39	0.04	0.03	0.01	0.09	0.01	0.01	0.06
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.571
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	40	1660	330	160	1650	370	200	90	20	250	120	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	1660	330	160	1650	370	200	90	20	250	120	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	40	1660	330	160	1650	370	200	90	20	250	120	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1660	330	160	1650	370	200	90	20	250	120	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	40	1660	330	160	1650	370	200	90	20	250	120	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.29	0.58	0.13	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2065	929	206	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.35	0.21	0.05	0.34	0.23	0.10	0.10	0.10	0.08	0.08	0.00
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.503
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1640	190	100	1530	80	40	0	20	210	0	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1640	190	100	1530	80	40	0	20	210	0	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1640	190	100	1530	80	40	0	20	210	0	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1640	190	100	1530	80	40	0	20	210	0	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1640	190	100	1530	80	40	0	20	210	0	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.69	0.31	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4302	498	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.38	0.38	0.03	0.32	0.05	0.03	0.00	0.01	0.07	0.00	0.04
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2	1 0		1 0 3	0 1		1 1 1	0 1		1 1 1	0 1	
Volume Module:												
Base Vol:	330	1830	320	40	1420	80	110	240	280	170	190	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	330	1830	320	40	1420	80	110	240	280	170	190	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	330	1830	320	40	1420	80	110	240	280	170	190	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	330	1830	320	40	1420	80	110	240	280	170	190	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	330	1830	320	40	1420	80	110	240	280	170	190	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.55	0.45	1.00	3.00	1.00	1.00	2.00	1.00	1.42	1.58	1.00
Final Sat.:	3200	4086	714	1600	4800	1600	1600	3200	1600	2267	2533	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.45	0.45	0.03	0.30	0.05	0.07	0.08	0.17	0.07	0.08	0.02
Crit Moves:		****		****					****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Ignore				Ovl				Ignore				Ovl			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 4	0	1	2	0 4	0	1	2	0 2	0	1	2	0 2	0	1
Volume Module:																
Base Vol:	140	2350	170		140	2470	220		230	220	100		310	220	140	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	140	2350	170		140	2470	220		230	220	100		310	220	140	
User Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Volume:	140	2350	0		140	2470	220		230	220	0		310	220	140	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	140	2350	0		140	2470	220		230	220	0		310	220	140	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
FinalVolume:	140	2350	0		140	2470	220		230	220	0		310	220	140	
OvlAdjVol:							105								70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	4.00	1.00		2.00	4.00	1.00		2.00	2.00	1.00		2.00	2.00	1.00	
Final Sat.:	3200	6400	1600		3200	6400	1600		3200	3200	1600		3200	3200	1600	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.37	0.00		0.04	0.39	0.14		0.07	0.07	0.00		0.10	0.07	0.09	
OvlAdjV/S:							0.07								0.04	
Crit Moves:	****					****				****			****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.848
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	150	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	90	2030	530	1120	2310	50	40	350	50	230	280	660
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	2030	530	1120	2310	50	40	350	50	230	280	660
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	90	2030	0	1120	2310	0	40	350	50	230	280	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	2030	0	1120	2310	0	40	350	50	230	280	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	90	2030	0	1120	2310	0	40	350	50	230	280	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.00	0.35	0.36	0.00	0.01	0.11	0.03	0.07	0.09	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.662
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	150	840	10		30	950	280		190	60	80		40	290	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	150	840	10		30	950	280		190	60	80		40	290	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	150	840	10		30	950	280		190	60	80		40	290	70	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	150	840	10		30	950	280		190	60	80		40	290	70	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	150	840	10		30	950	280		190	60	80		40	290	70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.98	0.02		1.00	1.54	0.46		1.00	1.00	1.00		1.00	1.61	0.39	
Final Sat.:	3200	3162	38		1600	2472	728		1600	1600	1600		1600	2578	622	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.27	0.27		0.02	0.38	0.38		0.12	0.04	0.05		0.03	0.11	0.11	
Crit Moves:	****					****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.625
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	290	630	20		20	530	390		360	80	90		50	360	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	290	630	20		20	530	390		360	80	90		50	360	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	290	630	20		20	530	390		360	80	90		50	360	70	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	290	630	20		20	530	390		360	80	90		50	360	70	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	290	630	20		20	530	390		360	80	90		50	360	70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.94	0.06		1.00	1.15	0.85		2.00	1.00	1.00		1.00	1.67	0.33	
Final Sat.:	3200	3102	98		1600	1843	1357		3200	1600	1600		1600	2679	521	
Capacity Analysis Module:																
Vol/Sat:	0.09	0.20	0.20		0.01	0.29	0.29		0.11	0.05	0.06		0.03	0.13	0.13	
Crit Moves:	****				****				****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.623
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Ignore			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0 2	0 2	0	0 3	0 1
Volume Module:												
Base Vol:	740	0	300	0	0	0	0	800	810	0	1810	1090
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	740	0	300	0	0	0	0	800	810	0	1810	1090
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	740	0	0	0	0	0	0	800	0	0	1810	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	740	0	0	0	0	0	0	800	0	0	1810	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	740	0	0	0	0	0	0	800	0	0	1810	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	3.00	1.00
Final Sat.:	3400	0	1700	0	0	0	0	3400	3400	0	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.35	0.00
Crit Moves:	****						****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	79	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	430	1780	360	370	460	110	200	800	60	150	910	600
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	430	1780	360	370	460	110	200	800	60	150	910	600
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	430	1780	360	370	460	110	200	800	60	150	910	600
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	430	1780	360	370	460	110	200	800	60	150	910	600
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	430	1780	360	370	460	110	200	800	60	150	910	600
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.33	0.67	2.00	3.23	0.77	2.00	3.72	0.28	2.00	4.00	1.00
Final Sat.:	3400	5656	1144	3400	5488	1312	3400	6326	474	3400	6800	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.31	0.31	0.11	0.08	0.08	0.06	0.13	0.13	0.04	0.13	0.35
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.795
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	2	0 1	2 0	1	0 1
Volume Module:												
Base Vol:	30	1950	260	120	690	10	50	190	100	500	100	360
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	1950	260	120	690	10	50	190	100	500	100	360
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	1950	260	120	690	10	50	190	100	500	100	360
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	1950	260	120	690	10	50	190	100	500	100	360
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	1950	260	120	690	10	50	190	100	500	100	360
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.65	0.35	1.00	2.96	0.04	1.00	2.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	4500	600	1700	5027	73	1700	3400	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.02	0.43	0.43	0.07	0.14	0.14	0.03	0.06	0.06	0.15	0.06	0.21
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.756
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	130	1950	280	50	1220	30	90	120	300	450	60	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1950	280	50	1220	30	90	120	300	450	60	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1950	280	50	1220	30	90	120	300	450	60	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1950	280	50	1220	30	90	120	300	450	60	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1950	280	50	1220	30	90	120	300	450	60	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.93	0.07	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	3400	5100	1700	3400	4978	122	1700	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.38	0.16	0.01	0.25	0.25	0.05	0.07	0.18	0.13	0.04	0.11
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.895
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2 0	2	1 0	2	1 0	2 0	3 0	1
Volume Module:												
Base Vol:	440	890	440	30	140	250	490	1240	90	150	800	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	890	440	30	140	250	490	1240	90	150	800	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	440	890	440	30	140	250	490	1240	90	150	800	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	890	440	30	140	250	490	1240	90	150	800	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	440	890	440	30	140	250	490	1240	90	150	800	60
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.34	0.66	2.00	2.00	2.00	1.00	2.80	0.20	2.00	3.00	1.00
Final Sat.:	3400	2275	1125	3400	3400	3400	1700	4755	345	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.39	0.39	0.01	0.04	0.07	0.29	0.26	0.26	0.04	0.16	0.04
OvlAdjV/S:						0.00						
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.894
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	90	1370	330	90	350	80	100	760	90	70	480	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1370	330	90	350	80	100	760	90	70	480	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1370	330	90	350	80	100	760	90	70	480	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1370	330	90	350	80	100	760	90	70	480	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	1370	330	90	350	80	100	760	90	70	480	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.61	0.39	1.00	1.63	0.37	1.00	1.79	0.21	1.00	1.78	0.22
Final Sat.:	1700	2740	660	1700	2767	633	1700	3040	360	1700	3022	378
Capacity Analysis Module:												
Vol/Sat:	0.05	0.50	0.50	0.05	0.13	0.13	0.06	0.25	0.25	0.04	0.16	0.16
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.787
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	280	1050	360	130	330	210	470	1350	100	120	930	160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	1050	360	130	330	210	470	1350	100	120	930	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	280	1050	360	130	330	210	470	1350	0	120	930	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	1050	360	130	330	210	470	1350	0	120	930	160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	280	1050	360	130	330	210	470	1350	0	120	930	160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.56	0.44
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4351	749
Capacity Analysis Module:												
Vol/Sat:	0.08	0.31	0.21	0.08	0.10	0.12	0.14	0.26	0.00	0.04	0.21	0.21
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.901
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	87	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 1	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	400	3000	190	330	1330	370	950	690	250	160	610	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	400	3000	190	330	1330	370	950	690	250	160	610	520
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	400	3000	0	330	1330	0	950	690	250	160	610	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	400	3000	0	330	1330	0	950	690	250	160	610	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	400	3000	0	330	1330	0	950	690	250	160	610	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.90	2.10	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	4924	3576	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.12	0.44	0.00	0.10	0.20	0.00	0.19	0.19	0.15	0.05	0.12	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.819
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 4	0	1	2	0 3	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	190	2880	260		280	1340	190		420	760	250		220	390	200	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	190	2880	260		280	1340	190		420	760	250		220	390	200	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	190	2880	260		280	1340	190		420	760	250		220	390	200	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	190	2880	260		280	1340	190		420	760	250		220	390	200	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	190	2880	260		280	1340	190		420	760	250		220	390	200	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	4.00	1.00		2.00	3.50	0.50		2.00	2.26	0.74		2.00	2.00	1.00	
Final Sat.:	3400	6800	1700		3400	5956	844		3400	3838	1262		3400	3400	1700	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.42	0.15		0.08	0.22	0.23		0.12	0.20	0.20		0.06	0.11	0.12	
Crit Moves:		****				****					****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	100	3000	40	30	1780	70	240	210	190	40	40	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	3000	40	30	1780	70	240	210	190	40	40	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	3000	40	30	1780	70	240	210	190	40	40	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	3000	40	30	1780	70	240	210	190	40	40	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	3000	40	30	1780	70	240	210	190	40	40	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.95	0.05	2.00	3.85	0.15	1.00	1.05	0.95	1.00	1.14	0.86
Final Sat.:	3400	6711	89	3400	6543	257	1700	1785	1615	1700	1943	1457
Capacity Analysis Module:												
Vol/Sat:	0.03	0.45	0.45	0.01	0.27	0.27	0.14	0.12	0.12	0.02	0.02	0.02
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.856
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	350	2330	580	250	1570	210	550	1240	720	500	540	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	2330	580	250	1570	210	550	1240	720	500	540	330
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	350	2330	0	250	1570	210	550	1240	0	500	540	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	2330	0	250	1570	210	550	1240	0	500	540	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	350	2330	0	250	1570	210	550	1240	0	500	540	0
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.10	0.34	0.00	0.07	0.23	0.12	0.16	0.24	0.00	0.15	0.11	0.00
OvlAdjV/S:						0.00						
Crit Moves:	****			****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.838
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	2 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	50	900	80	280	540	160	490	960	130	90	300	160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	900	80	280	540	160	490	960	130	90	300	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	50	900	80	280	540	160	490	960	0	90	300	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	900	80	280	540	160	490	960	0	90	300	160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	50	900	80	280	540	160	490	960	0	90	300	160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.84	0.16	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.30	0.70
Final Sat.:	1700	3122	278	1700	3400	1700	3400	3400	1700	1700	2217	1183
Capacity Analysis Module:												
Vol/Sat:	0.03	0.29	0.29	0.16	0.16	0.09	0.14	0.28	0.00	0.05	0.14	0.14
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Scenario Report

Scenario:	2016+P-AM (10.8)
Command:	2016+P-AM
Volume:	2016+P-AM
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2016+P-AM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	A	xxxxx	0.598	A	xxxxx	0.598	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.685	B	xxxxx	0.685	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.604	B	xxxxx	0.604	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	C	xxxxx	0.724	C	xxxxx	0.724	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	A	xxxxx	0.566	A	xxxxx	0.566	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.393	A	xxxxx	0.393	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	B	xxxxx	0.687	B	xxxxx	0.687	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	D	xxxxx	0.896	D	xxxxx	0.896	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	B	xxxxx	0.693	B	xxxxx	0.693	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	A	xxxxx	0.597	A	xxxxx	0.597	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	B	xxxxx	0.668	B	xxxxx	0.668	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.517	A	xxxxx	0.517	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.629	B	xxxxx	0.629	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	A	xxxxx	0.532	A	xxxxx	0.532	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	A	xxxxx	0.407	A	xxxxx	0.407	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.519	A	xxxxx	0.519	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	B	xxxxx	0.626	B	xxxxx	0.626	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	C	xxxxx	0.716	C	xxxxx	0.716	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	A	xxxxx	0.598	A	xxxxx	0.598	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.416	A	xxxxx	0.416	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	B	xxxxx	0.633	B	xxxxx	0.633	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.721	C	xxxxx	0.721	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.516	A	xxxxx	0.516	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.525	A	xxxxx	0.525	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	C	23.4	0.801	C	23.4	0.801	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.385	A	xxxxx	0.385	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	B	xxxxx	0.678	B	xxxxx	0.678	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	B	xxxxx	0.650	B	xxxxx	0.650	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	A	xxxxx	0.516	A	xxxxx	0.516	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	A	xxxxx	0.550	A	xxxxx	0.550	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	A	xxxxx	0.572	A	xxxxx	0.572	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	A	xxxxx	0.233	A	xxxxx	0.233	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.459	A	xxxxx	0.459	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.325	A	xxxxx	0.325	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	D	xxxxx	0.838	D	xxxxx	0.838	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	A	xxxxx	0.553	A	xxxxx	0.553	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	A	xxxxx	0.594	A	xxxxx	0.594	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.406	A	xxxxx	0.406	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.519	A	xxxxx	0.519	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.449	A	xxxxx	0.449	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	A	xxxxx	0.564	A	xxxxx	0.564	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.484	A	xxxxx	0.484	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	D	xxxxx	0.844	D	xxxxx	0.844	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	B	xxxxx	0.603	B	xxxxx	0.603	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	C	xxxxx	0.770	C	xxxxx	0.770	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	A	xxxxx	0.563	A	xxxxx	0.563	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	A	xxxxx	0.446	A	xxxxx	0.446	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	C	xxxxx	0.768	C	xxxxx	0.768	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 49 RED HILL AVE/DYER RD	A	xxxxx	0.532	A	xxxxx	0.532	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	B	xxxxx	0.615	B	xxxxx	0.615	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	A	xxxxx	0.465	A	xxxxx	0.465	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	C	xxxxx	0.739	C	xxxxx	0.739	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	C	xxxxx	0.782	C	xxxxx	0.782	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	B	xxxxx	0.631	B	xxxxx	0.631	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	C	xxxxx	0.755	C	xxxxx	0.755	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.802	D	xxxxx	0.802	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	B	xxxxx	0.663	B	xxxxx	0.663	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	C	xxxxx	0.775	C	xxxxx	0.775	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	B	xxxxx	0.676	B	xxxxx	0.676	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	710	990	1260	480	620	70	60	890	450	250	580	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	710	990	1260	480	620	70	60	890	450	250	580	200
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	710	990	0	480	620	70	60	890	450	250	580	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	710	990	0	480	620	70	60	890	450	250	580	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	710	990	0	480	620	70	60	890	450	250	580	0
OvlAdjVol:									95			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.21	0.15	0.00	0.14	0.09	0.04	0.04	0.17	0.26	0.07	0.11	0.00
OvlAdjV/S:									0.06			
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.685
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1940	310	150	1130	0	0	0	0	830	0	990
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1940	310	150	1130	0	0	0	0	830	0	990
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.52
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1940	310	150	1130	0	0	0	0	830	0	519
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1940	310	150	1130	0	0	0	0	830	0	519
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1940	310	150	1130	0	0	0	0	830	0	519
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.09	0.04	0.17	0.00	0.00	0.00	0.00	0.24	0.00	0.31
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.604
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	1210	360	150	1460	370	0	0	0	1130	160	1060
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1210	360	150	1460	370	0	0	0	1130	160	1060
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	1210	360	150	1460	370	0	0	0	1130	160	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1210	360	150	1460	370	0	0	0	1130	160	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	1210	360	150	1460	370	0	0	0	1130	160	0
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.21	0.04	0.21	0.22	0.00	0.00	0.00	0.33	0.09	0.00
OvlAdjV/S:			0.00									
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.724
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	150	1000	280	1040	1450	20	330	110	90	80	80	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1000	280	1040	1450	20	330	110	90	80	80	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1000	280	1040	1450	20	330	110	90	80	80	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1000	280	1040	1450	20	330	110	90	80	80	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1000	280	1040	1450	20	330	110	90	80	80	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.95	0.05	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6707	93	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.16	0.31	0.22	0.22	0.10	0.06	0.05	0.02	0.05	0.11
Crit Moves:			****	****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.566
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	1 0	4 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	60	770	70	280	900	240	620	1040	100	50	210	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	770	70	280	900	240	620	1040	100	50	210	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	60	770	70	280	900	240	620	1040	100	50	210	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	770	70	280	900	240	620	1040	100	50	210	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	60	770	70	280	900	240	620	1040	100	50	210	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	1.00	4.00	1.00	2.00	2.74	0.26	2.00	3.00	1.00
Final Sat.:	1700	6800	1700	1700	6800	1700	3400	4653	447	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.04	0.16	0.13	0.14	0.18	0.22	0.22	0.01	0.04	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.393
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	50	760	110	100	670	210	130	330	60	40	150	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	760	110	100	670	210	130	330	60	40	150	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	50	760	110	100	670	210	130	330	60	40	150	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	760	110	100	670	210	130	330	60	40	150	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	50	760	110	100	670	210	130	330	60	40	150	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.05	0.95	1.00	1.65	0.35	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	4873	1527	1600	2643	557	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.16	0.07	0.06	0.14	0.14	0.08	0.12	0.11	0.03	0.05	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.687
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 2	0	0 0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	2050	0	0	2050	1190	0	0	0	1200	0	670
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2050	0	0	2050	1190	0	0	0	1200	0	670
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2050	0	0	2050	0	0	0	0	1200	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2050	0	0	2050	0	0	0	0	1200	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2050	0	0	2050	0	0	0	0	1200	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.24	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.896
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 1	1	0 1!	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	850	0	0	3020	240	1210	0	1520	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	850	0	0	3020	240	1210	0	1520	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	850	0	0	3020	0	1210	0	1520	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	850	0	0	3020	0	1210	0	1520	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	850	0	0	3020	0	1210	0	1520	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	1.77	0.00	2.23	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	3014	0	3786	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.00	0.00	0.44	0.00	0.40	0.00	0.40	0.00	0.00	0.00
Crit Moves:	****				****		****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.693
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	210	1330	280	990	2130	1370	160	130	30	190	370	400
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	1330	280	990	2130	1370	160	130	30	190	370	400
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	210	1330	280	990	2130	0	160	130	30	190	370	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	1330	280	990	2130	0	160	130	30	190	370	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	210	1330	280	990	2130	0	160	130	30	190	370	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.62	0.38	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2763	638	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.16	0.29	0.31	0.00	0.05	0.05	0.05	0.06	0.11	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.597
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	110	1340	100	200	1620	180	130	170	40	380	390	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1340	100	200	1620	180	130	170	40	380	390	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	110	1340	100	200	1620	180	130	170	0	380	390	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1340	100	200	1620	180	130	170	0	380	390	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	110	1340	100	200	1620	180	130	170	0	380	390	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.72	0.28	2.00	2.70	0.30	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	6328	472	3400	4590	510	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.21	0.21	0.06	0.35	0.35	0.04	0.05	0.00	0.11	0.11	0.05
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	90	340	180	180	1340	530	340	620	140	390	970	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	340	180	180	1340	530	340	620	140	390	970	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	90	340	180	180	1340	530	340	620	0	390	970	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	340	180	180	1340	530	340	620	0	390	970	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	90	340	180	180	1340	530	340	620	0	390	970	210
OvlAdjVol:												150
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.07	0.11	0.04	0.28	0.33	0.11	0.13	0.00	0.12	0.20	0.13
OvlAdjV/S:												0.09
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.517
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 3	1 1	0	0 0	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	710	2480	0	0	570	320	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	710	2480	0	0	570	320	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	710	2480	0	0	570	320	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	710	2480	0	0	570	320	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	710	2480	0	0	570	320	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.20	1.80	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	5124	2876	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.52	0.00	0.00	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.629
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 1	0	0 0	4 0	0	1 1	1 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	1960	50	0	560	0	1210	410	1160	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1960	50	0	560	0	1210	410	1160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1960	50	0	560	0	1210	410	1160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1960	50	0	560	0	1210	410	1160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1960	50	0	560	0	1210	410	1160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.88	0.12	0.00	4.00	0.00	2.00	1.00	2.00	0.00	0.00	0.00
Final Sat.:	0	7801	199	0	6400	0	3200	1600	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.00	0.09	0.00	0.38	0.26	0.36	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.532
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	70	700	120	170	700	150	110	260	40	150	370	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	700	120	170	700	150	110	260	40	150	370	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	70	700	120	170	700	150	110	260	40	150	370	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	700	120	170	700	150	110	260	40	150	370	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	70	700	120	170	700	150	110	260	40	150	370	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.65	0.35	1.00	1.73	0.27	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2800	600	1700	2947	453	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.21	0.07	0.10	0.25	0.25	0.06	0.09	0.09	0.09	0.11	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.407
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	0 0	0	2	0 0	0	0 0
Volume Module:												
Base Vol:	320	1630	0	0	430	70	0	0	330	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	320	1630	0	0	430	70	0	0	330	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	320	0	0	0	430	70	0	0	330	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	320	0	0	0	430	70	0	0	330	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	320	0	0	0	430	70	0	0	330	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.58	0.42	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4128	672	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.20	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.10	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.519
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	0 0	1!	0 0	1 0	0	1 0
Volume Module:												
Base Vol:	30	2140	110	50	530	10	10	0	10	20	0	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	2140	110	50	530	10	10	0	10	20	0	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	2140	110	50	530	10	10	0	10	20	0	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	2140	110	50	530	10	10	0	10	20	0	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	2140	110	50	530	10	10	0	10	20	0	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.85	0.15	1.00	2.94	0.06	0.50	0.00	0.50	1.00	0.00	1.00
Final Sat.:	1600	4565	235	1600	4711	89	800	0	800	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.47	0.47	0.03	0.11	0.11	0.01	0.00	0.01	0.01	0.00	0.01
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	4 0	2	0 0	0 0	0	1 0	3 1	0
Volume Module:												
Base Vol:	510	2120	0	0	270	280	0	0	0	170	1010	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	510	2120	0	0	270	280	0	0	0	170	1010	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	510	2120	0	0	270	280	0	0	0	170	1010	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	510	2120	0	0	270	280	0	0	0	170	1010	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	510	2120	0	0	270	280	0	0	0	170	1010	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	1.00	3.42	0.58
Final Sat.:	3200	4800	0	0	6400	3200	0	0	0	1600	5478	922
Capacity Analysis Module:												
Vol/Sat:	0.16	0.44	0.00	0.00	0.04	0.09	0.00	0.00	0.00	0.11	0.18	0.18
Crit Moves:		****									****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.716
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 1	0	1 0	3 0	0	1 1	2 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	1170	230	90	340	0	1450	1650	460	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1170	230	90	340	0	1450	1650	460	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1170	230	90	340	0	1450	1650	460	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1170	230	90	340	0	1450	1650	460	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1170	230	90	340	0	1450	1650	460	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.18	0.82	1.00	3.00	0.00	1.87	2.13	2.00	0.00	0.00	0.00
Final Sat.:	0	6686	1314	1600	4800	0	2994	3406	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.18	0.06	0.07	0.00	0.48	0.48	0.14	0.00	0.00	0.00
Crit Moves:			****	****			****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	100	1020	0	0	110	130	0	0	0	320	1110	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	1020	0	0	110	130	0	0	0	320	1110	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	1020	0	0	110	130	0	0	0	320	1110	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	1020	0	0	110	130	0	0	0	320	1110	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	1020	0	0	110	130	0	0	0	320	1110	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.83	2.17	0.00	0.00	0.00	1.00	3.49	0.51
Final Sat.:	3200	3200	0	0	2933	3467	0	0	0	1600	5576	824
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.20	0.20	0.28
Crit Moves:		****										****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.416
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2	0 2	0 0	1 1	2	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	330	270	120	280	0	810	1010	200	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	330	270	120	280	0	810	1010	200	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	330	270	120	280	0	810	1010	200	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	330	270	120	280	0	810	1010	200	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	330	270	120	280	0	810	1010	200	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.20	1.80	2.00	2.00	0.00	1.78	2.72	0.50	0.00	0.00	0.00
Final Sat.:	0	3520	2880	3200	3200	0	2848	4358	793	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.09	0.09	0.04	0.09	0.00	0.28	0.23	0.25	0.00	0.00	0.00
Crit Moves:		****		****			****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.633
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	90	680	20	360	720	430	930	900	150	50	340	600
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	680	20	360	720	430	930	900	150	50	340	600
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	90	680	20	360	720	0	930	900	150	50	340	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	680	20	360	720	0	930	900	150	50	340	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	90	680	20	360	720	0	930	900	150	50	340	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.91	0.09	2.00	3.00	1.00	2.00	2.57	0.43	1.00	3.00	1.00
Final Sat.:	3400	4954	146	3400	5100	1700	3400	4371	729	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.14	0.11	0.14	0.00	0.27	0.21	0.21	0.03	0.07	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.721
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 2	0	1	2	0 1	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	210	370	80		110	1010	210		170	680	370		110	340	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	210	370	80		110	1010	210		170	680	370		110	340	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	210	370	80		110	1010	210		170	680	370		110	340	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	210	370	80		110	1010	210		170	680	370		110	340	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	210	370	80		110	1010	210		170	680	370		110	340	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	2.00	1.00		2.00	1.66	0.34		2.00	2.00	1.00		2.00	2.17	0.83	
Final Sat.:	3400	3400	1700		3400	2815	585		3400	3400	1700		3400	3689	1411	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.11	0.05		0.03	0.36	0.36		0.05	0.20	0.22		0.03	0.09	0.09	
Crit Moves:	****					****					****	****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.516
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	130	480	150	250	150	70	400	830	80	90	460	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	480	150	250	150	70	400	830	80	90	460	520
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	480	150	250	150	70	400	830	80	90	460	520
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	480	150	250	150	70	400	830	80	90	460	520
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	480	150	250	150	70	400	830	80	90	460	520
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	2.00	2.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	3200	3200
Capacity Analysis Module:												
Vol/Sat:	0.04	0.15	0.09	0.08	0.05	0.04	0.13	0.17	0.05	0.03	0.14	0.16
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	390	50	50	170	40	170	280	40	30	90	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	390	50	50	170	40	170	280	40	30	90	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	390	50	50	170	40	170	280	40	30	90	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	390	50	50	170	40	170	280	40	30	90	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	390	50	50	170	40	170	280	40	30	90	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.89	0.11	1.00	1.00	1.00	1.00	0.88	0.12	1.00	0.50	0.50
Final Sat.:	1600	1418	182	1600	1600	1600	1600	1400	200	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.27	0.28	0.03	0.11	0.03	0.11	0.20	0.20	0.02	0.11	0.11
Crit Moves:			****	****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.801
Loss Time (sec):	0	Average Delay (sec/veh):	23.4
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	80	280	60	80	150	60	80	270	50	10	130	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	280	60	80	150	60	80	270	50	10	130	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	280	60	80	150	60	80	270	50	10	130	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	280	60	80	150	60	80	270	50	10	130	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	280	60	80	150	60	80	270	50	10	130	90
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.19	0.67	0.14	0.27	0.52	0.21	0.20	0.67	0.13	0.04	0.57	0.39
Final Sat.:	100	350	75	131	246	98	103	347	64	20	254	176
Capacity Analysis Module:												
Vol/Sat:	0.80	0.80	0.80	0.61	0.61	0.61	0.78	0.78	0.78	0.51	0.51	0.51
Crit Moves:	****			****					****		****	
Delay/Veh:	28.4	28.4	28.4	18.2	18.2	18.2	26.6	26.6	26.6	15.4	15.4	15.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.4	28.4	28.4	18.2	18.2	18.2	26.6	26.6	26.6	15.4	15.4	15.4
LOS by Move:	D	D	D	C	C	C	D	D	D	C	C	C
ApproachDel:	28.4			18.2			26.6			15.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	28.4			18.2			26.6			15.4		
LOS by Appr:	D			C			D			C		
AllWayAvgQ:	2.7	2.7	2.7	1.1	1.1	1.1	2.4	2.4	2.4	0.7	0.7	0.7

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.385
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	90	1220	370	10	560	40	150	170	100	130	30	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1220	370	10	560	40	150	170	100	130	30	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1220	370	10	560	40	150	170	100	130	30	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1220	370	10	560	40	150	170	100	130	30	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	1220	370	10	560	40	150	170	100	130	30	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.26	0.74	2.00	0.75	0.25
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	2015	1185	3200	1200	400
Capacity Analysis Module:												
Vol/Sat:	0.06	0.25	0.23	0.01	0.12	0.03	0.09	0.08	0.08	0.04	0.03	0.03
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	110	1430	40	80	610	100	230	70	120	30	30	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1430	40	80	610	100	230	70	120	30	30	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1430	40	80	610	100	230	70	120	30	30	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1430	40	80	610	100	230	70	120	30	30	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1430	40	80	610	100	230	70	120	30	30	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.07	0.45	0.03	0.05	0.19	0.06	0.14	0.04	0.08	0.02	0.04	0.04
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.650
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	60	1250	10	70	830	40	140	50	110	20	50	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1250	10	70	830	40	140	50	110	20	50	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1250	10	70	830	40	140	50	110	20	50	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1250	10	70	830	40	140	50	110	20	50	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1250	10	70	830	40	140	50	110	20	50	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.91	0.09	0.74	0.26	1.00	0.10	0.25	0.65
Final Sat.:	1600	3175	25	1600	3053	147	1179	421	1600	160	400	1040
Capacity Analysis Module:												
Vol/Sat:	0.04	0.39	0.39	0.04	0.27	0.27	0.09	0.12	0.07	0.01	0.13	0.13
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.516
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	60	1120	10	30	860	30	70	30	110	20	40	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1120	10	30	860	30	70	30	110	20	40	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1120	10	30	860	30	70	30	110	20	40	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1120	10	30	860	30	70	30	110	20	40	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1120	10	30	860	30	70	30	110	20	40	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.93	0.07	0.33	0.14	0.53	0.13	0.27	0.60
Final Sat.:	1600	3172	28	1600	3092	108	533	229	838	213	427	960
Capacity Analysis Module:												
Vol/Sat:	0.04	0.35	0.35	0.02	0.28	0.28	0.04	0.13	0.13	0.01	0.09	0.09
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.550
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	1 0	1
Volume Module:												
Base Vol:	60	880	20	140	850	30	70	110	50	20	80	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	880	20	140	850	30	70	110	50	20	80	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	880	20	140	850	30	70	110	50	20	80	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	880	20	140	850	30	70	110	50	20	80	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	880	20	140	850	30	70	110	50	20	80	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.93	0.07	1.00	0.69	0.31	1.00	1.00	1.00
Final Sat.:	1600	3129	71	1600	3091	109	1600	1100	500	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.28	0.28	0.09	0.28	0.27	0.04	0.10	0.10	0.01	0.05	0.14
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.572
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	400	550	30	260	430	180	290	550	190	40	370	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	400	550	30	260	430	180	290	550	190	40	370	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	400	550	30	260	430	180	290	550	190	40	370	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	400	550	30	260	430	180	290	550	190	40	370	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	400	550	30	260	430	180	290	550	190	40	370	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.90	0.10	2.00	1.41	0.59	2.00	1.49	0.51	1.00	1.68	0.32
Final Sat.:	3200	3034	166	3200	2256	944	3200	2378	822	1600	2691	509
Capacity Analysis Module:												
Vol/Sat:	0.13	0.18	0.18	0.08	0.19	0.19	0.09	0.23	0.23	0.03	0.14	0.14
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.233
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	0	4	0	1	0	0	1	0	1	1	0	1	0	0
Volume Module:												
Base Vol:	0	0	0	250	1130	10	0	0	10	80	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	250	1130	10	0	0	10	80	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	250	1130	10	0	0	10	80	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	250	1130	10	0	0	10	80	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	250	1130	10	0	0	10	80	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.18	0.01	0.00	0.00	0.01	0.05	0.00	0.00
Crit Moves:					****				****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.459
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	10	870	240	0	0	0	100	150	0	0	70	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	870	240	0	0	0	100	150	0	0	70	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	870	240	0	0	0	100	150	0	0	70	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	870	240	0	0	0	100	150	0	0	70	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	870	240	0	0	0	100	150	0	0	70	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.57	0.43	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.54	0.46
Final Sat.:	1600	2508	692	0	0	0	3200	1600	0	0	862	738
Capacity Analysis Module:												
Vol/Sat:	0.01	0.35	0.35	0.00	0.00	0.00	0.03	0.09	0.00	0.00	0.08	0.08
Crit Moves:		****					****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.325
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0	0 3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	190	480	550	0	880	40	100	250	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	190	480	550	0	880	40	100	250	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	190	480	0	0	880	40	100	250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	190	480	0	0	880	40	100	250	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	190	480	0	0	880	40	100	250	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.83	0.17	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	6122	278	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.10	0.00	0.00	0.14	0.14	0.06	0.08	0.00
Crit Moves:				****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.838
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	114	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	0	0	2	0	2	0	0	2
Volume Module:												
Base Vol:	150	1580	160	0	0	0	760	310	0	0	220	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1580	160	0	0	0	760	310	0	0	220	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1580	160	0	0	0	760	310	0	0	220	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1580	160	0	0	0	760	310	0	0	220	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1580	160	0	0	0	760	310	0	0	220	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	2.51	0.25	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	381	4013	406	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.39	0.39	0.00	0.00	0.00	0.24	0.10	0.00	0.00	0.07	0.21
Crit Moves:	****						****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.553
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	30	570	50	50	380	90	330	450	70	90	290	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	570	50	50	380	90	330	450	70	90	290	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	570	50	50	380	90	330	450	70	90	290	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	570	50	50	380	90	330	450	70	90	290	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	570	50	50	380	90	330	450	70	90	290	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.62	0.38	1.00	2.00	1.00	1.00	1.49	0.51
Final Sat.:	1600	2942	258	1600	2587	613	1600	3200	1600	1600	2379	821
Capacity Analysis Module:												
Vol/Sat:	0.02	0.19	0.19	0.03	0.15	0.15	0.21	0.14	0.04	0.06	0.12	0.12
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0 1	0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	20	90	20	90	130	30	60	460	160	60	790	710
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	90	20	90	130	30	60	460	160	60	790	710
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	90	20	90	130	30	60	460	160	60	790	710
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	90	20	90	130	30	60	460	160	60	790	710
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	90	20	90	130	30	60	460	160	60	790	710
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	2.00	0.81	0.19	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	2618	582	3200	1300	300	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.03	0.10	0.10	0.04	0.10	0.10	0.04	0.16	0.44
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.406
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	2	0 0	0 0	0	0 0	4 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	0	70	0	0	0	0	2460	350	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	70	0	0	0	0	2460	350	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	70	0	0	0	0	2460	350	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	70	0	0	0	0	2460	350	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	70	0	0	0	0	2460	350	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.38	0.22	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.519
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	1	1 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	210	1320	10	10	1500	460	150	10	70	10	10	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	1320	10	10	1500	460	150	10	70	10	10	20
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	210	1320	10	10	1500	0	150	10	0	10	10	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	1320	10	10	1500	0	150	10	0	10	10	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	210	1320	10	10	1500	0	150	10	0	10	10	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	3.00	1.00	1.88	0.12	1.00	0.25	0.25	0.50
Final Sat.:	1600	4764	36	1600	4800	1600	3000	200	1600	400	400	800
Capacity Analysis Module:												
Vol/Sat:	0.13	0.28	0.28	0.01	0.31	0.00	0.05	0.05	0.00	0.03	0.03	0.03
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.449
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	120	1820	70	70	1450	130	50	10	110	20	10	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1820	70	70	1450	130	50	10	110	20	10	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1820	70	70	1450	130	50	10	110	20	10	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1820	70	70	1450	130	50	10	110	20	10	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1820	70	70	1450	130	50	10	110	20	10	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.85	0.15	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6163	237	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.30	0.04	0.30	0.08	0.02	0.01	0.07	0.01	0.01	0.06
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.564
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	30	1450	230	80	1520	170	300	90	10	330	50	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	1450	230	80	1520	170	300	90	10	330	50	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	30	1450	230	80	1520	170	300	90	10	330	50	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	1450	230	80	1520	170	300	90	10	330	50	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	30	1450	230	80	1520	170	300	90	10	330	50	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.50	0.45	0.05	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2400	720	80	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.30	0.14	0.03	0.32	0.11	0.13	0.13	0.13	0.10	0.03	0.00
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.484
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1430	160	110	1390	50	80	0	100	180	0	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1430	160	110	1390	50	80	0	100	180	0	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1430	160	110	1390	50	80	0	100	180	0	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1430	160	110	1390	50	80	0	100	180	0	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1430	160	110	1390	50	80	0	100	180	0	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.70	0.30	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4317	483	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.33	0.03	0.29	0.03	0.05	0.00	0.06	0.06	0.00	0.04
Crit Moves:		****		****					****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.844
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	146	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	430	1220	100	80	1470	150	190	290	400	170	490	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	430	1220	100	80	1470	150	190	290	400	170	490	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	430	1220	100	80	1470	150	190	290	400	170	490	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	430	1220	100	80	1470	150	190	290	400	170	490	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	430	1220	100	80	1470	150	190	290	400	170	490	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.77	0.23	1.00	3.00	1.00	1.19	1.81	1.00	1.00	2.00	1.00
Final Sat.:	3200	4436	364	1600	4800	1600	1900	2900	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.27	0.28	0.05	0.31	0.09	0.10	0.10	0.25	0.11	0.15	0.03
Crit Moves:	****				****				****		****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.603
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	210	2800	220	40	2170	280	200	180	130	310	200	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	2800	220	40	2170	280	200	180	130	310	200	110
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	210	2800	0	40	2170	280	200	180	0	310	200	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	2800	0	40	2170	280	200	180	0	310	200	110
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	210	2800	0	40	2170	280	200	180	0	310	200	110
OvlAdjVol:						180						90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.44	0.00	0.01	0.34	0.17	0.06	0.06	0.00	0.10	0.06	0.07
OvlAdjV/S:						0.11						0.06
Crit Moves:	****			****				****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.770
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	140	2010	120	580	2290	20	50	290	80	590	580	930
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	2010	120	580	2290	20	50	290	80	590	580	930
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	2010	0	580	2290	0	50	290	80	590	580	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	2010	0	580	2290	0	50	290	80	590	580	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	2010	0	580	2290	0	50	290	80	590	580	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.00	0.18	0.36	0.00	0.02	0.09	0.05	0.18	0.18	0.00
Crit Moves:		****			****				****		****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.563
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	90	1080	30		60	450	100		250	310	120		10	60	10	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	1080	30		60	450	100		250	310	120		10	60	10	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	90	1080	30		60	450	100		250	310	120		10	60	10	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	90	1080	30		60	450	100		250	310	120		10	60	10	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	90	1080	30		60	450	100		250	310	120		10	60	10	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.95	0.05		1.00	1.64	0.36		1.00	1.44	0.56		1.00	1.71	0.29	
Final Sat.:	3200	3114	86		1600	2618	582		1600	2307	893		1600	2743	457	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.35	0.35		0.04	0.17	0.17		0.16	0.13	0.13		0.01	0.02	0.02	
Crit Moves:		****				****				****				****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.446
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	170	680		60	40	420		120	520	270		170	20	60		20
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	170	680		60	40	420		120	520	270		170	20	60		20
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	170	680		60	40	420		120	520	270		170	20	60		20
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	170	680		60	40	420		120	520	270		170	20	60		20
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	170	680		60	40	420		120	520	270		170	20	60		20
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	2.00	1.84		0.16	1.00	1.56		0.44	1.97	1.03		1.00	1.00	1.50		0.50
Final Sat.:	3200	2941		259	1600	2489		711	3159	1641		1600	1600	2400		800
Capacity Analysis Module:																
Vol/Sat:	0.05	0.23		0.23	0.03	0.17		0.17	0.16	0.16		0.11	0.01	0.03		0.03
Crit Moves:		****				****				****					****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.768
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Ignore			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0	2 0 2	0	0	3 0 1
Volume Module:												
Base Vol:	950	0	790	0	0	0	0	1490	730	0	610	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	950	0	790	0	0	0	0	1490	730	0	610	240
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	950	0	0	0	0	0	0	1490	0	0	610	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	950	0	0	0	0	0	0	1490	0	0	610	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	950	0	0	0	0	0	0	1490	0	0	610	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	3.00	1.00
Final Sat.:	3400	0	1700	0	0	0	0	3400	3400	0	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.12	0.00
Crit Moves:	****							****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.532
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	140	360	90	420	1010	130	140	750	190	460	760	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	360	90	420	1010	130	140	750	190	460	760	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	360	90	420	1010	130	140	750	190	460	760	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	360	90	420	1010	130	140	750	190	460	760	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	360	90	420	1010	130	140	750	190	460	760	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.20	0.80	2.00	3.54	0.46	2.00	3.19	0.81	2.00	4.00	1.00
Final Sat.:	3400	5440	1360	3400	6025	775	3400	5426	1374	3400	6800	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.07	0.07	0.12	0.17	0.17	0.04	0.14	0.14	0.14	0.11	0.18
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.615
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	2	1 0	1	0	2	1 0	1	0	2	0 1	2	0	1	0 1
Volume Module:																
Base Vol:	140	510	370		240	1140	120		60	110	60		310	290	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	140	510	370		240	1140	120		60	110	60		310	290	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	140	510	370		240	1140	120		60	110	60		310	290	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	140	510	370		240	1140	120		60	110	60		310	290	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	140	510	370		240	1140	120		60	110	60		310	290	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.00	1.00		1.00	2.71	0.29		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	3400	1700		1700	4614	486		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.08	0.15	0.22		0.14	0.25	0.25		0.04	0.03	0.04		0.09	0.17	0.08	
Crit Moves:			****		****				****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.465
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	260	930	310	110	1270	80	20	30	40	190	80	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	930	310	110	1270	80	20	30	40	190	80	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	930	310	110	1270	80	20	30	40	190	80	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	930	310	110	1270	80	20	30	40	190	80	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	260	930	310	110	1270	80	20	30	40	190	80	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.82	0.18	1.00	1.00	1.00	2.00	1.33	0.67
Final Sat.:	3400	5100	1700	3400	4798	302	1700	1700	1700	3400	2267	1133
Capacity Analysis Module:												
Vol/Sat:	0.08	0.18	0.18	0.03	0.26	0.26	0.01	0.02	0.02	0.06	0.04	0.04
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.739
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2 0	2	1 0	2	1 0	2 0	3 0	1
Volume Module:												
Base Vol:	90	90	70	90	870	420	90	560	270	830	1320	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	90	70	90	870	420	90	560	270	830	1320	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	90	70	90	870	420	90	560	270	830	1320	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	90	70	90	870	420	90	560	270	830	1320	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	90	70	90	870	420	90	560	270	830	1320	40
OvlAdjVol:						240						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.12	0.88	2.00	2.00	2.00	1.00	2.02	0.98	2.00	3.00	1.00
Final Sat.:	3400	1913	1488	3400	3400	3400	1700	3441	1659	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.05	0.05	0.03	0.26	0.12	0.05	0.16	0.16	0.24	0.26	0.02
OvlAdjV/S:						0.07						
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.782
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	70	240	40		30	1390	150		50	200	60		230	630	80	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	70	240	40		30	1390	150		50	200	60		230	630	80	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	70	240	40		30	1390	150		50	200	60		230	630	80	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	70	240	40		30	1390	150		50	200	60		230	630	80	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	70	240	40		30	1390	150		50	200	60		230	630	80	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.71	0.29		1.00	1.81	0.19		1.00	1.54	0.46		1.00	1.77	0.23	
Final Sat.:	1700	2914	486		1700	3069	331		1700	2615	785		1700	3017	383	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.08	0.08		0.02	0.45	0.45		0.03	0.08	0.08		0.14	0.21	0.21	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.631
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	90	290	80	110	1090	300	160	670	380	350	840	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	290	80	110	1090	300	160	670	380	350	840	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	90	290	80	110	1090	300	160	670	0	350	840	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	290	80	110	1090	300	160	670	0	350	840	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	90	290	80	110	1090	300	160	670	0	350	840	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.71	0.29
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4606	494
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.05	0.06	0.32	0.18	0.05	0.13	0.00	0.10	0.18	0.18
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.755
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 1	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	140	820	120	400	3350	1540	150	320	120	220	650	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	820	120	400	3350	1540	150	320	120	220	650	230
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	820	0	400	3350	0	150	320	120	220	650	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	820	0	400	3350	0	150	320	120	220	650	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	820	0	400	3350	0	150	320	120	220	650	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.00	0.12	0.49	0.00	0.04	0.06	0.07	0.06	0.13	0.00
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.802
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 4	0	1	2	0 3	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	210	980	160		170	3200	240		60	180	90		260	730	120	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	210	980	160		170	3200	240		60	180	90		260	730	120	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	210	980	160		170	3200	240		60	180	90		260	730	120	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	210	980	160		170	3200	240		60	180	90		260	730	120	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	210	980	160		170	3200	240		60	180	90		260	730	120	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	4.00	1.00		2.00	3.72	0.28		2.00	2.00	1.00		2.00	2.58	0.42	
Final Sat.:	3400	6800	1700		3400	6326	474		3400	3400	1700		3400	4380	720	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.14	0.09		0.05	0.51	0.51		0.02	0.05	0.05		0.08	0.17	0.17	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	180	1330	40		30	3320	250		30	20	40		30	40	20	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	180	1330	40		30	3320	250		30	20	40		30	40	20	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	180	1330	40		30	3320	250		30	20	40		30	40	20	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	180	1330	40		30	3320	250		30	20	40		30	40	20	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	180	1330	40		30	3320	250		30	20	40		30	40	20	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.88	0.12		2.00	3.72	0.28		1.00	1.00	1.00		1.00	1.33	0.67	
Final Sat.:	3400	6601	199		3400	6324	476		1700	1700	1700		1700	2267	1133	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.20	0.20		0.01	0.53	0.52		0.02	0.01	0.02		0.02	0.02	0.02	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	480	1150	400	440	2570	390	120	270	180	520	780	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	480	1150	400	440	2570	390	120	270	180	520	780	120
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	480	1150	0	440	2570	390	120	270	0	520	780	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	480	1150	0	440	2570	390	120	270	0	520	780	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	480	1150	0	440	2570	390	120	270	0	520	780	0
OvlAdjVol:						330						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.14	0.17	0.00	0.13	0.38	0.23	0.04	0.05	0.00	0.15	0.15	0.00
OvlAdjV/S:						0.19						
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 2	0 1	2	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	90	280	30	130	760	500	80	130	40	110	730	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	280	30	130	760	500	80	130	40	110	730	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	90	280	30	130	760	500	80	130	0	110	730	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	280	30	130	760	500	80	130	0	110	730	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	90	280	30	130	760	500	80	130	0	110	730	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.81	0.19	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.68	0.32
Final Sat.:	1700	3071	329	1700	3400	1700	3400	3400	1700	1700	2853	547
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.09	0.08	0.22	0.29	0.02	0.04	0.00	0.06	0.26	0.26
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Scenario Report

Scenario:	2016+P-PM (10.8)
Command:	2016+P-PM
Volume:	2016+P-PM
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2016+P-PM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	C	xxxxx	0.754	C	xxxxx	0.754	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.652	B	xxxxx	0.652	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.662	B	xxxxx	0.662	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	E	xxxxx	0.929	E	xxxxx	0.929	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	C	xxxxx	0.778	C	xxxxx	0.778	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.518	A	xxxxx	0.518	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	D	xxxxx	0.807	D	xxxxx	0.807	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	C	xxxxx	0.783	C	xxxxx	0.783	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	D	xxxxx	0.865	D	xxxxx	0.865	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	B	xxxxx	0.612	B	xxxxx	0.612	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	C	xxxxx	0.728	C	xxxxx	0.728	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.498	A	xxxxx	0.498	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.645	B	xxxxx	0.645	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	B	xxxxx	0.665	B	xxxxx	0.665	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	C	xxxxx	0.734	C	xxxxx	0.734	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.515	A	xxxxx	0.515	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	E	xxxxx	0.936	E	xxxxx	0.936	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	A	xxxxx	0.453	A	xxxxx	0.453	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	B	xxxxx	0.606	B	xxxxx	0.606	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.447	A	xxxxx	0.447	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	C	xxxxx	0.736	C	xxxxx	0.736	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.723	C	xxxxx	0.723	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.496	A	xxxxx	0.496	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.563	A	xxxxx	0.563	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	C	23.5	0.861	C	23.5	0.861	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.589	A	xxxxx	0.589	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	C	xxxxx	0.741	C	xxxxx	0.741	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	C	xxxxx	0.722	C	xxxxx	0.722	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	B	xxxxx	0.653	B	xxxxx	0.653	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	B	xxxxx	0.678	B	xxxxx	0.678	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	C	xxxxx	0.728	C	xxxxx	0.728	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	A	xxxxx	0.578	A	xxxxx	0.578	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.387	A	xxxxx	0.387	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.441	A	xxxxx	0.441	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	A	xxxxx	0.515	A	xxxxx	0.515	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	C	xxxxx	0.706	C	xxxxx	0.706	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	A	xxxxx	0.556	A	xxxxx	0.556	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.420	A	xxxxx	0.420	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.508	A	xxxxx	0.508	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.533	A	xxxxx	0.533	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	A	xxxxx	0.582	A	xxxxx	0.582	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.508	A	xxxxx	0.508	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	C	xxxxx	0.729	C	xxxxx	0.729	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	B	xxxxx	0.600	B	xxxxx	0.600	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	D	xxxxx	0.853	D	xxxxx	0.853	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	B	xxxxx	0.681	B	xxxxx	0.681	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	B	xxxxx	0.634	B	xxxxx	0.634	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	B	xxxxx	0.630	B	xxxxx	0.630	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 49 RED HILL AVE/DYER RD	D	xxxxx	0.893	D	xxxxx	0.893	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	D	xxxxx	0.819	D	xxxxx	0.819	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	C	xxxxx	0.757	C	xxxxx	0.757	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	E	xxxxx	0.925	E	xxxxx	0.925	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	E	xxxxx	0.924	E	xxxxx	0.924	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	D	xxxxx	0.805	D	xxxxx	0.805	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	E	xxxxx	0.906	E	xxxxx	0.906	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.835	D	xxxxx	0.835	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	B	xxxxx	0.682	B	xxxxx	0.682	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	D	xxxxx	0.863	D	xxxxx	0.863	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	D	xxxxx	0.844	D	xxxxx	0.844	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.754
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	620	1110	620	290	820	70	70	950	640	730	1080	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	620	1110	620	290	820	70	70	950	640	730	1080	520
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	620	1110	0	290	820	70	70	950	640	730	1080	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	620	1110	0	290	820	70	70	950	640	730	1080	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	620	1110	0	290	820	70	70	950	640	730	1080	0
OvlAdjVol:									330			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.18	0.16	0.00	0.09	0.12	0.04	0.04	0.19	0.38	0.21	0.21	0.00
OvlAdjV/S:									0.19			
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.652
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1980	760	590	1560	0	0	0	0	390	0	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1980	760	590	1560	0	0	0	0	390	0	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1980	760	590	1560	0	0	0	0	390	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1980	760	590	1560	0	0	0	0	390	0	234
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1980	760	590	1560	0	0	0	0	390	0	234
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.22	0.17	0.23	0.00	0.00	0.00	0.00	0.11	0.00	0.14
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.662
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	2200	500	440	1260	250	0	0	0	540	110	550
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2200	500	440	1260	250	0	0	0	540	110	550
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2200	500	440	1260	250	0	0	0	540	110	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2200	500	440	1260	250	0	0	0	540	110	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2200	500	440	1260	250	0	0	0	540	110	0
OvlAdjVol:			230									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.29	0.13	0.19	0.15	0.00	0.00	0.00	0.16	0.06	0.00
OvlAdjV/S:			0.14									
Crit Moves:		****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.929
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	108	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	110	1580	110	510	1280	10	290	120	90	390	100	700
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1580	110	510	1280	10	290	120	90	390	100	700
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1580	110	510	1280	10	290	120	90	390	100	700
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1580	110	510	1280	10	290	120	90	390	100	700
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1580	110	510	1280	10	290	120	90	390	100	700
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.97	0.03	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6747	53	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.06	0.15	0.19	0.19	0.09	0.07	0.05	0.11	0.06	0.41
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.778
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	1 0	4 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	120	1020	40	150	940	580	370	410	90	80	1060	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1020	40	150	940	580	370	410	90	80	1060	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	120	1020	40	150	940	580	370	410	90	80	1060	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1020	40	150	940	580	370	410	90	80	1060	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	120	1020	40	150	940	580	370	410	90	80	1060	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	1.00	4.00	1.00	2.00	2.46	0.54	2.00	3.00	1.00
Final Sat.:	1700	6800	1700	1700	6800	1700	3400	4182	918	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.07	0.15	0.02	0.09	0.14	0.34	0.11	0.10	0.10	0.02	0.21	0.00
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.518
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	140	700	50	60	820	230	310	180	40	110	500	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	700	50	60	820	230	310	180	40	110	500	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	700	50	60	820	230	310	180	40	110	500	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	700	50	60	820	230	310	180	40	110	500	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	700	50	60	820	230	310	180	40	110	500	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.12	0.88	1.75	1.02	0.23	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	4998	1402	2809	1629	362	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.03	0.04	0.16	0.16	0.11	0.11	0.11	0.07	0.16	0.00
Crit Moves:	****				****				****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.807
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 2	0	0 0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	3200	0	0	1880	1020	0	0	0	660	0	390
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3200	0	0	1880	1020	0	0	0	660	0	390
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	3200	0	0	1880	0	0	0	0	660	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3200	0	0	1880	0	0	0	0	660	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	3200	0	0	1880	0	0	0	0	660	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.63	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.13	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.783
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 1	1	0 1!	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	2000	0	0	1890	640	1160	0	640	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2000	0	0	1890	640	1160	0	640	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2000	0	0	1890	0	1160	0	640	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2000	0	0	1890	0	1160	0	640	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2000	0	0	1890	0	1160	0	640	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.00	0.00	0.28	0.00	0.34	0.00	0.19	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.865
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	70	2120	280	610	1560	270	870	680	110	270	230	950
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	2120	280	610	1560	270	870	680	110	270	230	950
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	70	2120	280	610	1560	0	870	680	110	270	230	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	2120	280	610	1560	0	870	680	110	270	230	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	70	2120	280	610	1560	0	870	680	110	270	230	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.72	0.28	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2927	473	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.16	0.18	0.23	0.00	0.26	0.23	0.23	0.08	0.07	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.612
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	40	1670	310	190	1490	170	290	590	170	140	260	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	1670	310	190	1490	170	290	590	170	140	260	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	40	1670	310	190	1490	170	290	590	0	140	260	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1670	310	190	1490	170	290	590	0	140	260	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	40	1670	310	190	1490	170	290	590	0	140	260	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.37	0.63	2.00	2.69	0.31	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5735	1065	3400	4578	522	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.29	0.29	0.06	0.33	0.33	0.09	0.17	0.00	0.04	0.08	0.12
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.728
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	180	1420	430	270	520	370	610	1010	170	280	920	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1420	430	270	520	370	610	1010	170	280	920	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	180	1420	430	270	520	370	610	1010	0	280	920	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1420	430	270	520	370	610	1010	0	280	920	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	180	1420	430	270	520	370	610	1010	0	280	920	50
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.07	0.93	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4912	1488	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.29	0.29	0.06	0.11	0.23	0.19	0.21	0.00	0.09	0.19	0.03
OvlAdjV/S:												0.00
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.498
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 3	1 1	0	0 0	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	810	2390	0	0	1010	700	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	810	2390	0	0	1010	700	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	810	2390	0	0	1010	700	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	810	2390	0	0	1010	700	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	810	2390	0	0	1010	700	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	3200	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.25	0.50	0.00	0.00	0.21	0.22	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.645
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 1	0	0 0	4 0	0	1 1	1 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	2320	90	0	1010	0	880	770	1060	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2320	90	0	1010	0	880	770	1060	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2320	90	0	1010	0	880	770	1060	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2320	90	0	1010	0	880	770	1060	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2320	90	0	1010	0	880	770	1060	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.81	0.19	0.00	4.00	0.00	1.60	1.40	2.00	0.00	0.00	0.00
Final Sat.:	0	7701	299	0	6400	0	2560	2240	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.00	0.16	0.00	0.34	0.34	0.33	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.665
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	60	710	160	240	770	120	170	470	70	180	470	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	710	160	240	770	120	170	470	70	180	470	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	60	710	160	240	770	120	170	470	70	180	470	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	710	160	240	770	120	170	470	70	180	470	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	60	710	160	240	770	120	170	470	70	180	470	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.73	0.27	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2942	458	1700	2959	441	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.21	0.09	0.14	0.26	0.26	0.10	0.16	0.16	0.11	0.14	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.734
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0	0 2	1 0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	390	750	0	0	1630	140	0	0	390	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	390	750	0	0	1630	140	0	0	390	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	390	0	0	0	1630	140	0	0	390	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	0	0	0	1630	140	0	0	390	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	390	0	0	0	1630	140	0	0	390	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.76	0.24	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4420	380	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.24	0.00	0.00	0.00	0.37	0.37	0.00	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.515
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	0 0	1!	0 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	770	60	60	2040	10	10	10	20	80	0	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	770	60	60	2040	10	10	10	20	80	0	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	770	60	60	2040	10	10	10	20	80	0	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	770	60	60	2040	10	10	10	20	80	0	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	770	60	60	2040	10	10	10	20	80	0	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.78	0.22	1.00	2.99	0.01	0.25	0.25	0.50	1.00	0.00	1.00
Final Sat.:	1600	4453	347	1600	4777	23	400	400	800	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.17	0.04	0.43	0.43	0.01	0.03	0.03	0.05	0.00	0.03
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.936
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	4 0	2	0 0	0 0	0	1 0	3 1	0
Volume Module:												
Base Vol:	510	720	0	0	970	1250	0	0	0	270	2360	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	510	720	0	0	970	1250	0	0	0	270	2360	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	510	720	0	0	970	1250	0	0	0	270	2360	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	510	720	0	0	970	1250	0	0	0	270	2360	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	510	720	0	0	970	1250	0	0	0	270	2360	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	1.00	3.82	0.18
Final Sat.:	3200	4800	0	0	6400	3200	0	0	0	1600	6115	285
Capacity Analysis Module:												
Vol/Sat:	0.16	0.15	0.00	0.00	0.15	0.39	0.00	0.00	0.00	0.17	0.39	0.39
Crit Moves:	****					****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.453
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 4	1 0	1	0 3	0 0	1	1 2	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	750	230	150	1080	0	480	980	590	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	750	230	150	1080	0	480	980	590	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	750	230	150	1080	0	480	980	590	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	750	230	150	1080	0	480	980	590	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	750	230	150	1080	0	480	980	590	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	1.00	1.00	3.00	0.00	1.32	2.68	2.00	0.00	0.00	0.00
Final Sat.:	0	6400	1600	1600	4800	0	2104	4296	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.14	0.09	0.23	0.00	0.23	0.23	0.18	0.00	0.00	0.00
Crit Moves:					****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.606
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	160	310	0	0	470	850	0	0	0	420	1560	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	310	0	0	470	850	0	0	0	420	1560	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	310	0	0	470	850	0	0	0	420	1560	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	310	0	0	470	850	0	0	0	420	1560	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	310	0	0	470	850	0	0	0	420	1560	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.42	2.58	0.00	0.00	0.00	1.00	3.79	0.21
Final Sat.:	3200	3200	0	0	2279	4121	0	0	0	1600	6057	343
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.26	0.26	0.35
Crit Moves:	****				****							****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.447
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2 0	2	0 0	1 1	2	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	200	260	260	630	0	280	1070	130	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	200	260	260	630	0	280	1070	130	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	200	260	260	630	0	280	1070	130	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	200	260	260	630	0	280	1070	130	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	200	260	260	630	0	280	1070	130	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	3.68	0.32	0.00	0.00	0.00
Final Sat.:	0	3200	3200	3200	3200	0	1600	5880	520	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.08	0.08	0.20	0.00	0.17	0.18	0.25	0.00	0.00	0.00
Crit Moves:					****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.736
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	180	1120	20	350	780	950	710	500	80	60	770	850
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1120	20	350	780	950	710	500	80	60	770	850
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	180	1120	20	350	780	0	710	500	80	60	770	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1120	20	350	780	0	710	500	80	60	770	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	180	1120	20	350	780	0	710	500	80	60	770	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.95	0.05	2.00	3.00	1.00	2.00	2.59	0.41	1.00	3.00	1.00
Final Sat.:	3400	5011	89	3400	5100	1700	3400	4397	703	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.22	0.10	0.15	0.00	0.21	0.11	0.11	0.04	0.15	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	2 0	1 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	340	1310	100	160	880	160	250	810	260	80	610	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	1310	100	160	880	160	250	810	260	80	610	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	340	1310	100	160	880	160	250	810	260	80	610	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	1310	100	160	880	160	250	810	260	80	610	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	340	1310	100	160	880	160	250	810	260	80	610	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	2.00	1.69	0.31	2.00	2.27	0.73	2.00	2.15	0.85
Final Sat.:	3400	3400	1700	3400	2877	523	3400	3861	1239	3400	3660	1440
Capacity Analysis Module:												
Vol/Sat:	0.10	0.39	0.06	0.05	0.31	0.31	0.07	0.21	0.21	0.02	0.17	0.17
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.496
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	130	170	80	440	470	300	130	520	160	140	1090	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	170	80	440	470	300	130	520	160	140	1090	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	170	80	440	470	300	130	520	160	140	1090	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	170	80	440	470	300	130	520	160	140	1090	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	170	80	440	470	300	130	520	160	140	1090	260
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.05	0.05	0.14	0.15	0.19	0.04	0.11	0.10	0.04	0.23	0.16
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.563
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	180	40	130	390	160	100	140	60	50	310	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	180	40	130	390	160	100	140	60	50	310	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	180	40	130	390	160	100	140	60	50	310	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	180	40	130	390	160	100	140	60	50	310	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	180	40	130	390	160	100	140	60	50	310	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.82	0.18	1.00	1.00	1.00	1.00	0.70	0.30	1.00	0.79	0.21
Final Sat.:	1600	1309	291	1600	1600	1600	1600	1120	480	1600	1272	328
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.14	0.08	0.24	0.10	0.06	0.13	0.13	0.03	0.24	0.24
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.861
Loss Time (sec):	0	Average Delay (sec/veh):	23.5
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	40	160	30	90	320	70	50	170	60	30	230	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	160	30	90	320	70	50	170	60	30	230	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	160	30	90	320	70	50	170	60	30	230	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	160	30	90	320	70	50	170	60	30	230	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	160	30	90	320	70	50	170	60	30	230	60
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.70	0.13	0.19	0.67	0.14	0.18	0.61	0.21	0.09	0.72	0.19
Final Sat.:	81	325	61	104	372	81	86	293	103	47	358	93
Capacity Analysis Module:												
Vol/Sat:	0.49	0.49	0.49	0.86	0.86	0.86	0.58	0.58	0.58	0.64	0.64	0.64
Crit Moves:		****			****				****		****	
Delay/Veh:	15.2	15.2	15.2	34.1	34.1	34.1	17.1	17.1	17.1	19.0	19.0	19.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.2	15.2	15.2	34.1	34.1	34.1	17.1	17.1	17.1	19.0	19.0	19.0
LOS by Move:	C	C	C	D	D	D	C	C	C	C	C	C
ApproachDel:		15.2			34.1			17.1			19.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		15.2			34.1			17.1			19.0	
LOS by Appr:		C			D			C			C	
AllWayAvgQ:	0.7	0.7	0.7	3.8	3.8	3.8	1.0	1.0	1.0	1.3	1.3	1.3

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.589
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	70	600	200	10	1400	220	40	60	150	510	160	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	600	200	10	1400	220	40	60	150	510	160	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	600	200	10	1400	220	40	60	150	510	160	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	600	200	10	1400	220	40	60	150	510	160	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	600	200	10	1400	220	40	60	150	510	160	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	2.00	0.94	0.06
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	1600	1600	3200	1506	94
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.13	0.01	0.29	0.14	0.03	0.04	0.09	0.16	0.11	0.11
Crit Moves:	****				****					****	****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.741
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	90	710	40	50	1810	170	100	40	110	40	50	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	710	40	50	1810	170	100	40	110	40	50	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	710	40	50	1810	170	100	40	110	40	50	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	710	40	50	1810	170	100	40	110	40	50	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	710	40	50	1810	170	100	40	110	40	50	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.56	0.44
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	889	711
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.03	0.03	0.57	0.11	0.06	0.03	0.07	0.03	0.06	0.06
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	90	810	10	110	1640	90	50	50	100	20	60	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	810	10	110	1640	90	50	50	100	20	60	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	810	10	110	1640	90	50	50	100	20	60	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	810	10	110	1640	90	50	50	100	20	60	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	810	10	110	1640	90	50	50	100	20	60	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.90	0.10	0.50	0.50	1.00	0.13	0.40	0.47
Final Sat.:	1600	3161	39	1600	3034	166	800	800	1600	213	640	747
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.07	0.54	0.54	0.03	0.06	0.06	0.01	0.09	0.09
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	80	920	20	50	1520	70	40	30	60	30	40	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	920	20	50	1520	70	40	30	60	30	40	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	920	20	50	1520	70	40	30	60	30	40	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	920	20	50	1520	70	40	30	60	30	40	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	920	20	50	1520	70	40	30	60	30	40	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.91	0.09	0.31	0.23	0.46	0.23	0.31	0.46
Final Sat.:	1600	3132	68	1600	3059	141	492	369	738	369	492	738
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.29	0.03	0.50	0.50	0.03	0.08	0.08	0.02	0.08	0.08
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	730	30	130	1300	90	60	90	60	30	180	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	730	30	130	1300	90	60	90	60	30	180	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	730	30	130	1300	90	60	90	60	30	180	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	730	30	130	1300	90	60	90	60	30	180	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	730	30	130	1300	90	60	90	60	30	180	250
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.92	0.08	1.00	1.87	0.13	1.00	0.60	0.40	1.00	1.00	1.00
Final Sat.:	1600	3074	126	1600	2993	207	1600	960	640	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.24	0.24	0.08	0.43	0.43	0.04	0.09	0.09	0.02	0.11	0.16
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.728
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	310	480	60	210	630	380	270	550	240	100	650	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	310	480	60	210	630	380	270	550	240	100	650	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	310	480	60	210	630	380	270	550	240	100	650	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	310	480	60	210	630	380	270	550	240	100	650	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	310	480	60	210	630	380	270	550	240	100	650	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.78	0.22	2.00	1.25	0.75	2.00	1.39	0.61	1.00	1.76	0.24
Final Sat.:	3200	2844	356	3200	1996	1204	3200	2228	972	1600	2811	389
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.17	0.07	0.32	0.32	0.08	0.25	0.25	0.06	0.23	0.23
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.578
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	0	4	0	1	0	0	1	0	1	1	0	1	0	0
Volume Module:												
Base Vol:	0	0	0	250	2500	0	0	10	10	290	10	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	250	2500	0	0	10	10	290	10	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	250	2500	0	0	10	10	290	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	250	2500	0	0	10	10	290	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	250	2500	0	0	10	10	290	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.39	0.00	0.00	0.01	0.01	0.18	0.01	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.387
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	30	400	120	0	0	0	60	190	0	0	270	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	400	120	0	0	0	60	190	0	0	270	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	400	120	0	0	0	60	190	0	0	270	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	400	120	0	0	0	60	190	0	0	270	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	400	120	0	0	0	60	190	0	0	270	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.54	0.46	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.82	0.18
Final Sat.:	1600	2462	738	0	0	0	3200	1600	0	0	1309	291
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.16	0.00	0.00	0.00	0.02	0.12	0.00	0.00	0.21	0.21
Crit Moves:		****					****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.441
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0	0 3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	340	1300	1200	0	610	80	100	340	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	340	1300	1200	0	610	80	100	340	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	340	1300	0	0	610	80	100	340	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	340	1300	0	0	610	80	100	340	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	340	1300	0	0	610	80	100	340	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.54	0.46	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	5658	742	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.27	0.00	0.00	0.11	0.11	0.06	0.11	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.515
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	0	0	2	0	2	0	0	1
Volume Module:												
Base Vol:	150	760	120	0	0	0	560	410	0	0	300	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	760	120	0	0	0	560	410	0	0	300	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	760	120	0	0	0	560	410	0	0	300	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	760	120	0	0	0	560	410	0	0	300	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	760	120	0	0	0	560	410	0	0	300	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.44	2.21	0.35	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	699	3542	559	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.00	0.00	0.00	0.17	0.13	0.00	0.00	0.09	0.13
Crit Moves:	****						****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.706
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	50	480	90	130	690	380	150	510	40	70	710	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	480	90	130	690	380	150	510	40	70	710	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	480	90	130	690	380	150	510	40	70	710	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	480	90	130	690	380	150	510	40	70	710	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	480	90	130	690	380	150	510	40	70	710	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	1.29	0.71	1.00	2.00	1.00	1.00	1.80	0.20
Final Sat.:	1600	2695	505	1600	2064	1136	1600	3200	1600	1600	2876	324
Capacity Analysis Module:												
Vol/Sat:	0.03	0.18	0.18	0.08	0.33	0.33	0.09	0.16	0.03	0.04	0.25	0.25
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.556
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0	1 0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	110	180	180	600	100	100	30	1110	70	40	600	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	180	180	600	100	100	30	1110	70	40	600	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	180	180	600	100	100	30	1110	70	40	600	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	180	180	600	100	100	30	1110	70	40	600	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	180	180	600	100	100	30	1110	70	40	600	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	0.50	0.50	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	800	800	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.19	0.13	0.13	0.02	0.23	0.04	0.03	0.13	0.08
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.420
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 2	0	0 0	0 0	0	0 4	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	0	230	0	0	0	0	2230	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	230	0	0	0	0	2230	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	230	0	0	0	0	2230	150	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	230	0	0	0	0	2230	150	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	230	0	0	0	0	2230	150	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.35	0.09	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.508
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	3	0 1	1 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	40	1560	0	0	1930	100	260	0	130	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	1560	0	0	1930	100	260	0	130	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	40	1560	0	0	1930	0	260	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1560	0	0	1930	0	260	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	40	1560	0	0	1930	0	260	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	3.00	1.00	2.00	0.00	1.00	0.00	1.00	0.00
Final Sat.:	1600	4800	0	1600	4800	1600	3200	0	1600	0	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.33	0.00	0.00	0.40	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.533
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	60	1780	60	40	1870	60	80	10	150	20	10	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1780	60	40	1870	60	80	10	150	20	10	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1780	60	40	1870	60	80	10	150	20	10	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1780	60	40	1870	60	80	10	150	20	10	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1780	60	40	1870	60	80	10	150	20	10	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.87	0.13	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6191	209	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.29	0.03	0.39	0.04	0.03	0.01	0.09	0.01	0.01	0.06
Crit Moves:	****				****				****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.582
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	40	1670	330	160	1650	380	220	90	20	260	120	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	1670	330	160	1650	380	220	90	20	260	120	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	40	1670	330	160	1650	380	220	90	20	260	120	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1670	330	160	1650	380	220	90	20	260	120	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	40	1670	330	160	1650	380	220	90	20	260	120	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.33	0.55	0.12	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2133	873	194	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.35	0.21	0.05	0.34	0.24	0.10	0.10	0.10	0.08	0.08	0.00
Crit Moves:		****		****					****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.508
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1650	190	100	1540	80	40	0	20	220	0	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1650	190	100	1540	80	40	0	20	220	0	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1650	190	100	1540	80	40	0	20	220	0	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1650	190	100	1540	80	40	0	20	220	0	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1650	190	100	1540	80	40	0	20	220	0	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.69	0.31	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4304	496	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.38	0.38	0.03	0.32	0.05	0.03	0.00	0.01	0.07	0.00	0.04
Crit Moves:		****			****			****			****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.729
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2	1 0	1 0	3	0 1	1 1	1	0 1	1 1	1	0 1
Volume Module:												
Base Vol:	350	1830	320	40	1430	80	110	240	290	170	190	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	1830	320	40	1430	80	110	240	290	170	190	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	350	1830	320	40	1430	80	110	240	290	170	190	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	1830	320	40	1430	80	110	240	290	170	190	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	350	1830	320	40	1430	80	110	240	290	170	190	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.55	0.45	1.00	3.00	1.00	1.00	2.00	1.00	1.42	1.58	1.00
Final Sat.:	3200	4086	714	1600	4800	1600	1600	3200	1600	2267	2533	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.45	0.45	0.03	0.30	0.05	0.07	0.08	0.18	0.07	0.08	0.02
Crit Moves:		****		****					****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	150	2370	170	140	2480	220	230	220	100	310	220	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	2370	170	140	2480	220	230	220	100	310	220	140
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	150	2370	0	140	2480	220	230	220	0	310	220	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	2370	0	140	2480	220	230	220	0	310	220	140
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	150	2370	0	140	2480	220	230	220	0	310	220	140
OvlAdjVol:						105						70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.37	0.00	0.04	0.39	0.14	0.07	0.07	0.00	0.10	0.07	0.09
OvlAdjV/S:						0.07						0.04
Crit Moves:	****				****			****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.853
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	155	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	90	2040	530	1130	2320	50	40	350	50	230	280	660
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	2040	530	1130	2320	50	40	350	50	230	280	660
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	90	2040	0	1130	2320	0	40	350	50	230	280	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	2040	0	1130	2320	0	40	350	50	230	280	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	90	2040	0	1130	2320	0	40	350	50	230	280	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.00	0.35	0.36	0.00	0.01	0.11	0.03	0.07	0.09	0.00
Crit Moves:		****		****				****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	0	1	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	160	840		10	30	970		290	200		60	80	40	290		70
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Initial Bse:	160	840		10	30	970		290	200		60	80	40	290		70
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
PHF Volume:	160	840		10	30	970		290	200		60	80	40	290		70
Reduct Vol:	0	0		0	0	0		0	0		0	0	0	0		0
Reduced Vol:	160	840		10	30	970		290	200		60	80	40	290		70
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
FinalVolume:	160	840		10	30	970		290	200		60	80	40	290		70
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600		1600	1600	1600	1600		1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Lanes:	2.00	1.98		0.02	1.00	1.54		0.46	1.00		1.00	1.00	1.00	1.61		0.39
Final Sat.:	3200	3162		38	1600	2463		737	1600		1600	1600	1600	2578		622
Capacity Analysis Module:																
Vol/Sat:	0.05	0.27		0.27	0.02	0.39		0.39	0.13		0.04	0.05	0.03	0.11		0.11
Crit Moves:	****					****			****							****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	290	640	20		20	540	400		370	80	90		50	360	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	290	640	20		20	540	400		370	80	90		50	360	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	290	640	20		20	540	400		370	80	90		50	360	70	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	290	640	20		20	540	400		370	80	90		50	360	70	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	290	640	20		20	540	400		370	80	90		50	360	70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.94	0.06		1.00	1.15	0.85		2.00	1.00	1.00		1.00	1.67	0.33	
Final Sat.:	3200	3103	97		1600	1838	1362		3200	1600	1600		1600	2679	521	
Capacity Analysis Module:																
Vol/Sat:	0.09	0.21	0.21		0.01	0.29	0.29		0.12	0.05	0.06		0.03	0.13	0.13	
Crit Moves:	****					****				****						****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.630
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Ignore			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0 2	0 2	0	0 3	0 1
Volume Module:												
Base Vol:	740	0	310	0	0	0	0	800	810	0	1850	1090
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	740	0	310	0	0	0	0	800	810	0	1850	1090
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	740	0	0	0	0	0	0	800	0	0	1850	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	740	0	0	0	0	0	0	800	0	0	1850	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	740	0	0	0	0	0	0	800	0	0	1850	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	3.00	1.00
Final Sat.:	3400	0	1700	0	0	0	0	3400	3400	0	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.36	0.00
Crit Moves:	****						****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.893
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	430	1780	370	370	460	140	220	800	60	170	910	600
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	430	1780	370	370	460	140	220	800	60	170	910	600
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	430	1780	370	370	460	140	220	800	60	170	910	600
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	430	1780	370	370	460	140	220	800	60	170	910	600
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	430	1780	370	370	460	140	220	800	60	170	910	600
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.31	0.69	2.00	3.07	0.93	2.00	3.72	0.28	2.00	4.00	1.00
Final Sat.:	3400	5630	1170	3400	5213	1587	3400	6326	474	3400	6800	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.32	0.32	0.11	0.09	0.09	0.06	0.13	0.13	0.05	0.13	0.35
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.819
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	0	1	2	0 1	0	1
Volume Module:																
Base Vol:	40	1950	260		120	710	60		90	270	100		500	160	360	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	40	1950	260		120	710	60		90	270	100		500	160	360	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	40	1950	260		120	710	60		90	270	100		500	160	360	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	40	1950	260		120	710	60		90	270	100		500	160	360	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	40	1950	260		120	710	60		90	270	100		500	160	360	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.65	0.35		1.00	2.77	0.23		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	4500	600		1700	4703	397		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.43	0.43		0.07	0.15	0.15		0.05	0.08	0.06		0.15	0.09	0.21	
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.757
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	130	1940	280	50	1210	30	90	120	300	460	60	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1940	280	50	1210	30	90	120	300	460	60	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1940	280	50	1210	30	90	120	300	460	60	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1940	280	50	1210	30	90	120	300	460	60	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1940	280	50	1210	30	90	120	300	460	60	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.93	0.07	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	3400	5100	1700	3400	4977	123	1700	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.38	0.16	0.01	0.24	0.24	0.05	0.07	0.18	0.14	0.04	0.11
Crit Moves:		****		****					****	****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.925
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	104	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2	0 2	1 0	2	1 0	2 0	3	0 1
Volume Module:												
Base Vol:	440	960	440	50	170	250	490	1290	110	140	820	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	960	440	50	170	250	490	1290	110	140	820	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	440	960	440	50	170	250	490	1290	110	140	820	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	960	440	50	170	250	490	1290	110	140	820	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	440	960	440	50	170	250	490	1290	110	140	820	130
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.37	0.63	2.00	2.00	2.00	1.00	2.76	0.24	2.00	3.00	1.00
Final Sat.:	3400	2331	1069	3400	3400	3400	1700	4699	401	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.41	0.41	0.01	0.05	0.07	0.29	0.27	0.27	0.04	0.16	0.08
OvlAdjV/S:						0.00						
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.924
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	103	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	90	1390	340	100	370	80	100	790	90	80	490	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1390	340	100	370	80	100	790	90	80	490	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1390	340	100	370	80	100	790	90	80	490	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1390	340	100	370	80	100	790	90	80	490	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	1390	340	100	370	80	100	790	90	80	490	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.61	0.39	1.00	1.64	0.36	1.00	1.80	0.20	1.00	1.75	0.25
Final Sat.:	1700	2732	668	1700	2796	604	1700	3052	348	1700	2975	425
Capacity Analysis Module:												
Vol/Sat:	0.05	0.51	0.51	0.06	0.13	0.13	0.06	0.26	0.26	0.05	0.16	0.16
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.805
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	280	1070	360	140	350	200	470	1370	110	140	950	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	1070	360	140	350	200	470	1370	110	140	950	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	280	1070	360	140	350	200	470	1370	0	140	950	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	1070	360	140	350	200	470	1370	0	140	950	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	280	1070	360	140	350	200	470	1370	0	140	950	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.54	0.46
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4326	774
Capacity Analysis Module:												
Vol/Sat:	0.08	0.31	0.21	0.08	0.10	0.12	0.14	0.27	0.00	0.04	0.22	0.22
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.906
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 1	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	440	3000	190	330	1370	360	950	720	250	160	620	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	3000	190	330	1370	360	950	720	250	160	620	520
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	440	3000	0	330	1370	0	950	720	250	160	620	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	3000	0	330	1370	0	950	720	250	160	620	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	440	3000	0	330	1370	0	950	720	250	160	620	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.84	2.16	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	4835	3665	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.44	0.00	0.10	0.20	0.00	0.20	0.20	0.15	0.05	0.12	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.835
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	3 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	190	2910	270	290	1390	200	440	790	250	230	430	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	2910	270	290	1390	200	440	790	250	230	430	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	2910	270	290	1390	200	440	790	250	230	430	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	2910	270	290	1390	200	440	790	250	230	430	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	2910	270	290	1390	200	440	790	250	230	430	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	3.50	0.50	2.00	2.28	0.72	2.00	2.05	0.95
Final Sat.:	3400	6800	1700	3400	5945	855	3400	3874	1226	3400	3481	1619
Capacity Analysis Module:												
Vol/Sat:	0.06	0.43	0.16	0.09	0.23	0.23	0.13	0.20	0.20	0.07	0.12	0.12
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.682
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	100	3020	40	30	1830	80	260	210	200	40	40	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	3020	40	30	1830	80	260	210	200	40	40	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	3020	40	30	1830	80	260	210	200	40	40	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	3020	40	30	1830	80	260	210	200	40	40	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	3020	40	30	1830	80	260	210	200	40	40	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.95	0.05	2.00	3.83	0.17	1.00	1.02	0.98	1.00	1.14	0.86
Final Sat.:	3400	6711	89	3400	6515	285	1700	1741	1659	1700	1943	1457
Capacity Analysis Module:												
Vol/Sat:	0.03	0.45	0.45	0.01	0.28	0.28	0.15	0.12	0.12	0.02	0.02	0.02
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.863
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	360	2340	580	260	1600	230	560	1250	740	500	540	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	360	2340	580	260	1600	230	560	1250	740	500	540	340
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	360	2340	0	260	1600	230	560	1250	0	500	540	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	360	2340	0	260	1600	230	560	1250	0	500	540	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	360	2340	0	260	1600	230	560	1250	0	500	540	0
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.11	0.34	0.00	0.08	0.24	0.14	0.16	0.25	0.00	0.15	0.11	0.00
OvlAdjV/S:						0.00						
Crit Moves:	****			****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.844
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ignore				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 2	0	1	2	0 2	0	1	1	0 1	1	0
Volume Module:																
Base Vol:	50	910	80		290	560	160		480	950	130		90	310	160	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	50	910	80		290	560	160		480	950	130		90	310	160	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Volume:	50	910	80		290	560	160		480	950	0		90	310	160	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	50	910	80		290	560	160		480	950	0		90	310	160	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
FinalVolume:	50	910	80		290	560	160		480	950	0		90	310	160	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.84	0.16		1.00	2.00	1.00		2.00	2.00	1.00		1.00	1.32	0.68	
Final Sat.:	1700	3125	275		1700	3400	1700		3400	3400	1700		1700	2243	1157	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.29	0.29		0.17	0.16	0.09		0.14	0.28	0.00		0.05	0.14	0.14	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Scenario Report

Scenario:	2021+P-AM (11.8)
Command:	2021+P-AM
Volume:	2021+P-AM
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2021+P-AM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	B	xxxxx	0.648	B	xxxxx	0.648	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.693	B	xxxxx	0.693	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.618	B	xxxxx	0.618	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	C	xxxxx	0.765	C	xxxxx	0.765	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	A	xxxxx	0.590	A	xxxxx	0.590	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.419	A	xxxxx	0.419	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	C	xxxxx	0.703	C	xxxxx	0.703	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	E	xxxxx	0.913	E	xxxxx	0.913	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	C	xxxxx	0.743	C	xxxxx	0.743	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	B	xxxxx	0.621	B	xxxxx	0.621	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	B	xxxxx	0.698	B	xxxxx	0.698	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.548	A	xxxxx	0.548	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.664	B	xxxxx	0.664	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	A	xxxxx	0.568	A	xxxxx	0.568	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	A	xxxxx	0.458	A	xxxxx	0.458	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.544	A	xxxxx	0.544	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	B	xxxxx	0.659	B	xxxxx	0.659	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	C	xxxxx	0.751	C	xxxxx	0.751	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	B	xxxxx	0.619	B	xxxxx	0.619	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.434	A	xxxxx	0.434	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	B	xxxxx	0.661	B	xxxxx	0.661	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.735	C	xxxxx	0.735	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.531	A	xxxxx	0.531	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.569	A	xxxxx	0.569	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	D	31.6	0.885	D	31.6	0.885	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.406	A	xxxxx	0.406	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	C	xxxxx	0.716	C	xxxxx	0.716	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	B	xxxxx	0.678	B	xxxxx	0.678	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	A	xxxxx	0.528	A	xxxxx	0.528	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	A	xxxxx	0.572	A	xxxxx	0.572	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	B	xxxxx	0.603	B	xxxxx	0.603	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	A	xxxxx	0.256	A	xxxxx	0.256	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.481	A	xxxxx	0.481	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.328	A	xxxxx	0.328	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	D	xxxxx	0.847	D	xxxxx	0.847	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	A	xxxxx	0.572	A	xxxxx	0.572	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	B	xxxxx	0.606	B	xxxxx	0.606	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.419	A	xxxxx	0.419	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.531	A	xxxxx	0.531	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.457	A	xxxxx	0.457	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	A	xxxxx	0.575	A	xxxxx	0.575	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.495	A	xxxxx	0.495	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	D	xxxxx	0.863	D	xxxxx	0.863	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	B	xxxxx	0.611	B	xxxxx	0.611	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	C	xxxxx	0.777	C	xxxxx	0.777	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	A	xxxxx	0.581	A	xxxxx	0.581	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	A	xxxxx	0.456	A	xxxxx	0.456	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	C	xxxxx	0.774	C	xxxxx	0.774	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 49 RED HILL AVE/DYER RD	A	xxxxx	0.551	A	xxxxx	0.551	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	C	xxxxx	0.732	C	xxxxx	0.732	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	A	xxxxx	0.477	A	xxxxx	0.477	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	C	xxxxx	0.789	C	xxxxx	0.789	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	D	xxxxx	0.815	D	xxxxx	0.815	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	B	xxxxx	0.652	B	xxxxx	0.652	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	C	xxxxx	0.788	C	xxxxx	0.788	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.842	D	xxxxx	0.842	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	B	xxxxx	0.693	B	xxxxx	0.693	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	C	xxxxx	0.789	C	xxxxx	0.789	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	C	xxxxx	0.718	C	xxxxx	0.718	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.648
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	760	1000	1270	500	750	70	60	940	480	270	610	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	760	1000	1270	500	750	70	60	940	480	270	610	200
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	760	1000	0	500	750	70	60	940	480	270	610	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	760	1000	0	500	750	70	60	940	480	270	610	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	760	1000	0	500	750	70	60	940	480	270	610	0
OvlAdjVol:									100			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.22	0.15	0.00	0.15	0.11	0.04	0.04	0.18	0.28	0.08	0.12	0.00
OvlAdjV/S:									0.06			
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.693
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	2000	320	150	1280	0	0	0	0	860	0	990
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2000	320	150	1280	0	0	0	0	860	0	990
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.52
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2000	320	150	1280	0	0	0	0	860	0	519
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2000	320	150	1280	0	0	0	0	860	0	519
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2000	320	150	1280	0	0	0	0	860	0	519
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.09	0.04	0.19	0.00	0.00	0.00	0.00	0.25	0.00	0.31
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.618
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 4	0 1	2	0 4	0 1	0	0 0	0 0	2	0 1	0 1
Volume Module:												
Base Vol:	0	1280	390	150	1570	440	0	0	0	1140	180	1060
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1280	390	150	1570	440	0	0	0	1140	180	1060
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	1280	390	150	1570	440	0	0	0	1140	180	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1280	390	150	1570	440	0	0	0	1140	180	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	1280	390	150	1570	440	0	0	0	1140	180	0
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.23	0.04	0.23	0.26	0.00	0.00	0.00	0.34	0.11	0.00
OvlAdjV/S:			0.00									
Crit Moves:		****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.765
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	150	1050	310	1040	1450	20	370	130	110	90	90	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1050	310	1040	1450	20	370	130	110	90	90	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1050	310	1040	1450	20	370	130	110	90	90	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1050	310	1040	1450	20	370	130	110	90	90	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1050	310	1040	1450	20	370	130	110	90	90	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.95	0.05	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6707	93	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.18	0.31	0.22	0.22	0.11	0.08	0.06	0.03	0.05	0.12
Crit Moves:			****	****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	1 0	4 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	80	810	70	290	910	240	660	1080	120	50	250	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	810	70	290	910	240	660	1080	120	50	250	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	80	810	70	290	910	240	660	1080	120	50	250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	810	70	290	910	240	660	1080	120	50	250	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	80	810	70	290	910	240	660	1080	120	50	250	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	1.00	4.00	1.00	2.00	2.70	0.30	2.00	3.00	1.00
Final Sat.:	1700	6800	1700	1700	6800	1700	3400	4590	510	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.12	0.04	0.17	0.13	0.14	0.19	0.24	0.24	0.01	0.05	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.419
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	50	810	110	120	690	210	130	340	60	50	150	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	810	110	120	690	210	130	340	60	50	150	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	50	810	110	120	690	210	130	340	60	50	150	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	810	110	120	690	210	130	340	60	50	150	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	50	810	110	120	690	210	130	340	60	50	150	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.07	0.93	1.00	1.66	0.34	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	4907	1493	1600	2653	547	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.17	0.07	0.08	0.14	0.14	0.08	0.13	0.11	0.03	0.05	0.00
Crit Moves:		****		****				****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.703
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 2	0	0 0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	2100	0	0	2110	1190	0	0	0	1230	0	680
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2100	0	0	2110	1190	0	0	0	1230	0	680
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2100	0	0	2110	0	0	0	0	1230	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2100	0	0	2110	0	0	0	0	1230	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2100	0	0	2110	0	0	0	0	1230	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.41	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.24	0.00	0.00
Crit Moves:		****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.913
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	95	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 1	1	0 1!	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	890	0	0	3090	250	1210	0	1570	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	890	0	0	3090	250	1210	0	1570	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	890	0	0	3090	0	1210	0	1570	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	890	0	0	3090	0	1210	0	1570	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	890	0	0	3090	0	1210	0	1570	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	1.74	0.00	2.26	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	2960	0	3840	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.00	0.00	0.45	0.00	0.41	0.00	0.41	0.00	0.00	0.00
Crit Moves:	****				****		****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.743
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	210	1410	290	1040	2200	1380	200	160	50	190	410	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	1410	290	1040	2200	1380	200	160	50	190	410	420
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	210	1410	290	1040	2200	0	200	160	50	190	410	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	1410	290	1040	2200	0	200	160	50	190	410	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	210	1410	290	1040	2200	0	200	160	50	190	410	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.52	0.48	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2590	810	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.12	0.21	0.17	0.31	0.32	0.00	0.06	0.06	0.06	0.06	0.12	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.621
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	130	1390	100	200	1620	180	150	190	40	420	410	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1390	100	200	1620	180	150	190	40	420	410	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	130	1390	100	200	1620	180	150	190	0	420	410	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1390	100	200	1620	180	150	190	0	420	410	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	130	1390	100	200	1620	180	150	190	0	420	410	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.73	0.27	2.00	2.70	0.30	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	6344	456	3400	4590	510	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.22	0.22	0.06	0.35	0.35	0.04	0.06	0.00	0.12	0.12	0.05
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.698
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	130	390	240	180	1370	540	350	640	190	390	1010	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	390	240	180	1370	540	350	640	190	390	1010	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	130	390	240	180	1370	540	350	640	0	390	1010	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	390	240	180	1370	540	350	640	0	390	1010	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	130	390	240	180	1370	540	350	640	0	390	1010	210
OvlAdjVol:												150
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.15	0.04	0.29	0.34	0.11	0.13	0.00	0.12	0.21	0.13
OvlAdjV/S:												0.09
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.548
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	3 1	1	0 0	0 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	720	2630	0	0	620	350	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	720	2630	0	0	620	350	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	720	2630	0	0	620	350	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	720	2630	0	0	620	350	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	720	2630	0	0	620	350	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.20	1.80	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	5113	2887	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.23	0.55	0.00	0.00	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.664
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 4	1 0	0	0 4	0 0	1	1 1	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	2010	50	0	610	0	1300	420	1160	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2010	50	0	610	0	1300	420	1160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2010	50	0	610	0	1300	420	1160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2010	50	0	610	0	1300	420	1160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2010	50	0	610	0	1300	420	1160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.88	0.12	0.00	4.00	0.00	2.00	1.00	2.00	0.00	0.00	0.00
Final Sat.:	0	7806	194	0	6400	0	3200	1600	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.00	0.10	0.00	0.41	0.26	0.36	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.568
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	80	710	120	180	750	180	130	350	40	150	390	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	710	120	180	750	180	130	350	40	150	390	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	80	710	120	180	750	180	130	350	40	150	390	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	710	120	180	750	180	130	350	40	150	390	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	80	710	120	180	750	180	130	350	40	150	390	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.61	0.39	1.00	1.79	0.21	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2742	658	1700	3051	349	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.21	0.07	0.11	0.27	0.27	0.08	0.11	0.11	0.09	0.11	0.00
Crit Moves:		****			****				****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.458
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	360	1740	0	0	460	90	0	0	380	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	360	1740	0	0	460	90	0	0	380	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	360	0	0	0	460	90	0	0	380	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	360	0	0	0	460	90	0	0	380	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	360	0	0	0	460	90	0	0	380	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.51	0.49	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4015	785	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.23	0.00	0.00	0.00	0.11	0.11	0.00	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.544
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	0 0	1!	0 0	1 0	0	1 0
Volume Module:												
Base Vol:	30	2260	110	50	610	10	10	0	10	20	0	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	2260	110	50	610	10	10	0	10	20	0	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	2260	110	50	610	10	10	0	10	20	0	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	2260	110	50	610	10	10	0	10	20	0	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	2260	110	50	610	10	10	0	10	20	0	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	2.95	0.05	0.50	0.00	0.50	1.00	0.00	1.00
Final Sat.:	1600	4577	223	1600	4723	77	800	0	800	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.49	0.49	0.03	0.13	0.13	0.01	0.00	0.01	0.01	0.00	0.01
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	4 0	2	0 0	0 0	0	1 0	3 1	0
Volume Module:												
Base Vol:	510	2240	0	0	280	340	0	0	0	170	1050	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	510	2240	0	0	280	340	0	0	0	170	1050	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	510	2240	0	0	280	340	0	0	0	170	1050	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	510	2240	0	0	280	340	0	0	0	170	1050	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	510	2240	0	0	280	340	0	0	0	170	1050	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	1.00	3.41	0.59
Final Sat.:	3200	4800	0	0	6400	3200	0	0	0	1600	5463	937
Capacity Analysis Module:												
Vol/Sat:	0.16	0.47	0.00	0.00	0.04	0.11	0.00	0.00	0.00	0.11	0.19	0.19
Crit Moves:		****									****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.751
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0 4	1	0	1	0 3	0	0	1	1 2	0	2	0	0 0	0	0
Volume Module:																
Base Vol:	0	1240	230		100	360	0		1510	1720	460		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	1240	230		100	360	0		1510	1720	460		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	1240	230		100	360	0		1510	1720	460		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	1240	230		100	360	0		1510	1720	460		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	1240	230		100	360	0		1510	1720	460		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	4.22	0.78		1.00	3.00	0.00		1.87	2.13	2.00		0.00	0.00	0.00	
Final Sat.:	0	6748	1252		1600	4800	0		2992	3408	3200		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.18	0.18		0.06	0.08	0.00		0.50	0.50	0.14		0.00	0.00	0.00	
Crit Moves:		****				****				****						

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.619
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	110	1060	0	0	110	130	0	0	0	320	1150	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1060	0	0	110	130	0	0	0	320	1150	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1060	0	0	110	130	0	0	0	320	1150	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1060	0	0	110	130	0	0	0	320	1150	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1060	0	0	110	130	0	0	0	320	1150	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.83	2.17	0.00	0.00	0.00	1.00	3.50	0.50
Final Sat.:	3200	3200	0	0	2933	3467	0	0	0	1600	5600	800
Capacity Analysis Module:												
Vol/Sat:	0.03	0.33	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.20	0.21	0.29
Crit Moves:		****										****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.434
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2	0 2	0 0	1 1	2	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	340	290	120	280	0	850	1060	200	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	340	290	120	280	0	850	1060	200	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	340	290	120	280	0	850	1060	200	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	340	290	120	280	0	850	1060	200	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	340	290	120	280	0	850	1060	200	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.16	1.84	2.00	2.00	0.00	1.78	2.74	0.48	0.00	0.00	0.00
Final Sat.:	0	3454	2946	3200	3200	0	2848	4390	762	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.10	0.04	0.09	0.00	0.30	0.24	0.26	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.661
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	90	720	20	410	750	430	940	970	150	50	350	630
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	720	20	410	750	430	940	970	150	50	350	630
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	90	720	20	410	750	0	940	970	150	50	350	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	720	20	410	750	0	940	970	150	50	350	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	90	720	20	410	750	0	940	970	150	50	350	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.92	0.08	2.00	3.00	1.00	2.00	2.60	0.40	1.00	3.00	1.00
Final Sat.:	3400	4962	138	3400	5100	1700	3400	4417	683	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.12	0.15	0.00	0.28	0.22	0.22	0.03	0.07	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.735
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	2 0	1 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	210	410	100	110	1030	220	180	740	370	130	420	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	410	100	110	1030	220	180	740	370	130	420	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	410	100	110	1030	220	180	740	370	130	420	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	410	100	110	1030	220	180	740	370	130	420	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	210	410	100	110	1030	220	180	740	370	130	420	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	2.00	1.65	0.35	2.00	2.00	1.00	2.00	2.29	0.71
Final Sat.:	3400	3400	1700	3400	2802	598	3400	3400	1700	3400	3895	1205
Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.06	0.03	0.37	0.37	0.05	0.22	0.22	0.04	0.11	0.11
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.531
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	130	490	150	250	160	70	410	920	80	100	510	550
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	490	150	250	160	70	410	920	80	100	510	550
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	490	150	250	160	70	410	920	80	100	510	550
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	490	150	250	160	70	410	920	80	100	510	550
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	490	150	250	160	70	410	920	80	100	510	550
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	2.00	2.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	3200	3200
Capacity Analysis Module:												
Vol/Sat:	0.04	0.15	0.09	0.08	0.05	0.04	0.13	0.19	0.05	0.03	0.16	0.17
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.569
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0 1	0	1	0 1	0	1	0 0 1	0	1	0 0 1 0
Volume Module:												
Base Vol:	20	410	70	50	170	40	170	300	40	40	90	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	410	70	50	170	40	170	300	40	40	90	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	410	70	50	170	40	170	300	40	40	90	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	410	70	50	170	40	170	300	40	40	90	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	410	70	50	170	40	170	300	40	40	90	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.85	0.15	1.00	1.00	1.00	1.00	0.88	0.12	1.00	0.50	0.50
Final Sat.:	1600	1367	233	1600	1600	1600	1600	1412	188	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.30	0.30	0.03	0.11	0.03	0.11	0.21	0.21	0.03	0.11	0.11
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	0	Average Delay (sec/veh):	31.6
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	80	280	80	80	150	60	100	290	50	10	140	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	280	80	80	150	60	100	290	50	10	140	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	280	80	80	150	60	100	290	50	10	140	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	280	80	80	150	60	100	290	50	10	140	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	280	80	80	150	60	100	290	50	10	140	100
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.64	0.18	0.27	0.52	0.21	0.23	0.66	0.11	0.04	0.56	0.40
Final Sat.:	91	318	91	121	228	91	113	328	57	17	244	174
Capacity Analysis Module:												
Vol/Sat:	0.88	0.88	0.88	0.66	0.66	0.66	0.88	0.88	0.88	0.57	0.57	0.57
Crit Moves:		****			****			****			****	
Delay/Veh:	38.5	38.5	38.5	20.8	20.8	20.8	39.6	39.6	39.6	18.0	18.0	18.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.5	38.5	38.5	20.8	20.8	20.8	39.6	39.6	39.6	18.0	18.0	18.0
LOS by Move:	E	E	E	C	C	C	E	E	E	C	C	C
ApproachDel:		38.5			20.8			39.6			18.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		38.5			20.8			39.6			18.0	
LOS by Appr:		E			C			E			C	
AllWayAvgQ:	4.0	4.0	4.0	1.3	1.3	1.3	4.1	4.1	4.1	0.9	0.9	0.9

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.406
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	90	1260	410	10	570	50	180	170	100	140	30	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1260	410	10	570	50	180	170	100	140	30	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1260	410	10	570	50	180	170	100	140	30	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1260	410	10	570	50	180	170	100	140	30	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	1260	410	10	570	50	180	170	100	140	30	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.26	0.74	2.00	0.75	0.25
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	2015	1185	3200	1200	400
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.01	0.12	0.03	0.11	0.08	0.08	0.04	0.03	0.03
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.716
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	110	1490	40	80	620	120	260	70	120	30	30	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1490	40	80	620	120	260	70	120	30	30	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1490	40	80	620	120	260	70	120	30	30	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1490	40	80	620	120	260	70	120	30	30	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1490	40	80	620	120	260	70	120	30	30	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.07	0.47	0.03	0.05	0.19	0.08	0.16	0.04	0.08	0.02	0.04	0.04
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	60	1280	10	70	840	40	170	50	120	20	50	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1280	10	70	840	40	170	50	120	20	50	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1280	10	70	840	40	170	50	120	20	50	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1280	10	70	840	40	170	50	120	20	50	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1280	10	70	840	40	170	50	120	20	50	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.91	0.09	0.77	0.23	1.00	0.10	0.25	0.65
Final Sat.:	1600	3175	25	1600	3055	145	1236	364	1600	160	400	1040
Capacity Analysis Module:												
Vol/Sat:	0.04	0.40	0.40	0.04	0.28	0.27	0.11	0.14	0.08	0.01	0.13	0.13
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.528
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	60	1140	10	30	870	30	80	30	110	20	40	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1140	10	30	870	30	80	30	110	20	40	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1140	10	30	870	30	80	30	110	20	40	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1140	10	30	870	30	80	30	110	20	40	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1140	10	30	870	30	80	30	110	20	40	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.93	0.07	0.36	0.14	0.50	0.13	0.27	0.60
Final Sat.:	1600	3172	28	1600	3093	107	582	218	800	213	427	960
Capacity Analysis Module:												
Vol/Sat:	0.04	0.36	0.36	0.02	0.28	0.28	0.05	0.14	0.14	0.01	0.09	0.09
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.572
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	60	910	20	150	860	30	70	120	50	20	80	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	910	20	150	860	30	70	120	50	20	80	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	910	20	150	860	30	70	120	50	20	80	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	910	20	150	860	30	70	120	50	20	80	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	910	20	150	860	30	70	120	50	20	80	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.93	0.07	1.00	0.71	0.29	1.00	1.00	1.00
Final Sat.:	1600	3131	69	1600	3092	108	1600	1129	471	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.29	0.09	0.28	0.28	0.04	0.11	0.11	0.01	0.05	0.14
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.603
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	430	560	30	260	440	190	300	570	220	40	370	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	430	560	30	260	440	190	300	570	220	40	370	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	430	560	30	260	440	190	300	570	220	40	370	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	430	560	30	260	440	190	300	570	220	40	370	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	430	560	30	260	440	190	300	570	220	40	370	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.90	0.10	2.00	1.40	0.60	2.00	1.44	0.56	1.00	1.68	0.32
Final Sat.:	3200	3037	163	3200	2235	965	3200	2309	891	1600	2691	509
Capacity Analysis Module:												
Vol/Sat:	0.13	0.18	0.18	0.08	0.20	0.20	0.09	0.25	0.25	0.03	0.14	0.14
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.256
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 4	0 1	0	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	0	0	0	320	1140	10	0	0	10	80	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	320	1140	10	0	0	10	80	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	320	1140	10	0	0	10	80	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	320	1140	10	0	0	10	80	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	320	1140	10	0	0	10	80	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.18	0.01	0.00	0.00	0.01	0.05	0.00	0.00
Crit Moves:				****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.481
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	10	900	250	0	0	0	130	190	0	0	70	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	900	250	0	0	0	130	190	0	0	70	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	900	250	0	0	0	130	190	0	0	70	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	900	250	0	0	0	130	190	0	0	70	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	900	250	0	0	0	130	190	0	0	70	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.57	0.43	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.54	0.46
Final Sat.:	1600	2504	696	0	0	0	3200	1600	0	0	862	738
Capacity Analysis Module:												
Vol/Sat:	0.01	0.36	0.36	0.00	0.00	0.00	0.04	0.12	0.00	0.00	0.08	0.08
Crit Moves:		****					****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.328
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0	0 3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	190	480	580	0	900	40	100	250	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	190	480	580	0	900	40	100	250	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	190	480	0	0	900	40	100	250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	190	480	0	0	900	40	100	250	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	190	480	0	0	900	40	100	250	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.83	0.17	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	6128	272	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.10	0.00	0.00	0.15	0.15	0.06	0.08	0.00
Crit Moves:				****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.847
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	121	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 1	0	0	0 0	0	2	0 2	0 0	0	0 2	0 1
Volume Module:												
Base Vol:	150	1590	180	0	0	0	770	330	0	0	220	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1590	180	0	0	0	770	330	0	0	220	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1590	180	0	0	0	770	330	0	0	220	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1590	180	0	0	0	770	330	0	0	220	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1590	180	0	0	0	770	330	0	0	220	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.23	2.49	0.28	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	375	3975	450	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.40	0.40	0.00	0.00	0.00	0.24	0.10	0.00	0.00	0.07	0.21
Crit Moves:		****					****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.572
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	40	590	60	50	410	100	330	510	80	100	310	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	590	60	50	410	100	330	510	80	100	310	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	590	60	50	410	100	330	510	80	100	310	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	590	60	50	410	100	330	510	80	100	310	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	590	60	50	410	100	330	510	80	100	310	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.82	0.18	1.00	1.61	0.39	1.00	2.00	1.00	1.00	1.48	0.52
Final Sat.:	1600	2905	295	1600	2573	627	1600	3200	1600	1600	2362	838
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.20	0.03	0.16	0.16	0.21	0.16	0.05	0.06	0.13	0.13
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.606
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0	1 0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	20	90	20	110	130	30	60	490	160	60	840	730
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	90	20	110	130	30	60	490	160	60	840	730
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	90	20	110	130	30	60	490	160	60	840	730
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	90	20	110	130	30	60	490	160	60	840	730
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	90	20	110	130	30	60	490	160	60	840	730
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	2.00	0.81	0.19	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	2618	582	3200	1300	300	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.03	0.10	0.10	0.04	0.10	0.10	0.04	0.17	0.46
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.419
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	2	0 0	0 0	0	0 0	4 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	0	70	0	0	0	0	2540	350	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	70	0	0	0	0	2540	350	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	70	0	0	0	0	2540	350	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	70	0	0	0	0	2540	350	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	70	0	0	0	0	2540	350	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.40	0.22	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.531
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	3	0 1	1 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	210	1380	10	10	1530	470	170	10	70	10	10	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	1380	10	10	1530	470	170	10	70	10	10	20
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	210	1380	10	10	1530	0	170	10	0	10	10	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	1380	10	10	1530	0	170	10	0	10	10	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	210	1380	10	10	1530	0	170	10	0	10	10	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	3.00	1.00	1.89	0.11	1.00	0.25	0.25	0.50
Final Sat.:	1600	4765	35	1600	4800	1600	3022	178	1600	400	400	800
Capacity Analysis Module:												
Vol/Sat:	0.13	0.29	0.29	0.01	0.32	0.00	0.06	0.06	0.00	0.03	0.03	0.03
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.457
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	120	1870	70	70	1490	130	50	10	110	20	10	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1870	70	70	1490	130	50	10	110	20	10	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1870	70	70	1490	130	50	10	110	20	10	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1870	70	70	1490	130	50	10	110	20	10	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1870	70	70	1490	130	50	10	110	20	10	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.86	0.14	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6169	231	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.30	0.04	0.31	0.08	0.02	0.01	0.07	0.01	0.01	0.06
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.575
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	30	1500	230	100	1530	200	320	90	10	340	50	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	1500	230	100	1530	200	320	90	10	340	50	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	30	1500	230	100	1530	200	320	90	10	340	50	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	1500	230	100	1530	200	320	90	10	340	50	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	30	1500	230	100	1530	200	320	90	10	340	50	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.52	0.43	0.05	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2438	686	76	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.31	0.14	0.03	0.32	0.13	0.13	0.13	0.13	0.11	0.03	0.00
Crit Moves:	****				****		****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.495
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1480	160	110	1420	50	80	0	100	180	0	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1480	160	110	1420	50	80	0	100	180	0	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1480	160	110	1420	50	80	0	100	180	0	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1480	160	110	1420	50	80	0	100	180	0	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1480	160	110	1420	50	80	0	100	180	0	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.71	0.29	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4332	468	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.34	0.03	0.30	0.03	0.05	0.00	0.06	0.06	0.00	0.04
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.863
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	166	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	430	1270	100	80	1500	150	190	290	420	190	490	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	430	1270	100	80	1500	150	190	290	420	190	490	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	430	1270	100	80	1500	150	190	290	420	190	490	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	430	1270	100	80	1500	150	190	290	420	190	490	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	430	1270	100	80	1500	150	190	290	420	190	490	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.78	0.22	1.00	3.00	1.00	1.19	1.81	1.00	1.00	2.00	1.00
Final Sat.:	3200	4450	350	1600	4800	1600	1900	2900	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.29	0.29	0.05	0.31	0.09	0.10	0.10	0.26	0.12	0.15	0.03
Crit Moves:	****				****				****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.611
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	210	2830	220	40	2200	290	210	180	130	320	210	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	2830	220	40	2200	290	210	180	130	320	210	110
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	210	2830	0	40	2200	290	210	180	0	320	210	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	2830	0	40	2200	290	210	180	0	320	210	110
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	210	2830	0	40	2200	290	210	180	0	320	210	110
OvlAdjVol:						185						90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.44	0.00	0.01	0.34	0.18	0.07	0.06	0.00	0.10	0.07	0.07
OvlAdjV/S:						0.12						0.06
Crit Moves:	****			****				****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.777
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	102	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	140	2030	120	590	2340	30	60	290	80	590	590	930
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	2030	120	590	2340	30	60	290	80	590	590	930
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	2030	0	590	2340	0	60	290	80	590	590	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	2030	0	590	2340	0	60	290	80	590	590	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	2030	0	590	2340	0	60	290	80	590	590	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.32	0.00	0.18	0.37	0.00	0.02	0.09	0.05	0.18	0.18	0.00
Crit Moves:		****			****				****		****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.581
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	0	1	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	100	1120		30	60	450		110	260	310		130	10	60		10
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	100	1120		30	60	450		110	260	310		130	10	60		10
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	100	1120		30	60	450		110	260	310		130	10	60		10
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	100	1120		30	60	450		110	260	310		130	10	60		10
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	100	1120		30	60	450		110	260	310		130	10	60		10
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	2.00	1.95		0.05	1.00	1.61		0.39	1.00	1.41		0.59	1.00	1.71		0.29
Final Sat.:	3200	3117		83	1600	2571		629	1600	2255		945	1600	2743		457
Capacity Analysis Module:																
Vol/Sat:	0.03	0.36		0.36	0.04	0.18		0.17	0.16	0.14		0.14	0.01	0.02		0.02
Crit Moves:		****			****				****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.456
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	180	700	60		40	430	120		540	270	170		20	60	20	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	180	700	60		40	430	120		540	270	170		20	60	20	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	180	700	60		40	430	120		540	270	170		20	60	20	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	180	700	60		40	430	120		540	270	170		20	60	20	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	180	700	60		40	430	120		540	270	170		20	60	20	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.84	0.16		1.00	1.56	0.44		2.00	1.00	1.00		1.00	1.50	0.50	
Final Sat.:	3200	2947	253		1600	2502	698		3200	1600	1600		1600	2400	800	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.24	0.24		0.03	0.17	0.17		0.17	0.17	0.11		0.01	0.03	0.03	
Crit Moves:		****				****				****				****		

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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.774
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Ignore			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0 2	0 2	0	0 3	0 1
Volume Module:												
Base Vol:	960	0	800	0	0	0	0	1500	730	0	620	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	960	0	800	0	0	0	0	1500	730	0	620	250
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	960	0	0	0	0	0	0	1500	0	0	620	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	960	0	0	0	0	0	0	1500	0	0	620	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	960	0	0	0	0	0	0	1500	0	0	620	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	3.00	1.00
Final Sat.:	3400	0	1700	0	0	0	0	3400	3400	0	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.12	0.00
Crit Moves:	****							****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.551
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	160	390	110	420	1020	150	190	760	220	470	760	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	390	110	420	1020	150	190	760	220	470	760	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	390	110	420	1020	150	190	760	220	470	760	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	390	110	420	1020	150	190	760	220	470	760	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	390	110	420	1020	150	190	760	220	470	760	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.12	0.88	2.00	3.49	0.51	2.00	3.10	0.90	2.00	4.00	1.00
Final Sat.:	3400	5304	1496	3400	5928	872	3400	5273	1527	3400	6800	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.07	0.07	0.12	0.17	0.17	0.06	0.14	0.14	0.14	0.11	0.18
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.732
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	0	1	2	0 1	0	1
Volume Module:																
Base Vol:	160	550	370		240	1170	170		120	210	130		310	430	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	160	550	370		240	1170	170		120	210	130		310	430	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	160	550	370		240	1170	170		120	210	130		310	430	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	160	550	370		240	1170	170		120	210	130		310	430	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	160	550	370		240	1170	170		120	210	130		310	430	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.00	1.00		1.00	2.62	0.38		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	3400	1700		1700	4453	647		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.09	0.16	0.22		0.14	0.26	0.26		0.07	0.06	0.08		0.09	0.25	0.08	
Crit Moves:			****	****					****					****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.477
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	260	940	320	120	1290	80	20	30	40	220	80	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	940	320	120	1290	80	20	30	40	220	80	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	940	320	120	1290	80	20	30	40	220	80	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	940	320	120	1290	80	20	30	40	220	80	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	260	940	320	120	1290	80	20	30	40	220	80	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.82	0.18	1.00	1.00	1.00	2.00	1.14	0.86
Final Sat.:	3400	5100	1700	3400	4802	298	1700	1700	1700	3400	1943	1457
Capacity Analysis Module:												
Vol/Sat:	0.08	0.18	0.19	0.04	0.27	0.27	0.01	0.02	0.02	0.06	0.04	0.04
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.789
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2 0	2	1 0	2	1 0	2 0	3 0	1
Volume Module:												
Base Vol:	110	140	100	200	1010	420	90	560	270	840	1380	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	140	100	200	1010	420	90	560	270	840	1380	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	140	100	200	1010	420	90	560	270	840	1380	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	140	100	200	1010	420	90	560	270	840	1380	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	140	100	200	1010	420	90	560	270	840	1380	70
OvlAdjVol:						240						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.17	0.83	2.00	2.00	2.00	1.00	2.02	0.98	2.00	3.00	1.00
Final Sat.:	3400	1983	1417	3400	3400	3400	1700	3441	1659	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.07	0.07	0.06	0.30	0.12	0.05	0.16	0.16	0.25	0.27	0.04
OvlAdjV/S:						0.07						
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.815
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	70	310	60	40	1420	170	60	210	60	280	660	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	310	60	40	1420	170	60	210	60	280	660	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	310	60	40	1420	170	60	210	60	280	660	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	310	60	40	1420	170	60	210	60	280	660	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	310	60	40	1420	170	60	210	60	280	660	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.68	0.32	1.00	1.79	0.21	1.00	1.56	0.44	1.00	1.76	0.24
Final Sat.:	1700	2849	551	1700	3036	364	1700	2644	756	1700	2992	408
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.02	0.47	0.47	0.04	0.08	0.08	0.16	0.22	0.22
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.652
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	110	350	100	130	1110	310	160	720	380	350	910	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	350	100	130	1110	310	160	720	380	350	910	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	110	350	100	130	1110	310	160	720	0	350	910	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	350	100	130	1110	310	160	720	0	350	910	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	110	350	100	130	1110	310	160	720	0	350	910	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.73	0.27
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4641	459
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.06	0.08	0.33	0.18	0.05	0.14	0.00	0.10	0.20	0.20
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.788
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 1	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	160	860	130	410	3410	1550	170	340	140	230	710	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	860	130	410	3410	1550	170	340	140	230	710	230
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	160	860	0	410	3410	0	170	340	140	230	710	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	860	0	410	3410	0	170	340	140	230	710	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	160	860	0	410	3410	0	170	340	140	230	710	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.13	0.00	0.12	0.50	0.00	0.05	0.07	0.08	0.07	0.14	0.00
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.842
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	3 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	210	1030	200	170	3290	270	70	230	100	270	810	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	1030	200	170	3290	270	70	230	100	270	810	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	1030	200	170	3290	270	70	230	100	270	810	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	1030	200	170	3290	270	70	230	100	270	810	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	210	1030	200	170	3290	270	70	230	100	270	810	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	3.70	0.30	2.00	2.09	0.91	2.00	2.56	0.44
Final Sat.:	3400	6800	1700	3400	6284	516	3400	3555	1545	3400	4348	752
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.12	0.05	0.52	0.52	0.02	0.06	0.06	0.08	0.19	0.19
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.693
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	200	1410	40		30	3380	310		40	20	40		30	40	20	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	200	1410	40		30	3380	310		40	20	40		30	40	20	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	200	1410	40		30	3380	310		40	20	40		30	40	20	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	200	1410	40		30	3380	310		40	20	40		30	40	20	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	200	1410	40		30	3380	310		40	20	40		30	40	20	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.89	0.11		2.00	3.66	0.34		1.00	1.00	1.00		1.00	1.33	0.67	
Final Sat.:	3400	6612	188		3400	6229	571		1700	1700	1700		1700	2267	1133	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.21	0.21		0.01	0.54	0.54		0.02	0.01	0.02		0.02	0.02	0.02	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.789
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 4	0 1	2	0 4	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	490	1210	410	450	2610	410	140	280	180	530	830	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	490	1210	410	450	2610	410	140	280	180	530	830	130
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	490	1210	0	450	2610	410	140	280	0	530	830	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	490	1210	0	450	2610	410	140	280	0	530	830	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	490	1210	0	450	2610	410	140	280	0	530	830	0
OvlAdjVol:						340						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.14	0.18	0.00	0.13	0.38	0.24	0.04	0.05	0.00	0.16	0.16	0.00
OvlAdjV/S:						0.20						
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.718
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 2	0 1	2	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	90	300	30	140	770	550	100	140	40	110	740	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	300	30	140	770	550	100	140	40	110	740	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	90	300	30	140	770	550	100	140	0	110	740	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	300	30	140	770	550	100	140	0	110	740	150
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	90	300	30	140	770	550	100	140	0	110	740	150
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	1.82	0.18	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.66	0.34
Final Sat.:	1700	3091	309	1700	3400	1700	3400	3400	1700	1700	2827	573
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.10	0.08	0.23	0.32	0.03	0.04	0.00	0.06	0.26	0.26
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Scenario Report

Scenario:	2021+P-PM (11.8)
Command:	2021+P-PM
Volume:	2021+P-PM
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2021+P-PM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	C	xxxxx	0.794	C	xxxxx	0.794	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.665	B	xxxxx	0.665	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.676	B	xxxxx	0.676	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	E	xxxxx	0.971	E	xxxxx	0.971	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	D	xxxxx	0.814	D	xxxxx	0.814	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.544	A	xxxxx	0.544	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	D	xxxxx	0.828	D	xxxxx	0.828	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	C	xxxxx	0.785	C	xxxxx	0.785	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	E	xxxxx	0.926	E	xxxxx	0.926	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	B	xxxxx	0.632	B	xxxxx	0.632	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	C	xxxxx	0.740	C	xxxxx	0.740	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.512	A	xxxxx	0.512	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.663	B	xxxxx	0.663	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	B	xxxxx	0.697	B	xxxxx	0.697	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	C	xxxxx	0.797	C	xxxxx	0.797	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.546	A	xxxxx	0.546	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	E	xxxxx	0.998	E	xxxxx	0.998	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	A	xxxxx	0.468	A	xxxxx	0.468	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	B	xxxxx	0.636	B	xxxxx	0.636	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.463	A	xxxxx	0.463	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	C	xxxxx	0.761	C	xxxxx	0.761	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.739	C	xxxxx	0.739	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.543	A	xxxxx	0.543	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.594	A	xxxxx	0.594	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	D	29.1	0.924	D	29.1	0.924	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.597	A	xxxxx	0.597	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	C	xxxxx	0.762	C	xxxxx	0.762	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	C	xxxxx	0.731	C	xxxxx	0.731	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	B	xxxxx	0.675	B	xxxxx	0.675	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	B	xxxxx	0.697	B	xxxxx	0.697	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	C	xxxxx	0.747	C	xxxxx	0.747	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	B	xxxxx	0.608	B	xxxxx	0.608	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.416	A	xxxxx	0.416	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.463	A	xxxxx	0.463	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	A	xxxxx	0.522	A	xxxxx	0.522	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	C	xxxxx	0.734	C	xxxxx	0.734	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	A	xxxxx	0.567	A	xxxxx	0.567	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.427	A	xxxxx	0.427	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.530	A	xxxxx	0.530	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.540	A	xxxxx	0.540	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	B	xxxxx	0.610	B	xxxxx	0.610	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.512	A	xxxxx	0.512	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	C	xxxxx	0.748	C	xxxxx	0.748	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	B	xxxxx	0.606	B	xxxxx	0.606	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	D	xxxxx	0.866	D	xxxxx	0.866	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	B	xxxxx	0.697	B	xxxxx	0.697	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	B	xxxxx	0.656	B	xxxxx	0.656	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	B	xxxxx	0.649	B	xxxxx	0.649	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 49 RED HILL AVE/DYER RD	E	xxxxx	0.906	E	xxxxx	0.906	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	D	xxxxx	0.862	D	xxxxx	0.862	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	C	xxxxx	0.768	C	xxxxx	0.768	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	E	xxxxx	0.981	E	xxxxx	0.981	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	E	xxxxx	0.974	E	xxxxx	0.974	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	D	xxxxx	0.833	D	xxxxx	0.833	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	E	xxxxx	0.927	E	xxxxx	0.927	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.864	D	xxxxx	0.864	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	C	xxxxx	0.707	C	xxxxx	0.707	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	D	xxxxx	0.880	D	xxxxx	0.880	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	D	xxxxx	0.859	D	xxxxx	0.859	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.794
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	640	1160	640	290	900	70	70	960	670	740	1100	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	640	1160	640	290	900	70	70	960	670	740	1100	520
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	640	1160	0	290	900	70	70	960	670	740	1100	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	640	1160	0	290	900	70	70	960	670	740	1100	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	640	1160	0	290	900	70	70	960	670	740	1100	0
OvlAdjVol:									350			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.19	0.17	0.00	0.09	0.13	0.04	0.04	0.19	0.39	0.22	0.22	0.00
OvlAdjV/S:									0.21			
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.665
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	2070	770	590	1660	0	0	0	0	430	0	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2070	770	590	1660	0	0	0	0	430	0	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2070	770	590	1660	0	0	0	0	430	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2070	770	590	1660	0	0	0	0	430	0	234
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2070	770	590	1660	0	0	0	0	430	0	234
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.23	0.17	0.24	0.00	0.00	0.00	0.00	0.13	0.00	0.14
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	2280	520	440	1340	300	0	0	0	550	130	550
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2280	520	440	1340	300	0	0	0	550	130	550
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2280	520	440	1340	300	0	0	0	550	130	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2280	520	440	1340	300	0	0	0	550	130	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2280	520	440	1340	300	0	0	0	550	130	0
OvlAdjVol:			245									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.31	0.13	0.20	0.18	0.00	0.00	0.00	0.16	0.08	0.00
OvlAdjV/S:			0.14									
Crit Moves:		****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.971
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	164	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	110	1580	110	510	1350	20	330	150	100	390	120	750
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1580	110	510	1350	20	330	150	100	390	120	750
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1580	110	510	1350	20	330	150	100	390	120	750
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1580	110	510	1350	20	330	150	100	390	120	750
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1580	110	510	1350	20	330	150	100	390	120	750
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.94	0.06	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6701	99	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.06	0.15	0.20	0.20	0.10	0.09	0.06	0.11	0.07	0.44
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.814
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	1 0	4 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	130	1030	40	160	990	610	370	450	90	80	1120	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1030	40	160	990	610	370	450	90	80	1120	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	130	1030	40	160	990	610	370	450	90	80	1120	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1030	40	160	990	610	370	450	90	80	1120	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	130	1030	40	160	990	610	370	450	90	80	1120	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	1.00	4.00	1.00	2.00	2.50	0.50	2.00	3.00	1.00
Final Sat.:	1700	6800	1700	1700	6800	1700	3400	4250	850	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.02	0.09	0.15	0.36	0.11	0.11	0.11	0.02	0.22	0.00
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.544
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	140	720	60	70	870	260	310	190	50	120	530	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	720	60	70	870	260	310	190	50	120	530	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	720	60	70	870	260	310	190	50	120	530	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	720	60	70	870	260	310	190	50	120	530	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	720	60	70	870	260	310	190	50	120	530	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.08	0.92	1.69	1.04	0.27	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	4927	1473	2703	1660	437	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.04	0.04	0.18	0.18	0.11	0.11	0.11	0.08	0.17	0.00
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.828
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 2	0	0 0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	3270	0	0	1970	1020	0	0	0	700	0	390
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3270	0	0	1970	1020	0	0	0	700	0	390
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	3270	0	0	1970	0	0	0	0	700	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3270	0	0	1970	0	0	0	0	700	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	3270	0	0	1970	0	0	0	0	700	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.64	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.14	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.785
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 1	1	0 1!	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	2010	0	0	1980	670	1160	0	660	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2010	0	0	1980	670	1160	0	660	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2010	0	0	1980	0	1160	0	660	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2010	0	0	1980	0	1160	0	660	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2010	0	0	1980	0	1160	0	660	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.00	0.00	0.29	0.00	0.34	0.00	0.19	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.926
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	105	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	80	2260	280	640	1610	300	930	690	110	290	280	1010
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	2260	280	640	1610	300	930	690	110	290	280	1010
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	80	2260	280	640	1610	0	930	690	110	290	280	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	2260	280	640	1610	0	930	690	110	290	280	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	80	2260	280	640	1610	0	930	690	110	290	280	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.72	0.28	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2933	468	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.16	0.19	0.24	0.00	0.27	0.24	0.24	0.09	0.08	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.632
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	50	1670	370	190	1560	180	290	620	190	150	280	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	1670	370	190	1560	180	290	620	190	150	280	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	50	1670	370	190	1560	180	290	620	0	150	280	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	1670	370	190	1560	180	290	620	0	150	280	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	50	1670	370	190	1560	180	290	620	0	150	280	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.27	0.73	2.00	2.69	0.31	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5567	1233	3400	4572	528	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.30	0.30	0.06	0.34	0.34	0.09	0.18	0.00	0.04	0.08	0.12
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.740
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	88	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	220	1440	430	270	550	380	620	1050	170	370	950	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	220	1440	430	270	550	380	620	1050	170	370	950	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	220	1440	430	270	550	380	620	1050	0	370	950	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	1440	430	270	550	380	620	1050	0	370	950	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	220	1440	430	270	550	380	620	1050	0	370	950	50
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.08	0.92	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4928	1472	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.29	0.29	0.06	0.11	0.24	0.19	0.22	0.00	0.12	0.20	0.03
OvlAdjV/S:												0.00
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.512
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 3	1 1	0	0 0	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	840	2460	0	0	1020	730	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	840	2460	0	0	1020	730	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	840	2460	0	0	1020	730	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	840	2460	0	0	1020	730	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	840	2460	0	0	1020	730	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	3200	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.26	0.51	0.00	0.00	0.21	0.23	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	1 0	0 0	4	0 0	1 1	1	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	2410	90	0	1010	0	900	780	1090	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2410	90	0	1010	0	900	780	1090	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2410	90	0	1010	0	900	780	1090	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2410	90	0	1010	0	900	780	1090	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2410	90	0	1010	0	900	780	1090	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.82	0.18	0.00	4.00	0.00	1.61	1.39	2.00	0.00	0.00	0.00
Final Sat.:	0	7712	288	0	6400	0	2571	2229	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.31	0.31	0.00	0.16	0.00	0.35	0.35	0.34	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.697
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	60	740	180	250	790	140	190	510	90	180	540	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	740	180	250	790	140	190	510	90	180	540	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	60	740	180	250	790	140	190	510	90	180	540	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	740	180	250	790	140	190	510	90	180	540	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	60	740	180	250	790	140	190	510	90	180	540	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.70	0.30	1.00	1.70	0.30	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2888	512	1700	2890	510	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.22	0.11	0.15	0.27	0.27	0.11	0.18	0.18	0.11	0.16	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.797
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	420	800	0	0	1700	160	0	0	470	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	420	800	0	0	1700	160	0	0	470	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	420	0	0	0	1700	160	0	0	470	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	420	0	0	0	1700	160	0	0	470	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	420	0	0	0	1700	160	0	0	470	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.74	0.26	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4387	413	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.26	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.15	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	0 0	1!	0 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	850	60	60	2190	10	10	10	20	80	0	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	850	60	60	2190	10	10	10	20	80	0	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	850	60	60	2190	10	10	10	20	80	0	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	850	60	60	2190	10	10	10	20	80	0	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	850	60	60	2190	10	10	10	20	80	0	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.80	0.20	1.00	2.99	0.01	0.25	0.25	0.50	1.00	0.00	1.00
Final Sat.:	1600	4484	316	1600	4778	22	400	400	800	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.19	0.19	0.04	0.46	0.46	0.01	0.03	0.03	0.05	0.00	0.03
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.998
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	4 0	2	0 0	0 0	0	1 0	3 1	0
Volume Module:												
Base Vol:	510	790	0	0	1000	1380	0	0	0	270	2490	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	510	790	0	0	1000	1380	0	0	0	270	2490	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	510	790	0	0	1000	1380	0	0	0	270	2490	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	510	790	0	0	1000	1380	0	0	0	270	2490	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	510	790	0	0	1000	1380	0	0	0	270	2490	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	1.00	3.82	0.18
Final Sat.:	3200	4800	0	0	6400	3200	0	0	0	1600	6106	294
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.00	0.00	0.16	0.43	0.00	0.00	0.00	0.17	0.41	0.41
Crit Moves:	****					****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.468
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 4	1 0	1	0 3	0 0	1	1 2	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	770	230	160	1100	0	530	1000	590	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	770	230	160	1100	0	530	1000	590	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	770	230	160	1100	0	530	1000	590	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	770	230	160	1100	0	530	1000	590	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	770	230	160	1100	0	530	1000	590	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	1.00	1.00	3.00	0.00	1.39	2.61	2.00	0.00	0.00	0.00
Final Sat.:	0	6400	1600	1600	4800	0	2217	4183	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.14	0.10	0.23	0.00	0.24	0.24	0.18	0.00	0.00	0.00
Crit Moves:					****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.636
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	160	310	0	0	500	890	0	0	0	420	1650	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	310	0	0	500	890	0	0	0	420	1650	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	310	0	0	500	890	0	0	0	420	1650	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	310	0	0	500	890	0	0	0	420	1650	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	310	0	0	500	890	0	0	0	420	1650	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.44	2.56	0.00	0.00	0.00	1.00	3.80	0.20
Final Sat.:	3200	3200	0	0	2302	4098	0	0	0	1600	6075	325
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.00	0.00	0.22	0.22	0.00	0.00	0.00	0.26	0.27	0.37
Crit Moves:	****				****							****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.463
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2	0 2	0 0	1	1 2	1 0	0	0 0	0 0 0
Volume Module:												
Base Vol:	0	200	270	260	660	0	280	1100	130	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	200	270	260	660	0	280	1100	130	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	200	270	260	660	0	280	1100	130	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	200	270	260	660	0	280	1100	130	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	200	270	260	660	0	280	1100	130	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	3.68	0.32	0.00	0.00	0.00
Final Sat.:	0	3200	3200	3200	3200	0	1600	5893	507	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.08	0.08	0.21	0.00	0.17	0.19	0.26	0.00	0.00	0.00
Crit Moves:					****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.761
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	180	1150	20	380	810	1010	710	510	80	60	820	870
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1150	20	380	810	1010	710	510	80	60	820	870
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	180	1150	20	380	810	0	710	510	80	60	820	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1150	20	380	810	0	710	510	80	60	820	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	180	1150	20	380	810	0	710	510	80	60	820	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.95	0.05	2.00	3.00	1.00	2.00	2.59	0.41	1.00	3.00	1.00
Final Sat.:	3400	5013	87	3400	5100	1700	3400	4408	692	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.23	0.23	0.11	0.16	0.00	0.21	0.12	0.12	0.04	0.16	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.739
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 2	0	1	2	0 1	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	340	1330	120		160	910	160		260	850	260		80	650	240	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	340	1330	120		160	910	160		260	850	260		80	650	240	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	340	1330	120		160	910	160		260	850	260		80	650	240	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	340	1330	120		160	910	160		260	850	260		80	650	240	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	340	1330	120		160	910	160		260	850	260		80	650	240	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	2.00	1.00		2.00	1.70	0.30		2.00	2.30	0.70		2.00	2.19	0.81	
Final Sat.:	3400	3400	1700		3400	2892	508		3400	3905	1195		3400	3725	1375	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.39	0.07		0.05	0.31	0.31		0.08	0.22	0.22		0.02	0.17	0.17	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.543
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	130	180	80	440	480	310	140	550	170	160	1270	290
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	180	80	440	480	310	140	550	170	160	1270	290
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	180	80	440	480	310	140	550	170	160	1270	290
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	180	80	440	480	310	140	550	170	160	1270	290
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	180	80	440	480	310	140	550	170	160	1270	290
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.05	0.14	0.15	0.19	0.04	0.11	0.11	0.05	0.26	0.18
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	190	50	130	410	180	100	140	60	60	340	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	190	50	130	410	180	100	140	60	60	340	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	190	50	130	410	180	100	140	60	60	340	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	190	50	130	410	180	100	140	60	60	340	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	190	50	130	410	180	100	140	60	60	340	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.79	0.21	1.00	1.00	1.00	1.00	0.70	0.30	1.00	0.81	0.19
Final Sat.:	1600	1267	333	1600	1600	1600	1600	1120	480	1600	1295	305
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.15	0.08	0.26	0.11	0.06	0.13	0.13	0.04	0.26	0.26
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.924
Loss Time (sec):	0	Average Delay (sec/veh):	29.1
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	40	160	30	100	320	80	50	190	60	40	240	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	160	30	100	320	80	50	190	60	40	240	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	160	30	100	320	80	50	190	60	40	240	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	160	30	100	320	80	50	190	60	40	240	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	160	30	100	320	80	50	190	60	40	240	60
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.70	0.13	0.20	0.64	0.16	0.17	0.63	0.20	0.12	0.70	0.18
Final Sat.:	79	314	59	108	346	87	79	301	95	57	344	86
Capacity Analysis Module:												
Vol/Sat:	0.51	0.51	0.51	0.92	0.92	0.92	0.63	0.63	0.63	0.70	0.70	0.70
Crit Moves:		****			****			****			****	
Delay/Veh:	16.3	16.3	16.3	45.1	45.1	45.1	19.7	19.7	19.7	22.4	22.4	22.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.3	16.3	16.3	45.1	45.1	45.1	19.7	19.7	19.7	22.4	22.4	22.4
LOS by Move:	C	C	C	E	E	E	C	C	C	C	C	C
ApproachDel:		16.3			45.1			19.7			22.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		16.3			45.1			19.7			22.4	
LOS by Appr:		C			E			C			C	
AllWayAvgQ:	0.8	0.8	0.8	5.3	5.3	5.3	1.3	1.3	1.3	1.7	1.7	1.7

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.597
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	70	620	210	10	1410	230	50	70	150	530	170	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	620	210	10	1410	230	50	70	150	530	170	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	620	210	10	1410	230	50	70	150	530	170	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	620	210	10	1410	230	50	70	150	530	170	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	620	210	10	1410	230	50	70	150	530	170	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	2.00	0.94	0.06
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	1600	1600	3200	1511	89
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.13	0.01	0.29	0.14	0.03	0.04	0.09	0.17	0.11	0.11
Crit Moves:	****				****					****	****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.762
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	90	730	40	50	1840	180	120	40	110	40	50	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	730	40	50	1840	180	120	40	110	40	50	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	730	40	50	1840	180	120	40	110	40	50	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	730	40	50	1840	180	120	40	110	40	50	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	730	40	50	1840	180	120	40	110	40	50	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.56	0.44
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	889	711
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.03	0.03	0.57	0.11	0.08	0.03	0.07	0.03	0.06	0.06
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.731
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	90	830	10	110	1660	100	50	50	100	20	60	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	830	10	110	1660	100	50	50	100	20	60	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	830	10	110	1660	100	50	50	100	20	60	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	830	10	110	1660	100	50	50	100	20	60	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	830	10	110	1660	100	50	50	100	20	60	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.89	0.11	0.50	0.50	1.00	0.13	0.40	0.47
Final Sat.:	1600	3162	38	1600	3018	182	800	800	1600	213	640	747
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.07	0.55	0.55	0.03	0.06	0.06	0.01	0.09	0.09
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.675
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	80	940	20	50	1550	70	50	30	60	30	40	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	940	20	50	1550	70	50	30	60	30	40	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	940	20	50	1550	70	50	30	60	30	40	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	940	20	50	1550	70	50	30	60	30	40	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	940	20	50	1550	70	50	30	60	30	40	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.91	0.09	0.36	0.21	0.43	0.21	0.29	0.50
Final Sat.:	1600	3133	67	1600	3062	138	571	343	686	343	457	800
Capacity Analysis Module:												
Vol/Sat:	0.05	0.30	0.30	0.03	0.51	0.51	0.03	0.09	0.09	0.02	0.09	0.09
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.697
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	750	30	150	1320	90	60	90	60	30	190	270
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	750	30	150	1320	90	60	90	60	30	190	270
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	750	30	150	1320	90	60	90	60	30	190	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	750	30	150	1320	90	60	90	60	30	190	270
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	750	30	150	1320	90	60	90	60	30	190	270
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.92	0.08	1.00	1.87	0.13	1.00	0.60	0.40	1.00	1.00	1.00
Final Sat.:	1600	3077	123	1600	2996	204	1600	960	640	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.24	0.24	0.09	0.44	0.44	0.04	0.09	0.09	0.02	0.12	0.17
Crit Moves:	****				****		****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.747
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	340	490	60	210	640	390	280	550	280	100	650	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	490	60	210	640	390	280	550	280	100	650	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	340	490	60	210	640	390	280	550	280	100	650	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	490	60	210	640	390	280	550	280	100	650	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	340	490	60	210	640	390	280	550	280	100	650	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.78	0.22	2.00	1.24	0.76	2.00	1.33	0.67	1.00	1.76	0.24
Final Sat.:	3200	2851	349	3200	1988	1212	3200	2120	1080	1600	2811	389
Capacity Analysis Module:												
Vol/Sat:	0.11	0.17	0.17	0.07	0.32	0.32	0.09	0.26	0.26	0.06	0.23	0.23
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.608
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	0	4	0	1	0	0	1	0	1	1	0	1	0	0
Volume Module:												
Base Vol:	0	0	0	250	2530	0	0	20	10	320	10	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	250	2530	0	0	20	10	320	10	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	250	2530	0	0	20	10	320	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	250	2530	0	0	20	10	320	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	250	2530	0	0	20	10	320	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.40	0.00	0.00	0.01	0.01	0.20	0.01	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.416
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	30	420	120	0	0	0	70	190	0	10	290	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	420	120	0	0	0	70	190	0	10	290	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	420	120	0	0	0	70	190	0	10	290	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	420	120	0	0	0	70	190	0	10	290	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	420	120	0	0	0	70	190	0	10	290	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.56	0.44	0.00	0.00	0.00	2.00	1.00	0.00	0.03	0.80	0.17
Final Sat.:	1600	2489	711	0	0	0	3200	1600	0	44	1289	267
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.17	0.00	0.00	0.00	0.02	0.12	0.00	0.01	0.22	0.22
Crit Moves:	****						****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.463
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0	0 3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	340	1330	1250	0	630	80	120	350	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	340	1330	1250	0	630	80	120	350	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	340	1330	0	0	630	80	120	350	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	340	1330	0	0	630	80	120	350	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	340	1330	0	0	630	80	120	350	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.55	0.45	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	5679	721	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.28	0.00	0.00	0.11	0.11	0.08	0.11	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.522
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	0	0	2	0	2	0	0	1
Volume Module:												
Base Vol:	150	770	130	0	0	0	570	420	0	0	310	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	770	130	0	0	0	570	420	0	0	310	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	770	130	0	0	0	570	420	0	0	310	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	770	130	0	0	0	570	420	0	0	310	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	770	130	0	0	0	570	420	0	0	310	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.43	2.20	0.37	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	686	3520	594	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.22	0.22	0.00	0.00	0.00	0.18	0.13	0.00	0.00	0.10	0.13
Crit Moves:	****						****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.734
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	86	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	70	510	100	140	700	380	150	550	50	80	750	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	510	100	140	700	380	150	550	50	80	750	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	510	100	140	700	380	150	550	50	80	750	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	510	100	140	700	380	150	550	50	80	750	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	510	100	140	700	380	150	550	50	80	750	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.67	0.33	1.00	1.30	0.70	1.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	1600	2675	525	1600	2074	1126	1600	3200	1600	1600	2892	308
Capacity Analysis Module:												
Vol/Sat:	0.04	0.19	0.19	0.09	0.34	0.34	0.09	0.17	0.03	0.05	0.26	0.26
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.567
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0	1 0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	110	180	180	600	100	100	30	1160	70	40	620	160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	180	180	600	100	100	30	1160	70	40	620	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	180	180	600	100	100	30	1160	70	40	620	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	180	180	600	100	100	30	1160	70	40	620	160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	180	180	600	100	100	30	1160	70	40	620	160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	0.50	0.50	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	800	800	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.19	0.13	0.13	0.02	0.24	0.04	0.03	0.13	0.10
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.427
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 2	0	0 0	0 0	0	0 4	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	0	230	0	0	0	0	2270	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	230	0	0	0	0	2270	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	230	0	0	0	0	2270	150	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	230	0	0	0	0	2270	150	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	230	0	0	0	0	2270	150	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.35	0.09	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.530
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	3	0 1	1 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	50	1610	0	0	1990	130	270	0	140	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	1610	0	0	1990	130	270	0	140	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	50	1610	0	0	1990	0	270	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	1610	0	0	1990	0	270	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	50	1610	0	0	1990	0	270	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	3.00	1.00	2.00	0.00	1.00	0.00	1.00	0.00
Final Sat.:	1600	4800	0	1600	4800	1600	3200	0	1600	0	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.00	0.00	0.41	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.540
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	60	1850	60	40	1900	60	80	10	150	20	10	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1850	60	40	1900	60	80	10	150	20	10	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1850	60	40	1900	60	80	10	150	20	10	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1850	60	40	1900	60	80	10	150	20	10	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1850	60	40	1900	60	80	10	150	20	10	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.87	0.13	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6199	201	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.30	0.03	0.40	0.04	0.03	0.01	0.09	0.01	0.01	0.06
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.610
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	40	1700	330	170	1670	410	260	90	20	280	130	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	1700	330	170	1670	410	260	90	20	280	130	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	40	1700	330	170	1670	410	260	90	20	280	130	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1700	330	170	1670	410	260	90	20	280	130	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	40	1700	330	170	1670	410	260	90	20	280	130	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.40	0.49	0.11	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2249	778	173	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.35	0.21	0.05	0.35	0.26	0.12	0.12	0.12	0.09	0.08	0.00
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.512
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1670	190	100	1580	80	40	0	20	220	0	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1670	190	100	1580	80	40	0	20	220	0	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1670	190	100	1580	80	40	0	20	220	0	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1670	190	100	1580	80	40	0	20	220	0	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1670	190	100	1580	80	40	0	20	220	0	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.69	0.31	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4310	490	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.39	0.03	0.33	0.05	0.03	0.00	0.01	0.07	0.00	0.04
Crit Moves:		****		****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.748
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	380	1860	320	40	1470	80	110	240	310	170	190	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	380	1860	320	40	1470	80	110	240	310	170	190	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	380	1860	320	40	1470	80	110	240	310	170	190	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	380	1860	320	40	1470	80	110	240	310	170	190	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	380	1860	320	40	1470	80	110	240	310	170	190	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.56	0.44	1.00	3.00	1.00	1.00	2.00	1.00	1.42	1.58	1.00
Final Sat.:	3200	4095	705	1600	4800	1600	1600	3200	1600	2267	2533	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.45	0.45	0.03	0.31	0.05	0.07	0.08	0.19	0.07	0.08	0.02
Crit Moves:		****		****					****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.606
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	150	2410	170	140	2520	240	240	220	100	310	220	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	2410	170	140	2520	240	240	220	100	310	220	150
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	150	2410	0	140	2520	240	240	220	0	310	220	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	2410	0	140	2520	240	240	220	0	310	220	150
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	150	2410	0	140	2520	240	240	220	0	310	220	150
OvlAdjVol:						120						80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.38	0.00	0.04	0.39	0.15	0.08	0.07	0.00	0.10	0.07	0.09
OvlAdjV/S:						0.08						0.05
Crit Moves:	****				****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.866
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	170	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	90	2080	530	1150	2350	50	50	350	50	230	280	670
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	2080	530	1150	2350	50	50	350	50	230	280	670
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	90	2080	0	1150	2350	0	50	350	50	230	280	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	2080	0	1150	2350	0	50	350	50	230	280	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	90	2080	0	1150	2350	0	50	350	50	230	280	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.33	0.00	0.36	0.37	0.00	0.02	0.11	0.03	0.07	0.09	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.697
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	170	860	10	30	1010	290	200	60	90	40	290	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	860	10	30	1010	290	200	60	90	40	290	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	860	10	30	1010	290	200	60	90	40	290	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	860	10	30	1010	290	200	60	90	40	290	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	860	10	30	1010	290	200	60	90	40	290	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.98	0.02	1.00	1.55	0.45	1.00	1.00	1.00	1.00	1.61	0.39
Final Sat.:	3200	3163	37	1600	2486	714	1600	1600	1600	1600	2578	622
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.27	0.02	0.41	0.41	0.13	0.04	0.06	0.03	0.11	0.11
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.656
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	310	660	20		20	560	430		370	80	90		50	360	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	310	660	20		20	560	430		370	80	90		50	360	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	310	660	20		20	560	430		370	80	90		50	360	70	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	310	660	20		20	560	430		370	80	90		50	360	70	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	310	660	20		20	560	430		370	80	90		50	360	70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.94	0.06		1.00	1.13	0.87		2.00	1.00	1.00		1.00	1.67	0.33	
Final Sat.:	3200	3106	94		1600	1810	1390		3200	1600	1600		1600	2679	521	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.21	0.21		0.01	0.31	0.31		0.12	0.05	0.06		0.03	0.13	0.13	
Crit Moves:	****					****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.649
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Ignore			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0	2 0 2	0	0	3 0 1
Volume Module:												
Base Vol:	750	0	320	0	0	0	0	810	810	0	1930	1100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	750	0	320	0	0	0	0	810	810	0	1930	1100
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	750	0	0	0	0	0	0	810	0	0	1930	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	750	0	0	0	0	0	0	810	0	0	1930	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	750	0	0	0	0	0	0	810	0	0	1930	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	3.00	1.00
Final Sat.:	3400	0	1700	0	0	0	0	3400	3400	0	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.38	0.00
Crit Moves:	****						****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.906
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	440	1790	390	370	480	190	250	800	70	200	910	600
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	1790	390	370	480	190	250	800	70	200	910	600
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	440	1790	390	370	480	190	250	800	70	200	910	600
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	1790	390	370	480	190	250	800	70	200	910	600
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	440	1790	390	370	480	190	250	800	70	200	910	600
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.28	0.72	2.00	3.00	1.00	2.00	3.68	0.32	2.00	4.00	1.00
Final Sat.:	3400	5583	1217	3400	5100	1700	3400	6253	547	3400	6800	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.32	0.32	0.11	0.09	0.11	0.07	0.13	0.13	0.06	0.13	0.35
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.862
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	0	1	2	0 1	0	1
Volume Module:																
Base Vol:	70	1960	260		120	770	150		160	400	110		500	260	360	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	70	1960	260		120	770	150		160	400	110		500	260	360	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	70	1960	260		120	770	150		160	400	110		500	260	360	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	70	1960	260		120	770	150		160	400	110		500	260	360	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	70	1960	260		120	770	150		160	400	110		500	260	360	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.65	0.35		1.00	2.51	0.49		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	4503	597		1700	4268	832		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.44	0.44		0.07	0.18	0.18		0.09	0.12	0.06		0.15	0.15	0.21	
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.768
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	130	1950	280	70	1220	30	90	120	300	470	60	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1950	280	70	1220	30	90	120	300	470	60	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1950	280	70	1220	30	90	120	300	470	60	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1950	280	70	1220	30	90	120	300	470	60	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1950	280	70	1220	30	90	120	300	470	60	190
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.93	0.07	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	3400	5100	1700	3400	4978	122	1700	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.38	0.16	0.02	0.25	0.25	0.05	0.07	0.18	0.14	0.04	0.11
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.981
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2	0 2	1 0	2	1 0	2 0	3	0 1
Volume Module:												
Base Vol:	440	1100	440	80	250	250	490	1370	150	150	850	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	1100	440	80	250	250	490	1370	150	150	850	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	440	1100	440	80	250	250	490	1370	150	150	850	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	1100	440	80	250	250	490	1370	150	150	850	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	440	1100	440	80	250	250	490	1370	150	150	850	240
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.43	0.57	2.00	2.00	2.00	1.00	2.70	0.30	2.00	3.00	1.00
Final Sat.:	3400	2429	971	3400	3400	3400	1700	4597	503	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.45	0.45	0.02	0.07	0.07	0.29	0.30	0.30	0.04	0.17	0.14
OvlAdjV/S:						0.00						
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.974
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	170	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	90	1450	370		100	430	80		100	830	90		100	510	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	1450	370		100	430	80		100	830	90		100	510	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	90	1450	370		100	430	80		100	830	90		100	510	70	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	90	1450	370		100	430	80		100	830	90		100	510	70	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	90	1450	370		100	430	80		100	830	90		100	510	70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.59	0.41		1.00	1.69	0.31		1.00	1.80	0.20		1.00	1.76	0.24	
Final Sat.:	1700	2709	691		1700	2867	533		1700	3067	333		1700	2990	410	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.54	0.54		0.06	0.15	0.15		0.06	0.27	0.27		0.06	0.17	0.17	
Crit Moves:		****				****					****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.833
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	280	1120	370	140	400	210	470	1410	110	160	1000	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	1120	370	140	400	210	470	1410	110	160	1000	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	280	1120	370	140	400	210	470	1410	0	160	1000	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	1120	370	140	400	210	470	1410	0	160	1000	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	280	1120	370	140	400	210	470	1410	0	160	1000	190
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.52	0.48
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4286	814
Capacity Analysis Module:												
Vol/Sat:	0.08	0.33	0.22	0.08	0.12	0.12	0.14	0.28	0.00	0.05	0.23	0.23
Crit Moves:		****		****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.927
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	106	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 1	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	500	3020	210	340	1450	370	950	780	260	170	660	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	500	3020	210	340	1450	370	950	780	260	170	660	520
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	500	3020	0	340	1450	0	950	780	260	170	660	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	500	3020	0	340	1450	0	950	780	260	170	660	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	500	3020	0	340	1450	0	950	780	260	170	660	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.75	2.25	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	4668	3832	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.15	0.44	0.00	0.10	0.21	0.00	0.20	0.20	0.15	0.05	0.13	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.864
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	3 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	190	2980	290	290	1490	200	470	840	250	260	490	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	2980	290	290	1490	200	470	840	250	260	490	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	2980	290	290	1490	200	470	840	250	260	490	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	2980	290	290	1490	200	470	840	250	260	490	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	2980	290	290	1490	200	470	840	250	260	490	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	3.53	0.47	2.00	2.31	0.69	2.00	2.13	0.87
Final Sat.:	3400	6800	1700	3400	5995	805	3400	3930	1170	3400	3622	1478
Capacity Analysis Module:												
Vol/Sat:	0.06	0.44	0.17	0.09	0.25	0.25	0.14	0.21	0.21	0.08	0.14	0.14
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.707
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	100	3070	40	30	1920	100	290	210	220	40	40	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	3070	40	30	1920	100	290	210	220	40	40	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	3070	40	30	1920	100	290	210	220	40	40	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	3070	40	30	1920	100	290	210	220	40	40	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	3070	40	30	1920	100	290	210	220	40	40	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.95	0.05	2.00	3.80	0.20	1.00	1.00	1.00	1.00	1.14	0.86
Final Sat.:	3400	6713	87	3400	6463	337	1700	1700	1700	1700	1943	1457
Capacity Analysis Module:												
Vol/Sat:	0.03	0.46	0.46	0.01	0.30	0.30	0.17	0.12	0.13	0.02	0.02	0.02
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.880
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	77	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	380	2380	600	270	1650	270	590	1280	770	510	550	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	380	2380	600	270	1650	270	590	1280	770	510	550	350
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	380	2380	0	270	1650	270	590	1280	0	510	550	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	380	2380	0	270	1650	270	590	1280	0	510	550	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	380	2380	0	270	1650	270	590	1280	0	510	550	0
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.11	0.35	0.00	0.08	0.24	0.16	0.17	0.25	0.00	0.15	0.11	0.00
OvlAdjV/S:						0.00						
Crit Moves:	****			****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.859
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ignore				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 2	0	1	2	0 2	0	1	1	0 1	1	0
Volume Module:																
Base Vol:	60	920	80		300	580	190		490	970	140		90	360	180	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	60	920	80		300	580	190		490	970	140		90	360	180	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Volume:	60	920	80		300	580	190		490	970	0		90	360	180	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	60	920	80		300	580	190		490	970	0		90	360	180	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
FinalVolume:	60	920	80		300	580	190		490	970	0		90	360	180	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.84	0.16		1.00	2.00	1.00		2.00	2.00	1.00		1.00	1.33	0.67	
Final Sat.:	1700	3128	272		1700	3400	1700		3400	3400	1700		1700	2267	1133	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.29	0.29		0.18	0.17	0.11		0.14	0.29	0.00		0.05	0.16	0.16	
Crit Moves:		****				****					****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Scenario Report

Scenario:	2026+P-AM (12.5)
Command:	2026+P-AM
Volume:	2026+P-AM
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2026+P-AM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	B	xxxxx	0.685	B	xxxxx	0.685	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.699	B	xxxxx	0.699	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.632	B	xxxxx	0.632	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	D	xxxxx	0.806	D	xxxxx	0.806	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	B	xxxxx	0.607	B	xxxxx	0.607	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.434	A	xxxxx	0.434	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	C	xxxxx	0.713	C	xxxxx	0.713	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	E	xxxxx	0.931	E	xxxxx	0.931	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	C	xxxxx	0.788	C	xxxxx	0.788	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	B	xxxxx	0.640	B	xxxxx	0.640	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	C	xxxxx	0.714	C	xxxxx	0.714	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.579	A	xxxxx	0.579	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.691	B	xxxxx	0.691	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	B	xxxxx	0.612	B	xxxxx	0.612	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	A	xxxxx	0.488	A	xxxxx	0.488	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.567	A	xxxxx	0.567	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	B	xxxxx	0.692	B	xxxxx	0.692	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	C	xxxxx	0.778	C	xxxxx	0.778	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	B	xxxxx	0.640	B	xxxxx	0.640	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.452	A	xxxxx	0.452	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	B	xxxxx	0.685	B	xxxxx	0.685	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.754	C	xxxxx	0.754	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.544	A	xxxxx	0.544	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	A	xxxxx	0.594	A	xxxxx	0.594	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	E	45.2	0.976	E	45.2	0.976	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	A	xxxxx	0.431	A	xxxxx	0.431	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	C	xxxxx	0.744	C	xxxxx	0.744	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	C	xxxxx	0.703	C	xxxxx	0.703	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	A	xxxxx	0.534	A	xxxxx	0.534	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	A	xxxxx	0.578	A	xxxxx	0.578	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	B	xxxxx	0.631	B	xxxxx	0.631	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	A	xxxxx	0.288	A	xxxxx	0.288	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.500	A	xxxxx	0.500	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.330	A	xxxxx	0.330	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	D	xxxxx	0.857	D	xxxxx	0.857	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	A	xxxxx	0.584	A	xxxxx	0.584	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	B	xxxxx	0.619	B	xxxxx	0.619	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.430	A	xxxxx	0.430	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.550	A	xxxxx	0.550	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.464	A	xxxxx	0.464	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	A	xxxxx	0.587	A	xxxxx	0.587	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.501	A	xxxxx	0.501	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	D	xxxxx	0.874	D	xxxxx	0.874	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	B	xxxxx	0.617	B	xxxxx	0.617	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	C	xxxxx	0.781	C	xxxxx	0.781	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	B	xxxxx	0.600	B	xxxxx	0.600	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	A	xxxxx	0.472	A	xxxxx	0.472	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	C	xxxxx	0.776	C	xxxxx	0.776	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 49 RED HILL AVE/DYER RD	A	xxxxx	0.565	A	xxxxx	0.565	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	D	xxxxx	0.875	D	xxxxx	0.875	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	A	xxxxx	0.485	A	xxxxx	0.485	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	D	xxxxx	0.836	D	xxxxx	0.836	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	D	xxxxx	0.835	D	xxxxx	0.835	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	B	xxxxx	0.678	B	xxxxx	0.678	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	D	xxxxx	0.815	D	xxxxx	0.815	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.871	D	xxxxx	0.871	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	C	xxxxx	0.718	C	xxxxx	0.718	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	C	xxxxx	0.800	C	xxxxx	0.800	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	C	xxxxx	0.741	C	xxxxx	0.741	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.685
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	800	1020	1270	520	860	70	60	990	490	270	630	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	800	1020	1270	520	860	70	60	990	490	270	630	200
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	800	1020	0	520	860	70	60	990	490	270	630	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	800	1020	0	520	860	70	60	990	490	270	630	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	800	1020	0	520	860	70	60	990	490	270	630	0
OvlAdjVol:									90			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.24	0.15	0.00	0.15	0.13	0.04	0.04	0.19	0.29	0.08	0.12	0.00
OvlAdjV/S:									0.05			
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.699
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	2040	330	150	1420	0	0	0	0	890	0	990
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2040	330	150	1420	0	0	0	0	890	0	990
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.52
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2040	330	150	1420	0	0	0	0	890	0	519
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2040	330	150	1420	0	0	0	0	890	0	519
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2040	330	150	1420	0	0	0	0	890	0	519
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.10	0.04	0.21	0.00	0.00	0.00	0.00	0.26	0.00	0.31
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.632
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	1330	400	150	1680	490	0	0	0	1140	190	1060
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1330	400	150	1680	490	0	0	0	1140	190	1060
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	1330	400	150	1680	490	0	0	0	1140	190	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1330	400	150	1680	490	0	0	0	1140	190	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	1330	400	150	1680	490	0	0	0	1140	190	0
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.24	0.04	0.25	0.29	0.00	0.00	0.00	0.34	0.11	0.00
OvlAdjV/S:			0.00									
Crit Moves:				****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.806
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	150	1090	340	1040	1450	20	390	150	120	90	100	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1090	340	1040	1450	20	390	150	120	90	100	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1090	340	1040	1450	20	390	150	120	90	100	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1090	340	1040	1450	20	390	150	120	90	100	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1090	340	1040	1450	20	390	150	120	90	100	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.95	0.05	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6707	93	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.20	0.31	0.22	0.22	0.11	0.09	0.07	0.03	0.06	0.14
Crit Moves:			****	****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.607
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	1 0	4 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	90	850	70	290	920	250	710	1120	140	50	270	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	850	70	290	920	250	710	1120	140	50	270	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	90	850	70	290	920	250	710	1120	140	50	270	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	850	70	290	920	250	710	1120	140	50	270	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	90	850	70	290	920	250	710	1120	140	50	270	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	1.00	4.00	1.00	2.00	2.67	0.33	2.00	3.00	1.00
Final Sat.:	1700	6800	1700	1700	6800	1700	3400	4533	567	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.13	0.04	0.17	0.14	0.15	0.21	0.25	0.25	0.01	0.05	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.434
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	50	850	120	120	700	210	130	360	60	60	150	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	850	120	120	700	210	130	360	60	60	150	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	50	850	120	120	700	210	130	360	60	60	150	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	850	120	120	700	210	130	360	60	60	150	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	50	850	120	120	700	210	130	360	60	60	150	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.08	0.92	1.00	1.67	0.33	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	4923	1477	1600	2674	526	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.18	0.08	0.08	0.14	0.14	0.08	0.13	0.11	0.04	0.05	0.00
Crit Moves:		****		****				****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.713
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 2	0	0 0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	2140	0	0	2170	1190	0	0	0	1240	0	690
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2140	0	0	2170	1190	0	0	0	1240	0	690
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2140	0	0	2170	0	0	0	0	1240	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2140	0	0	2170	0	0	0	0	1240	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2140	0	0	2170	0	0	0	0	1240	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.42	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.24	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.931
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	109	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	4	0 1	1 0	1!	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	920	0	0	3150	260	1210	0	1630	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	920	0	0	3150	260	1210	0	1630	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	920	0	0	3150	0	1210	0	1630	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	920	0	0	3150	0	1210	0	1630	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	920	0	0	3150	0	1210	0	1630	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	1.70	0.00	2.30	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	2897	0	3903	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.00	0.00	0.46	0.00	0.42	0.00	0.42	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.788
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	220	1480	290	1100	2260	1380	240	170	50	190	430	440
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	220	1480	290	1100	2260	1380	240	170	50	190	430	440
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	220	1480	290	1100	2260	0	240	170	50	190	430	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	1480	290	1100	2260	0	240	170	50	190	430	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	220	1480	290	1100	2260	0	240	170	50	190	430	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.55	0.45	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2627	773	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.22	0.17	0.32	0.33	0.00	0.07	0.06	0.06	0.06	0.13	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.640
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	140	1450	100	200	1620	190	150	200	50	460	420	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	1450	100	200	1620	190	150	200	50	460	420	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	140	1450	100	200	1620	190	150	200	0	460	420	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	1450	100	200	1620	190	150	200	0	460	420	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	140	1450	100	200	1620	190	150	200	0	460	420	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.74	0.26	2.00	2.69	0.31	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	6361	439	3400	4565	535	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.23	0.23	0.06	0.35	0.35	0.04	0.06	0.00	0.14	0.12	0.05
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.714
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	80	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	160	440	300	180	1390	540	350	660	220	390	1040	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	440	300	180	1390	540	350	660	220	390	1040	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	160	440	300	180	1390	540	350	660	0	390	1040	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	440	300	180	1390	540	350	660	0	390	1040	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	160	440	300	180	1390	540	350	660	0	390	1040	210
OvlAdjVol:												150
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.19	0.04	0.29	0.34	0.11	0.14	0.00	0.12	0.22	0.13
OvlAdjV/S:												0.09
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.579
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 3	1 1	0	0 0	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	720	2780	0	0	660	380	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	720	2780	0	0	660	380	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	720	2780	0	0	660	380	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	720	2780	0	0	660	380	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	720	2780	0	0	660	380	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.17	1.83	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	5077	2923	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.23	0.58	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.691
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 4	1 0	0	0 4	0 0	1	1 1	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	2050	50	0	640	0	1370	420	1160	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2050	50	0	640	0	1370	420	1160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2050	50	0	640	0	1370	420	1160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2050	50	0	640	0	1370	420	1160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2050	50	0	640	0	1370	420	1160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.88	0.12	0.00	4.00	0.00	2.00	1.00	2.00	0.00	0.00	0.00
Final Sat.:	0	7810	190	0	6400	0	3200	1600	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.00	0.10	0.00	0.43	0.26	0.36	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.612
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	80	730	120	200	790	200	150	420	40	150	420	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	730	120	200	790	200	150	420	40	150	420	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	80	730	120	200	790	200	150	420	40	150	420	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	730	120	200	790	200	150	420	40	150	420	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	80	730	120	200	790	200	150	420	40	150	420	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.60	0.40	1.00	1.83	0.17	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2713	687	1700	3104	296	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.21	0.07	0.12	0.29	0.29	0.09	0.14	0.14	0.09	0.12	0.00
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.488
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	380	1850	0	0	490	110	0	0	400	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	380	1850	0	0	490	110	0	0	400	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	380	0	0	0	490	110	0	0	400	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	380	0	0	0	490	110	0	0	400	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	380	0	0	0	490	110	0	0	400	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.45	0.55	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	3920	880	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.24	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.13	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.567
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	0 0	1!	0 0	1 0	0	1 0
Volume Module:												
Base Vol:	30	2370	110	50	660	10	10	0	10	20	0	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	2370	110	50	660	10	10	0	10	20	0	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	2370	110	50	660	10	10	0	10	20	0	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	2370	110	50	660	10	10	0	10	20	0	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	2370	110	50	660	10	10	0	10	20	0	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.87	0.13	1.00	2.96	0.04	0.50	0.00	0.50	1.00	0.00	1.00
Final Sat.:	1600	4587	213	1600	4728	72	800	0	800	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.52	0.52	0.03	0.14	0.14	0.01	0.00	0.01	0.01	0.00	0.01
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.692
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	3	0 0	0	0	4	0 2	0	0	0	0 0	1	0	3	1 0
Volume Module:																
Base Vol:	510	2360		0	0	300		390	0		0	0	170	1090		190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	510	2360		0	0	300		390	0		0	0	170	1090		190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	510	2360		0	0	300		390	0		0	0	170	1090		190
Reduct Vol:	0	0	0	0	0	0	0		0	0	0		0	0	0	
Reduced Vol:	510	2360		0	0	300		390	0		0	0	170	1090		190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	510	2360		0	0	300		390	0		0	0	170	1090		190
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	3.00	0.00	0.00	4.00	2.00	0.00		0.00	0.00	0.00		1.00	3.41	0.59	
Final Sat.:	3200	4800		0	0	6400	3200		0		0	0	1600	5450		950
Capacity Analysis Module:																
Vol/Sat:	0.16	0.49	0.00	0.00	0.05	0.12	0.00		0.00	0.00	0.00		0.11	0.20	0.20	
Crit Moves:	****													****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.778
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0 4	1	0	1	0 3	0	0	1	1 2	0	2	0	0 0	0	0
Volume Module:																
Base Vol:	0	1310	230		100	370	0		1560	1790	460		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	1310	230		100	370	0		1560	1790	460		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	1310	230		100	370	0		1560	1790	460		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	1310	230		100	370	0		1560	1790	460		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	1310	230		100	370	0		1560	1790	460		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	4.25	0.75		1.00	3.00	0.00		1.86	2.14	2.00		0.00	0.00	0.00	
Final Sat.:	0	6805	1195		1600	4800	0		2980	3420	3200		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.19	0.19		0.06	0.08	0.00		0.52	0.52	0.14		0.00	0.00	0.00	
Crit Moves:		****				****				****						

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.640
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	1 1	2	0 0	0 0	0	1 1	2 1	0
Volume Module:												
Base Vol:	120	1100	0	0	110	130	0	0	0	320	1180	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1100	0	0	110	130	0	0	0	320	1180	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1100	0	0	110	130	0	0	0	320	1180	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1100	0	0	110	130	0	0	0	320	1180	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1100	0	0	110	130	0	0	0	320	1180	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.83	2.17	0.00	0.00	0.00	1.00	3.49	0.51
Final Sat.:	3200	3200	0	0	2933	3467	0	0	0	1600	5589	811
Capacity Analysis Module:												
Vol/Sat:	0.04	0.34	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.20	0.21	0.30
Crit Moves:		****										****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.452
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2	0 2	0 0	1 1	2	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	350	320	120	280	0	890	1090	200	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	350	320	120	280	0	890	1090	200	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	350	320	120	280	0	890	1090	200	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	350	320	120	280	0	890	1090	200	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	350	320	120	280	0	890	1090	200	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.09	1.91	2.00	2.00	0.00	1.80	2.74	0.46	0.00	0.00	0.00
Final Sat.:	0	3343	3057	3200	3200	0	2877	4379	744	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.10	0.04	0.09	0.00	0.31	0.25	0.27	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.685
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	90	760	30	450	770	430	950	1040	150	50	350	650
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	760	30	450	770	430	950	1040	150	50	350	650
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	90	760	30	450	770	0	950	1040	150	50	350	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	760	30	450	770	0	950	1040	150	50	350	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	90	760	30	450	770	0	950	1040	150	50	350	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.89	0.11	2.00	3.00	1.00	2.00	2.62	0.38	1.00	3.00	1.00
Final Sat.:	3400	4906	194	3400	5100	1700	3400	4457	643	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.13	0.15	0.00	0.28	0.23	0.23	0.03	0.07	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.754
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 2	0	1	2	0 1	1	0	2	0 2	1	0	2	0 2	1	0
Volume Module:																
Base Vol:	210	450	110		110	1040	230		180	790	370		140	480	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	210	450	110		110	1040	230		180	790	370		140	480	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	210	450	110		110	1040	230		180	790	370		140	480	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	210	450	110		110	1040	230		180	790	370		140	480	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	210	450	110		110	1040	230		180	790	370		140	480	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	2.00	1.00		2.00	1.64	0.36		2.00	2.04	0.96		2.00	2.36	0.64	
Final Sat.:	3400	3400	1700		3400	2784	616		3400	3473	1627		3400	4013	1087	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.13	0.06		0.03	0.37	0.37		0.05	0.23	0.23		0.04	0.12	0.12	
Crit Moves:	****					****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.544
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 1	1	2	0 2	0 1	2	0 3	0 1	2	0 2	1 1
Volume Module:												
Base Vol:	130	510	160	250	160	70	420	1010	80	100	540	560
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	510	160	250	160	70	420	1010	80	100	540	560
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	510	160	250	160	70	420	1010	80	100	540	560
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	510	160	250	160	70	420	1010	80	100	540	560
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	510	160	250	160	70	420	1010	80	100	540	560
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	2.00	2.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	3200	3200
Capacity Analysis Module:												
Vol/Sat:	0.04	0.16	0.10	0.08	0.05	0.04	0.13	0.21	0.05	0.03	0.17	0.17
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	420	80	50	180	40	170	320	40	40	90	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	420	80	50	180	40	170	320	40	40	90	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	420	80	50	180	40	170	320	40	40	90	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	420	80	50	180	40	170	320	40	40	90	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	420	80	50	180	40	170	320	40	40	90	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.84	0.16	1.00	1.00	1.00	1.00	0.89	0.11	1.00	0.50	0.50
Final Sat.:	1600	1344	256	1600	1600	1600	1600	1422	178	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.31	0.31	0.03	0.11	0.03	0.11	0.23	0.22	0.03	0.11	0.11
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.976
Loss Time (sec):	0	Average Delay (sec/veh):	45.2
Optimal Cycle:	0	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	80	290	90	80	150	60	120	300	50	10	150	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	290	90	80	150	60	120	300	50	10	150	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	290	90	80	150	60	120	300	50	10	150	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	290	90	80	150	60	120	300	50	10	150	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	290	90	80	150	60	120	300	50	10	150	110
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.63	0.20	0.27	0.52	0.21	0.25	0.64	0.11	0.04	0.55	0.41
Final Sat.:	84	303	94	120	224	90	123	307	51	16	242	178
Capacity Analysis Module:												
Vol/Sat:	0.96	0.96	0.96	0.67	0.67	0.67	0.98	0.98	0.98	0.62	0.62	0.62
Crit Moves:	****					****	****				****	
Delay/Veh:	55.8	55.8	55.8	24.1	24.1	24.1	61.2	61.2	61.2	21.7	21.7	21.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.8	55.8	55.8	24.1	24.1	24.1	61.2	61.2	61.2	21.7	21.7	21.7
LOS by Move:	F	F	F	C	C	C	F	F	F	C	C	C
ApproachDel:	55.8			24.1			61.2			21.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	55.8			24.1			61.2			21.7		
LOS by Appr:	F			C			F			C		
AllWayAvgQ:	6.1	6.1	6.1	1.6	1.6	1.6	6.8	6.8	6.8	1.3	1.3	1.3

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.431
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	90	1310	440	10	580	50	200	170	100	140	30	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1310	440	10	580	50	200	170	100	140	30	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1310	440	10	580	50	200	170	100	140	30	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1310	440	10	580	50	200	170	100	140	30	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	1310	440	10	580	50	200	170	100	140	30	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.26	0.74	2.00	0.75	0.25
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	2015	1185	3200	1200	400
Capacity Analysis Module:												
Vol/Sat:	0.06	0.27	0.28	0.01	0.12	0.03	0.13	0.08	0.08	0.04	0.03	0.03
Crit Moves:			****	****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.744
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	120	1540	40	80	630	120	280	70	120	30	30	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1540	40	80	630	120	280	70	120	30	30	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1540	40	80	630	120	280	70	120	30	30	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1540	40	80	630	120	280	70	120	30	30	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1540	40	80	630	120	280	70	120	30	30	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.08	0.48	0.03	0.05	0.20	0.08	0.17	0.04	0.08	0.02	0.04	0.04
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.703
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	60	1300	10	70	840	40	200	50	120	20	50	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1300	10	70	840	40	200	50	120	20	50	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1300	10	70	840	40	200	50	120	20	50	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1300	10	70	840	40	200	50	120	20	50	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1300	10	70	840	40	200	50	120	20	50	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.91	0.09	0.80	0.20	1.00	0.10	0.25	0.65
Final Sat.:	1600	3176	24	1600	3055	145	1280	320	1600	160	400	1040
Capacity Analysis Module:												
Vol/Sat:	0.04	0.41	0.41	0.04	0.28	0.27	0.13	0.16	0.08	0.01	0.13	0.13
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.534
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	60	1160	10	30	870	30	80	30	110	20	40	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1160	10	30	870	30	80	30	110	20	40	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1160	10	30	870	30	80	30	110	20	40	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1160	10	30	870	30	80	30	110	20	40	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1160	10	30	870	30	80	30	110	20	40	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.93	0.07	0.36	0.14	0.50	0.13	0.27	0.60
Final Sat.:	1600	3173	27	1600	3093	107	582	218	800	213	427	960
Capacity Analysis Module:												
Vol/Sat:	0.04	0.37	0.37	0.02	0.28	0.28	0.05	0.14	0.14	0.01	0.09	0.09
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.578
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	60	930	20	150	860	30	70	130	50	20	80	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	930	20	150	860	30	70	130	50	20	80	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	930	20	150	860	30	70	130	50	20	80	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	930	20	150	860	30	70	130	50	20	80	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	930	20	150	860	30	70	130	50	20	80	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.93	0.07	1.00	0.72	0.28	1.00	1.00	1.00
Final Sat.:	1600	3133	67	1600	3092	108	1600	1156	444	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.30	0.09	0.28	0.28	0.04	0.11	0.11	0.01	0.05	0.14
Crit Moves:		****			****			****				****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.631
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	470	570	30	260	440	200	310	580	250	40	370	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	470	570	30	260	440	200	310	580	250	40	370	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	470	570	30	260	440	200	310	580	250	40	370	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	470	570	30	260	440	200	310	580	250	40	370	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	470	570	30	260	440	200	310	580	250	40	370	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.90	0.10	2.00	1.38	0.62	2.00	1.40	0.60	1.00	1.68	0.32
Final Sat.:	3200	3040	160	3200	2200	1000	3200	2236	964	1600	2691	509
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.19	0.08	0.20	0.20	0.10	0.26	0.26	0.03	0.14	0.14
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.288
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1 0	4	0 1	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	370	1150	10	0	0	10	80	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	370	1150	10	0	0	10	80	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	370	1150	10	0	0	10	80	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	370	1150	10	0	0	10	80	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	370	1150	10	0	0	10	80	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.23	0.18	0.01	0.00	0.00	0.01	0.05	0.00	0.00
Crit Moves:				****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.500
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Protected				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	0	0 0	0	0	2	0 1	0	0	0	0 0	1	0
Volume Module:																
Base Vol:	10	910	250		0	0	0		150	220	0		0	70	60	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	10	910	250		0	0	0		150	220	0		0	70	60	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	10	910	250		0	0	0		150	220	0		0	70	60	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	10	910	250		0	0	0		150	220	0		0	70	60	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	10	910	250		0	0	0		150	220	0		0	70	60	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.57	0.43		0.00	0.00	0.00		2.00	1.00	0.00		0.00	0.54	0.46	
Final Sat.:	1600	2510	690		0	0	0		3200	1600	0		0	862	738	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.36	0.36		0.00	0.00	0.00		0.05	0.14	0.00		0.00	0.08	0.08	
Crit Moves:		****								****						

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.330
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0	0 3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	190	490	590	0	910	40	100	250	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	190	490	590	0	910	40	100	250	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	190	490	0	0	910	40	100	250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	190	490	0	0	910	40	100	250	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	190	490	0	0	910	40	100	250	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.83	0.17	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	6131	269	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.10	0.00	0.00	0.15	0.15	0.06	0.08	0.00
Crit Moves:				****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.857
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	130	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	0	0	2	0	2	0	0	1
Volume Module:												
Base Vol:	150	1590	200	0	0	0	770	330	0	0	230	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1590	200	0	0	0	770	330	0	0	230	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1590	200	0	0	0	770	330	0	0	230	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1590	200	0	0	0	770	330	0	0	230	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1590	200	0	0	0	770	330	0	0	230	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.23	2.46	0.31	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	371	3934	495	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.40	0.40	0.00	0.00	0.00	0.24	0.10	0.00	0.00	0.07	0.21
Crit Moves:		****					****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.584
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	50	610	60	50	440	100	330	560	80	100	330	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	610	60	50	440	100	330	560	80	100	330	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	610	60	50	440	100	330	560	80	100	330	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	610	60	50	440	100	330	560	80	100	330	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	610	60	50	440	100	330	560	80	100	330	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.82	0.18	1.00	1.63	0.37	1.00	2.00	1.00	1.00	1.50	0.50
Final Sat.:	1600	2913	287	1600	2607	593	1600	3200	1600	1600	2400	800
Capacity Analysis Module:												
Vol/Sat:	0.03	0.21	0.21	0.03	0.17	0.17	0.21	0.17	0.05	0.06	0.14	0.14
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.619
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0	1 0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	20	90	20	130	130	30	60	520	160	60	880	750
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	90	20	130	130	30	60	520	160	60	880	750
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	90	20	130	130	30	60	520	160	60	880	750
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	90	20	130	130	30	60	520	160	60	880	750
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	90	20	130	130	30	60	520	160	60	880	750
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	2.00	0.81	0.19	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	2618	582	3200	1300	300	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.04	0.10	0.10	0.04	0.11	0.10	0.04	0.18	0.47
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.430
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	2	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0
Volume Module:												
Base Vol:	0	0	70	0	0	0	0	2610	350	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	70	0	0	0	0	2610	350	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	70	0	0	0	0	2610	350	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	70	0	0	0	0	2610	350	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	70	0	0	0	0	2610	350	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.41	0.22	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.550
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	3	0 1	1 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	220	1430	10	10	1560	490	190	10	80	10	10	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	220	1430	10	10	1560	490	190	10	80	10	10	20
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	220	1430	10	10	1560	0	190	10	0	10	10	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	1430	10	10	1560	0	190	10	0	10	10	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	220	1430	10	10	1560	0	190	10	0	10	10	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	3.00	1.00	1.90	0.10	1.00	0.25	0.25	0.50
Final Sat.:	1600	4767	33	1600	4800	1600	3040	160	1600	400	400	800
Capacity Analysis Module:												
Vol/Sat:	0.14	0.30	0.30	0.01	0.33	0.00	0.06	0.06	0.00	0.03	0.03	0.03
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.464
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	120	1920	70	70	1520	130	50	10	110	20	10	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1920	70	70	1520	130	50	10	110	20	10	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1920	70	70	1520	130	50	10	110	20	10	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1920	70	70	1520	130	50	10	110	20	10	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1920	70	70	1520	130	50	10	110	20	10	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.86	0.14	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6175	225	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.31	0.31	0.04	0.32	0.08	0.02	0.01	0.07	0.01	0.01	0.06
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.587
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	30	1530	240	100	1540	210	320	90	10	340	50	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	1530	240	100	1540	210	320	90	10	340	50	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	30	1530	240	100	1540	210	320	90	10	340	50	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	1530	240	100	1540	210	320	90	10	340	50	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	30	1530	240	100	1540	210	320	90	10	340	50	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.52	0.43	0.05	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2438	686	76	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.32	0.15	0.03	0.32	0.13	0.13	0.13	0.13	0.11	0.03	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.501
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1510	160	110	1430	50	80	0	100	180	0	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1510	160	110	1430	50	80	0	100	180	0	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1510	160	110	1430	50	80	0	100	180	0	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1510	160	110	1430	50	80	0	100	180	0	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1510	160	110	1430	50	80	0	100	180	0	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.71	0.29	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4340	460	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.35	0.03	0.30	0.03	0.05	0.00	0.06	0.06	0.00	0.04
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.874
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	430	1300	100	80	1510	150	190	290	430	200	500	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	430	1300	100	80	1510	150	190	290	430	200	500	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	430	1300	100	80	1510	150	190	290	430	200	500	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	430	1300	100	80	1510	150	190	290	430	200	500	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	430	1300	100	80	1510	150	190	290	430	200	500	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.79	0.21	1.00	3.00	1.00	1.19	1.81	1.00	1.00	2.00	1.00
Final Sat.:	3200	4457	343	1600	4800	1600	1900	2900	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.29	0.29	0.05	0.31	0.09	0.10	0.10	0.27	0.13	0.16	0.03
Crit Moves:	****				****				****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.617
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Ignore				Ovl				Ignore				Ovl			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 4	0	1	2	0 4	0	1	2	0 2	0	1	2	0 2	0	1
Volume Module:																
Base Vol:	210	2850	220		40	2220	290		210	180	130		330	210	110	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	210	2850	220		40	2220	290		210	180	130		330	210	110	
User Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Volume:	210	2850	0		40	2220	290		210	180	0		330	210	110	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	210	2850	0		40	2220	290		210	180	0		330	210	110	
PCE Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	0.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
FinalVolume:	210	2850	0		40	2220	290		210	180	0		330	210	110	
OvlAdjVol:							185								90	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	4.00	1.00		2.00	4.00	1.00		2.00	2.00	1.00		2.00	2.00	1.00	
Final Sat.:	3200	6400	1600		3200	6400	1600		3200	3200	1600		3200	3200	1600	
Capacity Analysis Module:																
Vol/Sat:	0.07	0.45	0.00		0.01	0.35	0.18		0.07	0.06	0.00		0.10	0.07	0.07	
OvlAdjV/S:							0.12								0.06	
Crit Moves:	****				****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	104	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	140	2040	120	600	2370	30	60	290	80	590	600	930
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	2040	120	600	2370	30	60	290	80	590	600	930
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	2040	0	600	2370	0	60	290	80	590	600	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	2040	0	600	2370	0	60	290	80	590	600	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	2040	0	600	2370	0	60	290	80	590	600	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.32	0.00	0.19	0.37	0.00	0.02	0.09	0.05	0.18	0.19	0.00
Crit Moves:		****			****				****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	0	1	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	110	1160		30	60	450		120	270	310		130	10	60		10
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	110	1160		30	60	450		120	270	310		130	10	60		10
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	110	1160		30	60	450		120	270	310		130	10	60		10
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	110	1160		30	60	450		120	270	310		130	10	60		10
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	110	1160		30	60	450		120	270	310		130	10	60		10
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	2.00	1.95		0.05	1.00	1.58		0.42	1.00	1.41		0.59	1.00	1.71		0.29
Final Sat.:	3200	3119		81	1600	2526		674	1600	2255		945	1600	2743		457
Capacity Analysis Module:																
Vol/Sat:	0.03	0.37		0.37	0.04	0.18		0.18	0.17	0.14		0.14	0.01	0.02		0.02
Crit Moves:		****			****				****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.472
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	190	730		60	40	430		120	560	270		170	20	60		20
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	190	730		60	40	430		120	560	270		170	20	60		20
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	190	730		60	40	430		120	560	270		170	20	60		20
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	190	730		60	40	430		120	560	270		170	20	60		20
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	190	730		60	40	430		120	560	270		170	20	60		20
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	2.00	1.85		0.15	1.00	1.56		0.44	2.00	1.00		1.00	1.00	1.50		0.50
Final Sat.:	3200	2957		243	1600	2502		698	3200	1600		1600	1600	2400		800
Capacity Analysis Module:																
Vol/Sat:	0.06	0.25		0.25	0.03	0.17		0.17	0.17	0.17		0.11	0.01	0.03		0.03
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.776
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Ignore			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0	2 0 2	0	0	3 0 1
Volume Module:												
Base Vol:	960	0	810	0	0	0	0	1510	730	0	620	270
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	960	0	810	0	0	0	0	1510	730	0	620	270
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	960	0	0	0	0	0	0	1510	0	0	620	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	960	0	0	0	0	0	0	1510	0	0	620	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	960	0	0	0	0	0	0	1510	0	0	620	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	3.00	1.00
Final Sat.:	3400	0	1700	0	0	0	0	3400	3400	0	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.12	0.00
Crit Moves:	****							****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.565
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	170	410	120	420	1020	160	240	760	240	490	760	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	410	120	420	1020	160	240	760	240	490	760	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	410	120	420	1020	160	240	760	240	490	760	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	410	120	420	1020	160	240	760	240	490	760	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	410	120	420	1020	160	240	760	240	490	760	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.09	0.91	2.00	3.46	0.54	2.00	3.04	0.96	2.00	4.00	1.00
Final Sat.:	3400	5260	1540	3400	5878	922	3400	5168	1632	3400	6800	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.08	0.08	0.12	0.17	0.17	0.07	0.15	0.15	0.14	0.11	0.18
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.875
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	0	1	2	0 1	0	1
Volume Module:																
Base Vol:	170	580	370		240	1180	210		190	320	190		310	580	130	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	170	580	370		240	1180	210		190	320	190		310	580	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	170	580	370		240	1180	210		190	320	190		310	580	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	170	580	370		240	1180	210		190	320	190		310	580	130	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	170	580	370		240	1180	210		190	320	190		310	580	130	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.00	1.00		1.00	2.55	0.45		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	3400	1700		1700	4329	771		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.17	0.22		0.14	0.27	0.27		0.11	0.09	0.11		0.09	0.34	0.08	
Crit Moves:	****					****			****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.485
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	260	940	330	130	1300	80	20	30	40	240	80	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	940	330	130	1300	80	20	30	40	240	80	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	940	330	130	1300	80	20	30	40	240	80	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	940	330	130	1300	80	20	30	40	240	80	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	260	940	330	130	1300	80	20	30	40	240	80	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.83	0.17	1.00	1.00	1.00	2.00	1.07	0.93
Final Sat.:	3400	5100	1700	3400	4804	296	1700	1700	1700	3400	1813	1587
Capacity Analysis Module:												
Vol/Sat:	0.08	0.18	0.19	0.04	0.27	0.27	0.01	0.02	0.02	0.07	0.04	0.04
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.836
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	2 0	2	1 0	2	1 0	2 0	3 0	1
Volume Module:												
Base Vol:	130	170	120	320	1150	420	90	560	270	840	1440	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	170	120	320	1150	420	90	560	270	840	1440	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	170	120	320	1150	420	90	560	270	840	1440	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	170	120	320	1150	420	90	560	270	840	1440	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	170	120	320	1150	420	90	560	270	840	1440	110
OvlAdjVol:						240						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	1.17	0.83	2.00	2.00	2.00	1.00	2.02	0.98	2.00	3.00	1.00
Final Sat.:	3400	1993	1407	3400	3400	3400	1700	3441	1659	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.09	0.09	0.34	0.12	0.05	0.16	0.16	0.25	0.28	0.06
OvlAdjV/S:						0.07						
Crit Moves:	****				****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.835
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	70	370	60		60	1440	180		70	230	60		310	690	90	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	70	370	60		60	1440	180		70	230	60		310	690	90	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	70	370	60		60	1440	180		70	230	60		310	690	90	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	70	370	60		60	1440	180		70	230	60		310	690	90	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	70	370	60		60	1440	180		70	230	60		310	690	90	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.72	0.28		1.00	1.78	0.22		1.00	1.59	0.41		1.00	1.77	0.23	
Final Sat.:	1700	2926	474		1700	3022	378		1700	2697	703		1700	3008	392	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.13	0.13		0.04	0.48	0.48		0.04	0.09	0.09		0.18	0.23	0.23	
Crit Moves:	****					****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	130	400	100	150	1130	310	170	770	380	350	970	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	400	100	150	1130	310	170	770	380	350	970	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	130	400	100	150	1130	310	170	770	0	350	970	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	400	100	150	1130	310	170	770	0	350	970	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	130	400	100	150	1130	310	170	770	0	350	970	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.75	0.25
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4667	433
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.06	0.09	0.33	0.18	0.05	0.15	0.00	0.10	0.21	0.21
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.815
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 4	0 1	2	0 4	0 1	2	1 2	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	180	890	130	420	3470	1550	180	360	170	230	760	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	890	130	420	3470	1550	180	360	170	230	760	230
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	180	890	0	420	3470	0	180	360	170	230	760	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	890	0	420	3470	0	180	360	170	230	760	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	180	890	0	420	3470	0	180	360	170	230	760	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.13	0.00	0.12	0.51	0.00	0.05	0.07	0.10	0.07	0.15	0.00
Crit Moves:	****			****			****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.871
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 4	0 1		2	0 3	1 0		2	0 2	1 0		2	0 2	1 0	
Volume Module:																
Base Vol:	210	1080	230		170	3370	290		70	280	110		280	870	150	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	210	1080	230		170	3370	290		70	280	110		280	870	150	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	210	1080	230		170	3370	290		70	280	110		280	870	150	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	210	1080	230		170	3370	290		70	280	110		280	870	150	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	210	1080	230		170	3370	290		70	280	110		280	870	150	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	4.00	1.00		2.00	3.68	0.32		2.00	2.15	0.85		2.00	2.56	0.44	
Final Sat.:	3400	6800	1700		3400	6261	539		3400	3662	1438		3400	4350	750	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.16	0.14		0.05	0.54	0.54		0.02	0.08	0.08		0.08	0.20	0.20	
Crit Moves:	****					****			****					****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.718
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	220	1480	40		30	3420	360		50	20	40		30	40	20	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	220	1480	40		30	3420	360		50	20	40		30	40	20	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	220	1480	40		30	3420	360		50	20	40		30	40	20	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	220	1480	40		30	3420	360		50	20	40		30	40	20	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	220	1480	40		30	3420	360		50	20	40		30	40	20	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.89	0.11		2.00	3.62	0.38		1.00	1.00	1.00		1.00	1.33	0.67	
Final Sat.:	3400	6621	179		3400	6152	648		1700	1700	1700		1700	2267	1133	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.22	0.22		0.01	0.56	0.56		0.03	0.01	0.02		0.02	0.02	0.02	
Crit Moves:	****					****			****					****		

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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.800
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 4	0 1	2	0 4	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	490	1250	410	460	2650	420	160	290	190	530	860	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	490	1250	410	460	2650	420	160	290	190	530	860	140
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	490	1250	0	460	2650	420	160	290	0	530	860	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	490	1250	0	460	2650	420	160	290	0	530	860	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	490	1250	0	460	2650	420	160	290	0	530	860	0
OvlAdjVol:						340						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.14	0.18	0.00	0.14	0.39	0.25	0.05	0.06	0.00	0.16	0.17	0.00
OvlAdjV/S:						0.20						
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.741
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ignore				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 2	0	1	2	0 2	0	1	1	0 1	1	0
Volume Module:																
Base Vol:	90	320	30		140	780	580		110	140	40		110	740	160	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	320	30		140	780	580		110	140	40		110	740	160	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Volume:	90	320	30		140	780	580		110	140	0		110	740	160	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	90	320	30		140	780	580		110	140	0		110	740	160	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
FinalVolume:	90	320	30		140	780	580		110	140	0		110	740	160	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.83	0.17		1.00	2.00	1.00		2.00	2.00	1.00		1.00	1.64	0.36	
Final Sat.:	1700	3109	291		1700	3400	1700		3400	3400	1700		1700	2796	604	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.10	0.10		0.08	0.23	0.34		0.03	0.04	0.00		0.06	0.26	0.26	
Crit Moves:	****						****		****					****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Scenario Report

Scenario:	2026+P-PM (12.5)
Command:	2026+P-PM
Volume:	2026+P-PM
Geometry:	EX GEO
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2026+P-PM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 MACARTHUR BLVD/MAIN ST	D	xxxxx	0.834	D	xxxxx	0.834	+ 0.000 V/C
# 2 MACARTHUR BLVD/I-405 NB RAMPS	B	xxxxx	0.677	B	xxxxx	0.677	+ 0.000 V/C
# 3 MACARTHUR BLVD/I-405 SB RAMPS	B	xxxxx	0.688	B	xxxxx	0.688	+ 0.000 V/C
# 4 MACARTHUR BLVD/MICHELSON DR	F	xxxxx	1.012	F	xxxxx	1.012	+ 0.000 V/C
# 5 MACARTHUR BLVD/CAMPUS DR	D	xxxxx	0.841	D	xxxxx	0.841	+ 0.000 V/C
# 6 MACARTHUR BLVD/BIRCH ST	A	xxxxx	0.568	A	xxxxx	0.568	+ 0.000 V/C
# 7 JAMBOREE RD/I-405 NB RAMPS	D	xxxxx	0.846	D	xxxxx	0.846	+ 0.000 V/C
# 8 JAMBOREE RD/I-405 SB RAMPS	C	xxxxx	0.785	C	xxxxx	0.785	+ 0.000 V/C
# 9 JAMBOREE RD/MICHELSON DR	E	xxxxx	0.979	E	xxxxx	0.979	+ 0.000 V/C
# 10 JAMBOREE RD/CAMPUS DR	B	xxxxx	0.647	B	xxxxx	0.647	+ 0.000 V/C
# 11 JAMBOREE RD/MACARTHUR BLVD	C	xxxxx	0.747	C	xxxxx	0.747	+ 0.000 V/C
# 12 JAMBOREE RD/NORTH BRISTOL ST	A	xxxxx	0.527	A	xxxxx	0.527	+ 0.000 V/C
# 13 JAMBOREE RD/SOUTH BRISTOL ST	B	xxxxx	0.677	B	xxxxx	0.677	+ 0.000 V/C
# 14 VON KARMAN AVE/MICHELSON DR	C	xxxxx	0.718	C	xxxxx	0.718	+ 0.000 V/C
# 15 CAMPUS DR/AIRPORT WY	D	xxxxx	0.838	D	xxxxx	0.838	+ 0.000 V/C
# 16 CAMPUS DR/QUAIL ST	A	xxxxx	0.571	A	xxxxx	0.571	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	F	xxxxx	1.053	F	xxxxx	1.053	+ 0.000 V/C
# 18 CAMPUS DR/SOUTH BRISTOL ST	A	xxxxx	0.483	A	xxxxx	0.483	+ 0.000 V/C
# 19 BIRCH ST/NORTH BRISTOL ST	B	xxxxx	0.662	B	xxxxx	0.662	+ 0.000 V/C
# 20 BIRCH ST/SOUTH BRISTOL ST	A	xxxxx	0.475	A	xxxxx	0.475	+ 0.000 V/C
# 21 RED HILL AVE/MACARTHUR BLVD	C	xxxxx	0.783	C	xxxxx	0.783	+ 0.000 V/C
# 22 RED HILL AVE/MAIN ST	C	xxxxx	0.756	C	xxxxx	0.756	+ 0.000 V/C
# 23 SANTA ANA AVE/BRISTOL ST	A	xxxxx	0.578	A	xxxxx	0.578	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 24 SANTA ANA AVE/MESA DR	B	xxxxx	0.613	B	xxxxx	0.613	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	D	33.8	0.968	D	33.8	0.968	+ 0.000 V/C
# 26 IRVINE AVE/MESA DR	B	xxxxx	0.605	B	xxxxx	0.605	+ 0.000 V/C
# 27 IRVINE AVE/UNIVERSITY DR	C	xxxxx	0.772	C	xxxxx	0.772	+ 0.000 V/C
# 28 IRVINE AVE/22ND ST	C	xxxxx	0.747	C	xxxxx	0.747	+ 0.000 V/C
# 29 IRVINE AVE/20TH ST	B	xxxxx	0.678	B	xxxxx	0.678	+ 0.000 V/C
# 30 IRVINE AVE/19TH ST	C	xxxxx	0.703	C	xxxxx	0.703	+ 0.000 V/C
# 31 IRVINE AVE/17TH ST	C	xxxxx	0.778	C	xxxxx	0.778	+ 0.000 V/C
# 32 NEWPORT BLVD (SB)/MESA DR	B	xxxxx	0.622	B	xxxxx	0.622	+ 0.000 V/C
# 33 NEWPORT BLVD (NB)/MESA DR	A	xxxxx	0.431	A	xxxxx	0.431	+ 0.000 V/C
# 34 NEWPORT BLVD (SB)/DEL MAR AVE	A	xxxxx	0.471	A	xxxxx	0.471	+ 0.000 V/C
# 35 NEWPORT BLVD (NB)/DEL MAR AVE	A	xxxxx	0.525	A	xxxxx	0.525	+ 0.000 V/C
# 36 VON KARMAN AVE/CAMPUS DR	C	xxxxx	0.756	C	xxxxx	0.756	+ 0.000 V/C
# 37 VON KARMAN AVE/MACARTHUR RD	A	xxxxx	0.573	A	xxxxx	0.573	+ 0.000 V/C
# 38 BAYVIEW PL/SOUTH BRISTOL ST	A	xxxxx	0.433	A	xxxxx	0.433	+ 0.000 V/C
# 39 JAMBOREE RD/BIRCH ST	A	xxxxx	0.546	A	xxxxx	0.546	+ 0.000 V/C
# 40 JAMBOREE RD/BAYVEIW WAY	A	xxxxx	0.546	A	xxxxx	0.546	+ 0.000 V/C
# 41 JAMBOREE RD/UNIVERSITY DR-EAST	B	xxxxx	0.627	B	xxxxx	0.627	+ 0.000 V/C
# 42 JAMBOREE RD/BISON AVE	A	xxxxx	0.515	A	xxxxx	0.515	+ 0.000 V/C
# 43 JAMBOREE RD/EASTBLUFF DR-FORD	C	xxxxx	0.765	C	xxxxx	0.765	+ 0.000 V/C
# 44 MACARTHUR BLVD/BISON AVE	B	xxxxx	0.611	B	xxxxx	0.611	+ 0.000 V/C
# 45 MACARTHUR BLVD/FORD RD-BONITA	D	xxxxx	0.873	D	xxxxx	0.873	+ 0.000 V/C
# 46 RED HILL AVE/PAULARINO AVE	C	xxxxx	0.716	C	xxxxx	0.716	+ 0.000 V/C
# 47 RED HILL AVE/BAKER ST	B	xxxxx	0.666	B	xxxxx	0.666	+ 0.000 V/C
# 48 SR-55 NB RAMPS/MACARTHUR BLVD	B	xxxxx	0.663	B	xxxxx	0.663	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 49 RED HILL AVE/DYER RD	E	xxxxx	0.918	E	xxxxx	0.918	+ 0.000 V/C
# 50 RED HILL AVE/ALTON PKWY	E	xxxxx	0.903	E	xxxxx	0.903	+ 0.000 V/C
# 51 RED HILL AVE/MCGAW AVE	C	xxxxx	0.774	C	xxxxx	0.774	+ 0.000 V/C
# 52 VON KARMAN AVE/BARRANCA PKWY	F	xxxxx	1.065	F	xxxxx	1.065	+ 0.000 V/C
# 53 VON KARMAN AVE/ALTON PKWY	F	xxxxx	1.006	F	xxxxx	1.006	+ 0.000 V/C
# 54 VON KARMAN AVE/MAIN ST	D	xxxxx	0.855	D	xxxxx	0.855	+ 0.000 V/C
# 55 JAMBOREE RD/BARRANCA PKWY	E	xxxxx	0.942	E	xxxxx	0.942	+ 0.000 V/C
# 56 JAMBOREE RD/ALTON PKWY	D	xxxxx	0.894	D	xxxxx	0.894	+ 0.000 V/C
# 57 JAMBOREE RD/MCGAW AVE	C	xxxxx	0.731	C	xxxxx	0.731	+ 0.000 V/C
# 58 JAMBOREE RD/MAIN ST	D	xxxxx	0.896	D	xxxxx	0.896	+ 0.000 V/C
# 59 HARVARD AVE/MICHELSON DR	D	xxxxx	0.874	D	xxxxx	0.874	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 MACARTHUR BLVD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.834
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	2	2 0	4 0	1	1 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	660	1220	640	290	990	70	70	970	710	750	1120	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	660	1220	640	290	990	70	70	970	710	750	1120	520
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	660	1220	0	290	990	70	70	970	710	750	1120	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	660	1220	0	290	990	70	70	970	710	750	1120	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	660	1220	0	290	990	70	70	970	710	750	1120	0
OvlAdjVol:									380			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	2.00	2.00	4.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	3400	3400	6800	1700	1700	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.19	0.18	0.00	0.09	0.15	0.04	0.04	0.19	0.42	0.22	0.22	0.00
OvlAdjV/S:									0.22			
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 MACARTHUR BLVD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.677
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	2	2 0	4 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	2150	770	590	1750	0	0	0	0	460	0	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2150	770	590	1750	0	0	0	0	460	0	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2150	770	590	1750	0	0	0	0	460	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2150	770	590	1750	0	0	0	0	460	0	234
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2150	770	590	1750	0	0	0	0	460	0	234
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	2.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	6800	3400	3400	6800	0	0	0	0	3400	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.23	0.17	0.26	0.00	0.00	0.00	0.00	0.14	0.00	0.14
Crit Moves:		****		****								****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 MACARTHUR BLVD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.688
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Ovl			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	1	2 0	4 0	1	0 0	0 0	0	2 0	1 0	1
Volume Module:												
Base Vol:	0	2340	530	440	1430	330	0	0	0	560	140	550
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2340	530	440	1430	330	0	0	0	560	140	550
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	2340	530	440	1430	330	0	0	0	560	140	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2340	530	440	1430	330	0	0	0	560	140	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	2340	530	440	1430	330	0	0	0	560	140	0
OvlAdjVol:			250									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	4.00	1.00	2.00	4.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00
Final Sat.:	0	6800	1700	3400	6800	1700	0	0	0	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.31	0.13	0.21	0.19	0.00	0.00	0.00	0.16	0.08	0.00
OvlAdjV/S:			0.15									
Crit Moves:		****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	1.012
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	110	1580	120	510	1410	20	350	160	110	390	130	810
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1580	120	510	1410	20	350	160	110	390	130	810
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1580	120	510	1410	20	350	160	110	390	130	810
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1580	120	510	1410	20	350	160	110	390	130	810
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1580	120	510	1410	20	350	160	110	390	130	810
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.94	0.06	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6705	95	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.07	0.15	0.21	0.21	0.10	0.09	0.06	0.11	0.08	0.48
Crit Moves:		****		****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 MACARTHUR BLVD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.841
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	1 0	4 0	1	2 0	2 1	0	2 0	3 0	1
Volume Module:												
Base Vol:	140	1040	40	160	1030	630	370	500	100	80	1170	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	1040	40	160	1030	630	370	500	100	80	1170	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	1040	40	160	1030	630	370	500	100	80	1170	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	1040	40	160	1030	630	370	500	100	80	1170	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	1040	40	160	1030	630	370	500	100	80	1170	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	1.00	4.00	1.00	2.00	2.50	0.50	2.00	3.00	1.00
Final Sat.:	1700	6800	1700	1700	6800	1700	3400	4250	850	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.02	0.09	0.15	0.37	0.11	0.12	0.12	0.02	0.23	0.00
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 MACARTHUR BLVD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.568
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 1	0	1 1	0 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	140	730	70	80	910	290	310	190	50	130	570	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	730	70	80	910	290	310	190	50	130	570	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	140	730	70	80	910	290	310	190	50	130	570	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	730	70	80	910	290	310	190	50	130	570	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	140	730	70	80	910	290	310	190	50	130	570	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.03	0.97	1.69	1.04	0.27	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	1600	4853	1547	2703	1660	437	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.04	0.05	0.19	0.19	0.11	0.11	0.11	0.08	0.18	0.00
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 JAMBOREE RD/I-405 NB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.846
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 2	0	0 0	0 0	3	0 0	0 1
Volume Module:												
Base Vol:	0	3330	0	0	2050	1020	0	0	0	730	0	400
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3330	0	0	2050	1020	0	0	0	730	0	400
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	3330	0	0	2050	0	0	0	0	730	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3330	0	0	2050	0	0	0	0	730	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	3330	0	0	2050	0	0	0	0	730	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	2.00	0.00	0.00	0.00	3.00	0.00	1.00
Final Sat.:	0	5100	0	0	6800	3400	0	0	0	5100	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.65	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.14	0.00	0.00
Crit Moves:		****		****						****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 JAMBOREE RD/I-405 SB RAMPS

Cycle (sec):	100	Critical Vol./Cap.(X):	0.785
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 4	0 1	1	0 1!	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	0	2010	0	0	2060	700	1160	0	680	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2010	0	0	2060	700	1160	0	680	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2010	0	0	2060	0	1160	0	680	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2010	0	0	2060	0	1160	0	680	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2010	0	0	2060	0	1160	0	680	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	0.00	3.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.00	0.00	0.30	0.00	0.34	0.00	0.20	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 JAMBOREE RD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.979
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	2 0	1
Volume Module:												
Base Vol:	80	2400	280	670	1670	320	980	700	110	320	310	1060
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	2400	280	670	1670	320	980	700	110	320	310	1060
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	80	2400	280	670	1670	0	980	700	110	320	310	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	2400	280	670	1670	0	980	700	110	320	310	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	80	2400	280	670	1670	0	980	700	110	320	310	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	4.00	1.00	2.00	1.73	0.27	2.00	2.00	1.00
Final Sat.:	1700	6800	1700	3400	6800	1700	3400	2938	462	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.35	0.16	0.20	0.25	0.00	0.29	0.24	0.24	0.09	0.09	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 JAMBOREE RD/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	2 1	0	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	60	1670	430	190	1620	180	290	640	210	150	290	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1670	430	190	1620	180	290	640	210	150	290	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	60	1670	430	190	1620	180	290	640	0	150	290	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1670	430	190	1620	180	290	640	0	150	290	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	60	1670	430	190	1620	180	290	640	0	150	290	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.18	0.82	2.00	2.70	0.30	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5408	1392	3400	4590	510	3400	3400	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.02	0.31	0.31	0.06	0.35	0.35	0.09	0.19	0.00	0.04	0.09	0.12
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 JAMBOREE RD/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.747
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	3 0	3 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	240	1460	430	270	570	380	620	1080	170	460	970	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	1460	430	270	570	380	620	1080	170	460	970	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	240	1460	430	270	570	380	620	1080	0	460	970	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	1460	430	270	570	380	620	1080	0	460	970	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	240	1460	430	270	570	380	620	1080	0	460	970	50
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.09	0.91	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4944	1456	4800	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.30	0.06	0.12	0.24	0.19	0.23	0.00	0.14	0.20	0.03
OvlAdjV/S:												0.00
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 JAMBOREE RD/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.527
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	3 1	1	0 0	0 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	870	2530	0	0	1040	760	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	870	2530	0	0	1040	760	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	870	2530	0	0	1040	760	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	870	2530	0	0	1040	760	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	870	2530	0	0	1040	760	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	3200	0	0	0	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.27	0.53	0.00	0.00	0.22	0.24	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****										

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 JAMBOREE RD/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.677
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	1 0	0 0	4	0 0	1 1	1	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	2490	90	0	1020	0	920	780	1110	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2490	90	0	1020	0	920	780	1110	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2490	90	0	1020	0	920	780	1110	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2490	90	0	1020	0	920	780	1110	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2490	90	0	1020	0	920	780	1110	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.83	0.17	0.00	4.00	0.00	1.62	1.38	2.00	0.00	0.00	0.00
Final Sat.:	0	7721	279	0	6400	0	2598	2202	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.32	0.00	0.16	0.00	0.35	0.35	0.35	0.00	0.00	0.00
Crit Moves:		****			****			****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 VON KARMAN AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.718
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	60	770	200	250	820	150	210	540	100	180	590	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	770	200	250	820	150	210	540	100	180	590	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	60	770	200	250	820	150	210	540	100	180	590	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	770	200	250	820	150	210	540	100	180	590	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	60	770	200	250	820	150	210	540	100	180	590	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	2.00	1.00	1.00	1.69	0.31	1.00	1.69	0.31	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	2874	526	1700	2869	531	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.23	0.12	0.15	0.29	0.29	0.12	0.19	0.19	0.11	0.17	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 CAMPUS DR/AIRPORT WY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.838
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	114	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	430	840	0	0	1780	170	0	0	520	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	430	840	0	0	1780	170	0	0	520	0	0	0
User Adj:	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	430	0	0	0	1780	170	0	0	520	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	430	0	0	0	1780	170	0	0	520	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	430	0	0	0	1780	170	0	0	520	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.74	0.26	0.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4382	418	0	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.27	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.16	0.00	0.00	0.00
Crit Moves:	****				****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 CAMPUS DR/QUAIL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.571
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	0 0	1!	0 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	900	60	60	2310	10	10	10	20	80	0	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	900	60	60	2310	10	10	10	20	80	0	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	900	60	60	2310	10	10	10	20	80	0	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	900	60	60	2310	10	10	10	20	80	0	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	900	60	60	2310	10	10	10	20	80	0	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.81	0.19	1.00	2.99	0.01	0.25	0.25	0.50	1.00	0.00	1.00
Final Sat.:	1600	4500	300	1600	4779	21	400	400	800	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.20	0.20	0.04	0.48	0.48	0.01	0.03	0.03	0.05	0.00	0.03
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	1.053
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	0	0	0	0 4	0	2	0	0 0	0	0 0	1	0 3	1	0
Volume Module:																
Base Vol:	510	840	0		0	1020	1490		0	0	0		270	2620	120	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	510	840	0		0	1020	1490		0	0	0		270	2620	120	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	510	840	0		0	1020	1490		0	0	0		270	2620	120	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	510	840	0		0	1020	1490		0	0	0		270	2620	120	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	510	840	0		0	1020	1490		0	0	0		270	2620	120	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	3.00	0.00		0.00	4.00	2.00		0.00	0.00	0.00		1.00	3.82	0.18	
Final Sat.:	3200	4800	0		0	6400	3200		0	0	0		1600	6120	280	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.17	0.00		0.00	0.16	0.47		0.00	0.00	0.00		0.17	0.43	0.43	
Crit Moves:	****						****							****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 CAMPUS DR/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.483
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0 4	1	0	1	0 3	0	0	1	1 2	0	2	0	0 0	0	0
Volume Module:																
Base Vol:	0	770	230		170	1110	0		580	1030	590		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	770	230		170	1110	0		580	1030	590		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0	770	230		170	1110	0		580	1030	590		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	770	230		170	1110	0		580	1030	590		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	770	230		170	1110	0		580	1030	590		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	4.00	1.00		1.00	3.00	0.00		1.44	2.56	2.00		0.00	0.00	0.00	
Final Sat.:	0	6400	1600		1600	4800	0		2306	4094	3200		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.12	0.14		0.11	0.23	0.00		0.25	0.25	0.18		0.00	0.00	0.00	
Crit Moves:						****				****						

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 BIRCH ST/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.662
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2		0 0	0 0 1		1 2	0 0 0		0 0	1 1 2		1 0
Volume Module:												
Base Vol:	160	320	0	0	530	920	0	0	0	420	1730	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	320	0	0	530	920	0	0	0	420	1730	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	320	0	0	530	920	0	0	0	420	1730	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	320	0	0	530	920	0	0	0	420	1730	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	320	0	0	530	920	0	0	0	420	1730	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.46	2.54	0.00	0.00	0.00	1.00	3.81	0.19
Final Sat.:	3200	3200	0	0	2339	4061	0	0	0	1600	6089	311
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.00	0.00	0.23	0.23	0.00	0.00	0.00	0.26	0.28	0.39
Crit Moves:	****				****							****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 BIRCH ST/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.475
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 1	2	0 2	0 0	1 1	2	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	210	280	260	680	0	280	1130	130	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	210	280	260	680	0	280	1130	130	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	210	280	260	680	0	280	1130	130	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	210	280	260	680	0	280	1130	130	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	210	280	260	680	0	280	1130	130	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	3.69	0.31	0.00	0.00	0.00
Final Sat.:	0	3200	3200	3200	3200	0	1600	5905	495	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.09	0.08	0.21	0.00	0.17	0.19	0.26	0.00	0.00	0.00
Crit Moves:					****				****			

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 RED HILL AVE/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.783
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	2 0	3 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	180	1180	20	410	840	1060	710	510	80	60	860	880
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1180	20	410	840	1060	710	510	80	60	860	880
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	180	1180	20	410	840	0	710	510	80	60	860	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1180	20	410	840	0	710	510	80	60	860	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	180	1180	20	410	840	0	710	510	80	60	860	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.95	0.05	2.00	3.00	1.00	2.00	2.59	0.41	1.00	3.00	1.00
Final Sat.:	3400	5015	85	3400	5100	1700	3400	4408	692	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.24	0.24	0.12	0.16	0.00	0.21	0.12	0.12	0.04	0.17	0.00
Crit Moves:		****			****			****			****	

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2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 RED HILL AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.756
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	2 0	1 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	340	1350	120	160	950	160	270	890	260	80	690	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	1350	120	160	950	160	270	890	260	80	690	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	340	1350	120	160	950	160	270	890	260	80	690	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	1350	120	160	950	160	270	890	260	80	690	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	340	1350	120	160	950	160	270	890	260	80	690	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	2.00	1.71	0.29	2.00	2.32	0.68	2.00	2.23	0.77
Final Sat.:	3400	3400	1700	3400	2910	490	3400	3947	1153	3400	3784	1316
Capacity Analysis Module:												
Vol/Sat:	0.10	0.40	0.07	0.05	0.33	0.33	0.08	0.23	0.23	0.02	0.18	0.18
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 SANTA ANA AVE/BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.578
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1	2 0	2	0 1	2 0	3	0 1	2 0	2	1 1
Volume Module:												
Base Vol:	130	180	80	450	490	310	140	580	170	160	1440	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	180	80	450	490	310	140	580	170	160	1440	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	180	80	450	490	310	140	580	170	160	1440	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	180	80	450	490	310	140	580	170	160	1440	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	180	80	450	490	310	140	580	170	160	1440	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.05	0.14	0.15	0.19	0.04	0.12	0.11	0.05	0.30	0.19
Crit Moves:	****					****	****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 SANTA ANA AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	20	190	50	130	420	180	100	140	60	60	360	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	190	50	130	420	180	100	140	60	60	360	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	190	50	130	420	180	100	140	60	60	360	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	190	50	130	420	180	100	140	60	60	360	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	190	50	130	420	180	100	140	60	60	360	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.79	0.21	1.00	1.00	1.00	1.00	0.70	0.30	1.00	0.82	0.18
Final Sat.:	1600	1267	333	1600	1600	1600	1600	1120	480	1600	1309	291
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.15	0.08	0.26	0.11	0.06	0.13	0.13	0.04	0.27	0.28
Crit Moves:	****				****		****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.968
Loss Time (sec):	0	Average Delay (sec/veh):	33.8
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	40	160	30	100	330	90	50	200	60	40	240	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	160	30	100	330	90	50	200	60	40	240	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	160	30	100	330	90	50	200	60	40	240	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	160	30	100	330	90	50	200	60	40	240	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	160	30	100	330	90	50	200	60	40	240	60
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.70	0.13	0.19	0.64	0.17	0.16	0.65	0.19	0.12	0.70	0.18
Final Sat.:	78	312	59	103	341	93	77	306	92	57	341	85
Capacity Analysis Module:												
Vol/Sat:	0.51	0.51	0.51	0.97	0.97	0.97	0.65	0.65	0.65	0.70	0.70	0.70
Crit Moves:			****		****			****		****		
Delay/Veh:	17.0	17.0	17.0	55.2	55.2	55.2	21.4	21.4	21.4	23.7	23.7	23.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.0	17.0	17.0	55.2	55.2	55.2	21.4	21.4	21.4	23.7	23.7	23.7
LOS by Move:	C	C	C	F	F	F	C	C	C	C	C	C
ApproachDel:	17.0			55.2			21.4			23.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	17.0			55.2			21.4			23.7		
LOS by Appr:	C			F			C			C		
AllWayAvgQ:	0.8	0.8	0.8	6.8	6.8	6.8	1.5	1.5	1.5	1.8	1.8	1.8

Note: Queue reported is the number of cars per lane.

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 IRVINE AVE/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	1 1	0	2 0	0 1	0
Volume Module:												
Base Vol:	70	620	220	10	1420	230	50	70	150	550	170	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	620	220	10	1420	230	50	70	150	550	170	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	620	220	10	1420	230	50	70	150	550	170	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	620	220	10	1420	230	50	70	150	550	170	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	620	220	10	1420	230	50	70	150	550	170	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	2.00	0.94	0.06
Final Sat.:	1600	4800	1600	1600	4800	1600	1600	1600	1600	3200	1511	89
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.14	0.01	0.30	0.14	0.03	0.04	0.09	0.17	0.11	0.11
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 IRVINE AVE/UNIVERSITY DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	90	740	40	50	1850	180	130	40	120	40	50	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	740	40	50	1850	180	130	40	120	40	50	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	740	40	50	1850	180	130	40	120	40	50	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	740	40	50	1850	180	130	40	120	40	50	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	740	40	50	1850	180	130	40	120	40	50	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.56	0.44
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	889	711
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.03	0.03	0.58	0.11	0.08	0.03	0.08	0.03	0.06	0.06
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 IRVINE AVE/22ND ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.747
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	100	840	10	110	1670	100	60	50	110	20	60	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	840	10	110	1670	100	60	50	110	20	60	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	840	10	110	1670	100	60	50	110	20	60	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	840	10	110	1670	100	60	50	110	20	60	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	840	10	110	1670	100	60	50	110	20	60	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.89	0.11	0.55	0.45	1.00	0.13	0.40	0.47
Final Sat.:	1600	3162	38	1600	3019	181	873	727	1600	213	640	747
Capacity Analysis Module:												
Vol/Sat:	0.06	0.27	0.27	0.07	0.55	0.55	0.04	0.07	0.07	0.01	0.09	0.09
Crit Moves:	****			****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 IRVINE AVE/20TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	80	950	20	50	1560	70	50	30	60	30	40	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	950	20	50	1560	70	50	30	60	30	40	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	950	20	50	1560	70	50	30	60	30	40	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	950	20	50	1560	70	50	30	60	30	40	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	950	20	50	1560	70	50	30	60	30	40	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.91	0.09	0.36	0.21	0.43	0.21	0.29	0.50
Final Sat.:	1600	3134	66	1600	3063	137	571	343	686	343	457	800
Capacity Analysis Module:												
Vol/Sat:	0.05	0.30	0.30	0.03	0.51	0.51	0.03	0.09	0.09	0.02	0.09	0.09
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 IRVINE AVE/19TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.703
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	750	30	150	1340	90	60	90	70	30	190	270
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	750	30	150	1340	90	60	90	70	30	190	270
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	750	30	150	1340	90	60	90	70	30	190	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	750	30	150	1340	90	60	90	70	30	190	270
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	750	30	150	1340	90	60	90	70	30	190	270
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.92	0.08	1.00	1.87	0.13	1.00	0.56	0.44	1.00	1.00	1.00
Final Sat.:	1600	3077	123	1600	2999	201	1600	900	700	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.24	0.24	0.09	0.45	0.45	0.04	0.10	0.10	0.02	0.12	0.17
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 IRVINE AVE/17TH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.778
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	103	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	370	490	60	210	650	400	290	550	320	100	650	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	370	490	60	210	650	400	290	550	320	100	650	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	370	490	60	210	650	400	290	550	320	100	650	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	370	490	60	210	650	400	290	550	320	100	650	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	370	490	60	210	650	400	290	550	320	100	650	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.78	0.22	2.00	1.24	0.76	2.00	1.26	0.74	1.00	1.76	0.24
Final Sat.:	3200	2851	349	3200	1981	1219	3200	2023	1177	1600	2811	389
Capacity Analysis Module:												
Vol/Sat:	0.12	0.17	0.17	0.07	0.33	0.33	0.09	0.27	0.27	0.06	0.23	0.23
Crit Moves:	****			****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 NEWPORT BLVD (SB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.622
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	0	4	0	1	0	0	1	0	1	1	0	1	0	0
Volume Module:												
Base Vol:	0	0	0	250	2540	0	0	20	10	340	10	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	250	2540	0	0	20	10	340	10	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	250	2540	0	0	20	10	340	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	250	2540	0	0	20	10	340	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	250	2540	0	0	20	10	340	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	4.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1600	6400	1600	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.40	0.00	0.00	0.01	0.01	0.21	0.01	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 NEWPORT BLVD (NB)/MESA DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.431
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	0	0 0	2 0	1	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	30	430	120	0	0	0	70	190	0	10	310	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	430	120	0	0	0	70	190	0	10	310	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	430	120	0	0	0	70	190	0	10	310	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	430	120	0	0	0	70	190	0	10	310	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	430	120	0	0	0	70	190	0	10	310	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.56	0.44	0.00	0.00	0.00	2.00	1.00	0.00	0.03	0.81	0.16
Final Sat.:	1600	2502	698	0	0	0	3200	1600	0	42	1305	253
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.17	0.00	0.00	0.00	0.02	0.12	0.00	0.01	0.24	0.24
Crit Moves:	****						****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 NEWPORT BLVD (SB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.471
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 3	0 1	0 0	3	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	340	1340	1290	0	630	80	130	350	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	340	1340	1290	0	630	80	130	350	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	340	1340	0	0	630	80	130	350	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	340	1340	0	0	630	80	130	350	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	340	1340	0	0	630	80	130	350	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.55	0.45	1.00	2.00	0.00
Final Sat.:	0	0	0	1600	4800	1600	0	5679	721	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.28	0.00	0.00	0.11	0.11	0.08	0.11	0.00
Crit Moves:					****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 NEWPORT BLVD (NB)/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 1	0	0	0 0	0	2	0 2	0 0	0	0 2	0 1
Volume Module:												
Base Vol:	150	770	130	0	0	0	580	420	0	0	310	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	770	130	0	0	0	580	420	0	0	310	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	770	130	0	0	0	580	420	0	0	310	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	770	130	0	0	0	580	420	0	0	310	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	770	130	0	0	0	580	420	0	0	310	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.43	2.20	0.37	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	686	3520	594	0	0	0	3200	3200	0	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.22	0.22	0.00	0.00	0.00	0.18	0.13	0.00	0.00	0.10	0.13
Crit Moves:	****						****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 VON KARMAN AVE/CAMPUS DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.756
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	94	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	70	540	100	140	710	380	160	590	50	100	780	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	540	100	140	710	380	160	590	50	100	780	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	540	100	140	710	380	160	590	50	100	780	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	540	100	140	710	380	160	590	50	100	780	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	540	100	140	710	380	160	590	50	100	780	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.69	0.31	1.00	1.30	0.70	1.00	2.00	1.00	1.00	1.79	0.21
Final Sat.:	1600	2700	500	1600	2084	1116	1600	3200	1600	1600	2869	331
Capacity Analysis Module:												
Vol/Sat:	0.04	0.20	0.20	0.09	0.34	0.34	0.10	0.18	0.03	0.06	0.27	0.27
Crit Moves:	****				****		****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 VON KARMAN AVE/MACARTHUR RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.573
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	2 0	0	1 0	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	110	180	180	600	100	100	30	1190	70	40	640	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	180	180	600	100	100	30	1190	70	40	640	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	180	180	600	100	100	30	1190	70	40	640	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	180	180	600	100	100	30	1190	70	40	640	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	180	180	600	100	100	30	1190	70	40	640	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	0.50	0.50	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	3200	800	800	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.19	0.13	0.13	0.02	0.25	0.04	0.03	0.13	0.11
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #38 BAYVIEW PL/SOUTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.433
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 2	0 0	0	0 0	0 0	4	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	0	230	0	0	0	0	2310	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	230	0	0	0	0	2310	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	230	0	0	0	0	2310	150	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	230	0	0	0	0	2310	150	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	230	0	0	0	0	2310	150	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	6400	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.36	0.09	0.00	0.00	0.00
Crit Moves:			****					****				

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #39 JAMBOREE RD/BIRCH ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	3	0 1	1 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	50	1660	0	0	2050	150	280	0	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	1660	0	0	2050	150	280	0	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	50	1660	0	0	2050	0	280	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	1660	0	0	2050	0	280	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	50	1660	0	0	2050	0	280	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	3.00	1.00	2.00	0.00	1.00	0.00	1.00	0.00
Final Sat.:	1600	4800	0	1600	4800	1600	3200	0	1600	0	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.35	0.00	0.00	0.43	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #40 JAMBOREE RD/BAYVEIW WAY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 1	0	1 0	3 0	1	2 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	60	1910	60	40	1930	60	80	10	150	20	10	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1910	60	40	1930	60	80	10	150	20	10	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	1910	60	40	1930	60	80	10	150	20	10	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1910	60	40	1930	60	80	10	150	20	10	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	1910	60	40	1930	60	80	10	150	20	10	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.88	0.12	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	6205	195	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.31	0.03	0.40	0.04	0.03	0.01	0.09	0.01	0.01	0.06
Crit Moves:	****			****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 JAMBOREE RD/UNIVERSITY DR-EASTBLUFF DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.627
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1! 0	0	1 1	1 0	1
Volume Module:												
Base Vol:	40	1720	330	170	1680	430	290	90	20	290	140	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	1720	330	170	1680	430	290	90	20	290	140	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	40	1720	330	170	1680	430	290	90	20	290	140	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	1720	330	170	1680	430	290	90	20	290	140	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	40	1720	330	170	1680	430	290	90	20	290	140	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.45	0.45	0.10	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	2320	720	160	3200	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.36	0.21	0.05	0.35	0.27	0.13	0.13	0.13	0.09	0.09	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 JAMBOREE RD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.515
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 1	1 0	0	0 1	2 0	0	0 2
Volume Module:												
Base Vol:	0	1680	190	100	1600	80	40	0	20	220	0	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1680	190	100	1600	80	40	0	20	220	0	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1680	190	100	1600	80	40	0	20	220	0	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1680	190	100	1600	80	40	0	20	220	0	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1680	190	100	1600	80	40	0	20	220	0	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.70	0.30	2.00	3.00	1.00	1.00	0.00	1.00	2.00	0.00	2.00
Final Sat.:	0	4312	488	3200	4800	1600	1600	0	1600	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.39	0.03	0.33	0.05	0.03	0.00	0.01	0.07	0.00	0.04
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 JAMBOREE RD/EASTBLUFF DR-FORD RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.765
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	97	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2	1	0	1 0 3	0	1	1 1 1	0	1	1 1 1	0	1
Volume Module:												
Base Vol:	410 1870		320	40 1500		80	110	240	330	170	200	30
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	410 1870		320	40 1500		80	110	240	330	170	200	30
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	410 1870		320	40 1500		80	110	240	330	170	200	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	410 1870		320	40 1500		80	110	240	330	170	200	30
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	410 1870		320	40 1500		80	110	240	330	170	200	30
Saturation Flow Module:												
Sat/Lane:	1600 1600		1600	1600 1600		1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00 2.56		0.44	1.00 3.00		1.00	1.00	2.00	1.00	1.38	1.62	1.00
Final Sat.:	3200 4099		701	1600 4800		1600	1600	3200	1600	2205	2595	1600
Capacity Analysis Module:												
Vol/Sat:	0.13 0.46		0.46	0.03 0.31		0.05	0.07	0.08	0.21	0.08	0.08	0.02
Crit Moves:	****			****					****		****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 MACARTHUR BLVD/BISON AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.611
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	150	2440	170	140	2550	240	240	220	100	310	220	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	2440	170	140	2550	240	240	220	100	310	220	150
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	150	2440	0	140	2550	240	240	220	0	310	220	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	2440	0	140	2550	240	240	220	0	310	220	150
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	150	2440	0	140	2550	240	240	220	0	310	220	150
OvlAdjVol:						120						80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.38	0.00	0.04	0.40	0.15	0.08	0.07	0.00	0.10	0.07	0.09
OvlAdjV/S:						0.08						0.05
Crit Moves:	****				****			****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 MACARTHUR BLVD/FORD RD-BONITA CANYON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.873
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	90	2110	530	1160	2360	50	50	350	50	230	280	670
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	2110	530	1160	2360	50	50	350	50	230	280	670
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	90	2110	0	1160	2360	0	50	350	50	230	280	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	2110	0	1160	2360	0	50	350	50	230	280	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	90	2110	0	1160	2360	0	50	350	50	230	280	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	6400	1600	3200	6400	1600	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.33	0.00	0.36	0.37	0.00	0.02	0.11	0.03	0.07	0.09	0.00
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 RED HILL AVE/PAULARINO AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.716
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	80	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	180	870	10		30	1040	290		210	60	90		40	290	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	180	870	10		30	1040	290		210	60	90		40	290	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	180	870	10		30	1040	290		210	60	90		40	290	70	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	180	870	10		30	1040	290		210	60	90		40	290	70	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	180	870	10		30	1040	290		210	60	90		40	290	70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.98	0.02		1.00	1.56	0.44		1.00	1.00	1.00		1.00	1.61	0.39	
Final Sat.:	3200	3164	36		1600	2502	698		1600	1600	1600		1600	2578	622	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.28	0.27		0.02	0.42	0.42		0.13	0.04	0.06		0.03	0.11	0.11	
Crit Moves:	****					****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #47 RED HILL AVE/BAKER ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.666
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	1	1 0	1	0	1	1 0	1	1	1	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	310	670	20		20	570	450		370	80	90		50	360	70	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	310	670	20		20	570	450		370	80	90		50	360	70	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	310	670	20		20	570	450		370	80	90		50	360	70	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	310	670	20		20	570	450		370	80	90		50	360	70	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	310	670	20		20	570	450		370	80	90		50	360	70	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	1.94	0.06		1.00	1.12	0.88		2.00	1.00	1.00		1.00	1.67	0.33	
Final Sat.:	3200	3107	93		1600	1788	1412		3200	1600	1600		1600	2679	521	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.22	0.22		0.01	0.32	0.32		0.12	0.05	0.06		0.03	0.13	0.13	
Crit Moves:	****					****			****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #48 SR-55 NB RAMPS/MACARTHUR BLVD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Ignore			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	0 0 0	0	0 2	0 2	0	0 3	0 1
Volume Module:												
Base Vol:	750	0	340	0	0	0	0	810	810	0	2000	1120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	750	0	340	0	0	0	0	810	810	0	2000	1120
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	750	0	0	0	0	0	0	810	0	0	2000	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	750	0	0	0	0	0	0	810	0	0	2000	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	750	0	0	0	0	0	0	810	0	0	2000	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	3.00	1.00
Final Sat.:	3400	0	1700	0	0	0	0	3400	3400	0	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.39	0.00
Crit Moves:	****						****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #49 RED HILL AVE/DYER RD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.918
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	98	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	1	0	2	0 3	1	0	2	0 3	1	0	2	0 4	0	1
Volume Module:																
Base Vol:	440	1790	410		370	490	240		280	800	70		220	910	600	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	440	1790	410		370	490	240		280	800	70		220	910	600	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	440	1790	410		370	490	240		280	800	70		220	910	600	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	440	1790	410		370	490	240		280	800	70		220	910	600	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	440	1790	410		370	490	240		280	800	70		220	910	600	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	3.25	0.75		2.00	3.00	1.00		2.00	3.68	0.32		2.00	4.00	1.00	
Final Sat.:	3400	5533	1267		3400	5100	1700		3400	6253	547		3400	6800	1700	
Capacity Analysis Module:																
Vol/Sat:	0.13	0.32	0.32		0.11	0.10	0.14		0.08	0.13	0.13		0.06	0.13	0.35	
Crit Moves:		****				****				****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #50 RED HILL AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.903
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	88	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	0	1	2	0 1	0	1
Volume Module:																
Base Vol:	80	1960	260		120	820	240		220	530	110		500	370	360	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	80	1960	260		120	820	240		220	530	110		500	370	360	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	80	1960	260		120	820	240		220	530	110		500	370	360	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	80	1960	260		120	820	240		220	530	110		500	370	360	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	80	1960	260		120	820	240		220	530	110		500	370	360	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	2.65	0.35		1.00	2.32	0.68		1.00	2.00	1.00		2.00	1.00	1.00	
Final Sat.:	1700	4503	597		1700	3945	1155		1700	3400	1700		3400	1700	1700	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.44	0.44		0.07	0.21	0.21		0.13	0.16	0.06		0.15	0.22	0.21	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #51 RED HILL AVE/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.774
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 1	0	1 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	130	1950	280	80	1220	30	90	120	300	480	60	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1950	280	80	1220	30	90	120	300	480	60	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1950	280	80	1220	30	90	120	300	480	60	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1950	280	80	1220	30	90	120	300	480	60	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1950	280	80	1220	30	90	120	300	480	60	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.00	1.00	2.00	2.93	0.07	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	3400	5100	1700	3400	4978	122	1700	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.38	0.16	0.02	0.25	0.25	0.05	0.07	0.18	0.14	0.04	0.12
Crit Moves:		****		****					****	****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
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PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 VON KARMAN AVE/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	1.065
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Ovl				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 1	1	0	2	0 2	0	2	1	0 2	1	0	2	0 3	0	1
Volume Module:																
Base Vol:	440	1220	440		110	310	250		490	1460	180		150	880	350	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	440	1220	440		110	310	250		490	1460	180		150	880	350	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	440	1220	440		110	310	250		490	1460	180		150	880	350	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	440	1220	440		110	310	250		490	1460	180		150	880	350	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	440	1220	440		110	310	250		490	1460	180		150	880	350	
OvlAdjVol:							0									
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	2.00	1.47	0.53		2.00	2.00	2.00		1.00	2.67	0.33		2.00	3.00	1.00	
Final Sat.:	3400	2499	901		3400	3400	3400		1700	4540	560		3400	5100	1700	
Capacity Analysis Module:																
Vol/Sat:	0.13	0.49	0.49		0.03	0.09	0.07		0.29	0.32	0.32		0.04	0.17	0.21	
OvlAdjV/S:							0.00									
Crit Moves:	****				****				****						****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #53 VON KARMAN AVE/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	1.006
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	90	1490	380		100	480	90		100	870	90		110	530	80	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	90	1490	380		100	480	90		100	870	90		110	530	80	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	90	1490	380		100	480	90		100	870	90		110	530	80	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	90	1490	380		100	480	90		100	870	90		110	530	80	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	90	1490	380		100	480	90		100	870	90		110	530	80	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.59	0.41		1.00	1.68	0.32		1.00	1.81	0.19		1.00	1.74	0.26	
Final Sat.:	1700	2709	691		1700	2863	537		1700	3081	319		1700	2954	446	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.55	0.55		0.06	0.17	0.17		0.06	0.28	0.28		0.06	0.18	0.18	
Crit Moves:		****				****					****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 VON KARMAN AVE/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.855
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	1	1 0	2 0	1	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	280	1160	370	140	430	210	470	1450	110	190	1040	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	1160	370	140	430	210	470	1450	110	190	1040	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	280	1160	370	140	430	210	470	1450	0	190	1040	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	1160	370	140	430	210	470	1450	0	190	1040	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	280	1160	370	140	430	210	470	1450	0	190	1040	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	3.00	1.00	2.00	2.52	0.48
Final Sat.:	3400	3400	1700	1700	3400	1700	3400	5100	1700	3400	4277	823
Capacity Analysis Module:												
Vol/Sat:	0.08	0.34	0.22	0.08	0.13	0.12	0.14	0.28	0.00	0.06	0.24	0.24
Crit Moves:		****		****			****				****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 JAMBOREE RD/BARRANCA PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.942
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	120	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 1	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	570	3040	220	340	1520	370	950	830	270	180	690	520
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	570	3040	220	340	1520	370	950	830	270	180	690	520
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	570	3040	0	340	1520	0	950	830	270	180	690	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	570	3040	0	340	1520	0	950	830	270	180	690	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	570	3040	0	340	1520	0	950	830	270	180	690	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.67	2.33	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	4537	3963	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.17	0.45	0.00	0.10	0.22	0.00	0.21	0.21	0.16	0.05	0.14	0.00
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 JAMBOREE RD/ALTON PKWY

Cycle (sec):	100	Critical Vol./Cap.(X):	0.894
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	3 1	0	2 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	190	3040	300	300	1570	200	500	890	250	290	560	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	3040	300	300	1570	200	500	890	250	290	560	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	3040	300	300	1570	200	500	890	250	290	560	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	3040	300	300	1570	200	500	890	250	290	560	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	3040	300	300	1570	200	500	890	250	290	560	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	3.55	0.45	2.00	2.34	0.66	2.00	2.21	0.79
Final Sat.:	3400	6800	1700	3400	6032	768	3400	3982	1118	3400	3758	1342
Capacity Analysis Module:												
Vol/Sat:	0.06	0.45	0.18	0.09	0.26	0.26	0.15	0.22	0.22	0.09	0.15	0.15
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #57 JAMBOREE RD/MCGAW AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.731
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	110	3110	40	30	2000	120	320	210	250	40	40	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	3110	40	30	2000	120	320	210	250	40	40	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	3110	40	30	2000	120	320	210	250	40	40	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	3110	40	30	2000	120	320	210	250	40	40	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	3110	40	30	2000	120	320	210	250	40	40	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	3.95	0.05	2.00	3.77	0.23	1.00	1.00	1.00	1.00	1.14	0.86
Final Sat.:	3400	6714	86	3400	6415	385	1700	1700	1700	1700	1943	1457
Capacity Analysis Module:												
Vol/Sat:	0.03	0.46	0.46	0.01	0.31	0.31	0.19	0.12	0.15	0.02	0.02	0.02
Crit Moves:		****			****			****			****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 JAMBOREE RD/MAIN ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.896
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	400	2400	600	290	1700	300	620	1300	790	520	560	360
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	400	2400	600	290	1700	300	620	1300	790	520	560	360
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	400	2400	0	290	1700	300	620	1300	0	520	560	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	400	2400	0	290	1700	300	620	1300	0	520	560	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	400	2400	0	290	1700	300	620	1300	0	520	560	0
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.12	0.35	0.00	0.09	0.25	0.18	0.18	0.25	0.00	0.15	0.11	0.00
OvlAdjV/S:						0.00						
Crit Moves:	****			****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 HARVARD AVE/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.874
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ignore				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 2	0	1	2	0 2	0	1	1	0 1	1	0
Volume Module:																
Base Vol:	60	940	80		310	600	200		490	980	140		90	390	190	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	60	940	80		310	600	200		490	980	140		90	390	190	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Volume:	60	940	80		310	600	200		490	980	0		90	390	190	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	60	940	80		310	600	200		490	980	0		90	390	190	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
FinalVolume:	60	940	80		310	600	200		490	980	0		90	390	190	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06		1.06	1.06	1.06	
Lanes:	1.00	1.84	0.16		1.00	2.00	1.00		2.00	2.00	1.00		1.00	1.34	0.66	
Final Sat.:	1700	3133	267		1700	3400	1700		3400	3400	1700		1700	2286	1114	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.30	0.30		0.18	0.18	0.12		0.14	0.29	0.00		0.05	0.17	0.17	
Crit Moves:		****				****				****				****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Scenario Report

Scenario:	EX+P-AM (12.5)
Command:	EX+P-AM
Volume:	EX+P-AM
Geometry:	EXWP
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	EX+P-AM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 17 CAMPUS DR/NORTH BRISTOL ST	B	xxxxx	0.620	B	xxxxx	0.620	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.620
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	4 0	3	0 0	0 0	0	1 0	3 1	0
Volume Module:												
Base Vol:	510	2100	0	0	280	330	0	0	0	170	990	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	510	2100	0	0	280	330	0	0	0	170	990	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	510	2100	0	0	280	330	0	0	0	170	990	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	510	2100	0	0	280	330	0	0	0	170	990	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	510	2100	0	0	280	330	0	0	0	170	990	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	4.00	3.00	0.00	0.00	0.00	1.00	3.38	0.62
Final Sat.:	3200	4800	0	0	6400	4800	0	0	0	1600	5415	985
Capacity Analysis Module:												
Vol/Sat:	0.16	0.44	0.00	0.00	0.04	0.07	0.00	0.00	0.00	0.11	0.18	0.18
Crit Moves:		****									****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Scenario Report

Scenario:	EX+P-PM (12.5)
Command:	EX+P-PM
Volume:	EX+P-PM
Geometry:	EXWP
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	EX+P-PM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 17 CAMPUS DR/NORTH BRISTOL ST	C	xxxxx	0.797	C	xxxxx	0.797	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED EXISTING PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.797
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	0	0	0	0 4	0	3	0	0	0	0 0	1	0 3	1	0
Volume Module:																
Base Vol:	510	720	0		0	990	1260		0	0	0		270	2280	120	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	510	720	0		0	990	1260		0	0	0		270	2280	120	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	510	720	0		0	990	1260		0	0	0		270	2280	120	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	510	720	0		0	990	1260		0	0	0		270	2280	120	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	510	720	0		0	990	1260		0	0	0		270	2280	120	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	3.00	0.00		0.00	4.00	3.00		0.00	0.00	0.00		1.00	3.80	0.20	
Final Sat.:	3200	4800	0		0	6400	4800		0	0	0		1600	6080	320	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.15	0.00		0.00	0.15	0.26		0.00	0.00	0.00		0.17	0.38	0.38	
Crit Moves:	****					****								****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Scenario Report

Scenario:	2016+P-AM (10.8)
Command:	2016+P-AM
Volume:	2016+P-AM
Geometry:	2016WP
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2016+P-AM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 17 CAMPUS DR/NORTH BRISTOL ST	B	xxxxx	0.626	B	xxxxx	0.626	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2016 PLUS PROJECT CONDITIONS (MAP 10.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	0	0	0	0 4	0	3	0	0	0	0 0	1	0 3	1	0
Volume Module:																
Base Vol:	510	2120	0		0	270	280		0	0	0		170	1010	170	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	510	2120	0		0	270	280		0	0	0		170	1010	170	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	510	2120	0		0	270	280		0	0	0		170	1010	170	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	510	2120	0		0	270	280		0	0	0		170	1010	170	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	510	2120	0		0	270	280		0	0	0		170	1010	170	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	3.00	0.00		0.00	4.00	3.00		0.00	0.00	0.00		1.00	3.42	0.58	
Final Sat.:	3200	4800	0		0	6400	4800		0	0	0		1600	5478	922	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.44	0.00		0.00	0.04	0.06		0.00	0.00	0.00		0.11	0.18	0.18	
Crit Moves:		****												****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Scenario Report

Scenario:	2016+P-PM (10.8)
Command:	2016+P-PM
Volume:	2016+P-PM
Geometry:	2016WP
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2016+P-PM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 17 CAMPUS DR/NORTH BRISTOL ST	D	xxxxx	0.806	D	xxxxx	0.806	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2016 PLUS PROJECT CONDITIONS (MAP 10.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.806
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	96	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	0	0	0	0 4	0	3	0	0	0	0 0	1	0 3	1	0
Volume Module:																
Base Vol:	510	720	0		0	970	1250		0	0	0		270	2360	110	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	510	720	0		0	970	1250		0	0	0		270	2360	110	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	510	720	0		0	970	1250		0	0	0		270	2360	110	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	510	720	0		0	970	1250		0	0	0		270	2360	110	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	510	720	0		0	970	1250		0	0	0		270	2360	110	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	3.00	0.00		0.00	4.00	3.00		0.00	0.00	0.00		1.00	3.82	0.18	
Final Sat.:	3200	4800	0		0	6400	4800		0	0	0		1600	6115	285	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.15	0.00		0.00	0.15	0.26		0.00	0.00	0.00		0.17	0.39	0.39	
Crit Moves:	****					****								****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Scenario Report

Scenario:	2021+P-AM (11.8)
Command:	2021+P-AM
Volume:	2021+P-AM
Geometry:	2021WP
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2021+P-AM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	B	xxxxx	0.659	B	xxxxx	0.659	+ 0.000

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2021 PLUS PROJECT CONDITIONS (MAP 11.8)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	0	0	0	0 4	0	3	0	0	0	0 0	1	0 3	1	0
Volume Module:																
Base Vol:	510	2240	0		0	280	340	0	0	0			170	1050	180	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Initial Bse:	510	2240	0		0	280	340	0	0	0			170	1050	180	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
PHF Volume:	510	2240	0		0	280	340	0	0	0			170	1050	180	
Reduct Vol:	0	0	0		0	0	0	0	0	0			0	0	0	
Reduced Vol:	510	2240	0		0	280	340	0	0	0			170	1050	180	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
FinalVolume:	510	2240	0		0	280	340	0	0	0			170	1050	180	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600	1600	1600	1600			1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Lanes:	2.00	3.00	0.00		0.00	4.00	3.00	0.00	0.00	0.00			1.00	3.41	0.59	
Final Sat.:	3200	4800	0		0	6400	4800	0	0	0			1600	5463	937	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.47	0.00		0.00	0.04	0.07	0.00	0.00	0.00			0.11	0.19	0.19	
Crit Moves:		****												****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Scenario Report

Scenario:	2021+P-PM (11.8)
Command:	2021+P-PM
Volume:	2021+P-PM
Geometry:	2021WP
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2021+P-PM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 17 CAMPUS DR/NORTH BRISTOL ST	D	xxxxx	0.855	D	xxxxx	0.855	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2021 PLUS PROJECT CONDITIONS (MAP 11.8)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.855
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	128	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	0	0	0	0 4	0	3	0	0	0	0 0	1	0 3	1	0
Volume Module:																
Base Vol:	510	790	0	0	1000	1380	0		0	0	0		270	2490	120	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	510	790	0	0	1000	1380	0		0	0	0		270	2490	120	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	510	790	0	0	1000	1380	0		0	0	0		270	2490	120	
Reduct Vol:	0	0	0	0	0	0	0		0	0	0		0	0	0	
Reduced Vol:	510	790	0	0	1000	1380	0		0	0	0		270	2490	120	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	510	790	0	0	1000	1380	0		0	0	0		270	2490	120	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	4.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	3.82	0.18	
Final Sat.:	3200	4800	0	0	6400	4800	0		0	0	0		1600	6106	294	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.16	0.00	0.00	0.16	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.41	0.41	
Crit Moves:	****					****								****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Scenario Report

Scenario:	2026+P-AM (12.5)
Command:	2026+P-AM
Volume:	2026+P-AM
Geometry:	2026WP
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2026+P-AM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 4 MACARTHUR BLVD/MICHELSON DR	C	xxxxx	0.729	C	xxxxx	0.729	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	B	xxxxx	0.692	B	xxxxx	0.692	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	B	xxxxx	0.637	B	xxxxx	0.637	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.729
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	150	1090	340	1040	1450	20	390	150	120	90	100	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1090	340	1040	1450	20	390	150	120	90	100	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1090	340	1040	1450	20	390	150	120	90	100	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1090	340	1040	1450	20	390	150	120	90	100	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1090	340	1040	1450	20	390	150	120	90	100	230
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.95	0.05	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6707	93	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.20	0.31	0.22	0.22	0.11	0.09	0.07	0.03	0.06	0.14
OvlAdjV/S:												0.00
Crit Moves:			****	****			****			****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.692
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	4 0	3	0 0	0 0	0	1 0	3 1	0
Volume Module:												
Base Vol:	510	2360	0	0	300	390	0	0	0	170	1090	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	510	2360	0	0	300	390	0	0	0	170	1090	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	510	2360	0	0	300	390	0	0	0	170	1090	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	510	2360	0	0	300	390	0	0	0	170	1090	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	510	2360	0	0	300	390	0	0	0	170	1090	190
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	4.00	3.00	0.00	0.00	0.00	1.00	3.41	0.59
Final Sat.:	3200	4800	0	0	6400	4800	0	0	0	1600	5450	950
Capacity Analysis Module:												
Vol/Sat:	0.16	0.49	0.00	0.00	0.05	0.08	0.00	0.00	0.00	0.11	0.20	0.20
Crit Moves:		****									****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2026 PLUS PROJECT CONDITIONS (MAP 12.5)
AM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.637
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module:												
Base Vol:	80	290	90	80	150	60	120	300	50	10	150	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	290	90	80	150	60	120	300	50	10	150	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	290	90	80	150	60	120	300	50	10	150	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	290	90	80	150	60	120	300	50	10	150	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	290	90	80	150	60	120	300	50	10	150	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.63	0.20	0.27	0.52	0.21	0.25	0.64	0.11	0.04	0.55	0.41
Final Sat.:	278	1009	313	441	828	331	409	1021	170	59	889	652
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.29	0.05	0.18	0.18	0.08	0.29	0.29	0.01	0.17	0.17
Crit Moves:		****		****				****		****		

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Scenario Report

Scenario:	2026+P-PM (12.5)
Command:	2026+P-PM
Volume:	2026+P-PM
Geometry:	2026WP
Impact Fee:	Default Impact Fee
Trip Generation:	NONE
Trip Distribution:	NONE
Paths:	Default Path
Routes:	Default Route
Configuration:	2026+P-PM

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 4 MACARTHUR BLVD/MICHELSON DR	D	xxxxx	0.862	D	xxxxx	0.862	+ 0.000 V/C
# 17 CAMPUS DR/NORTH BRISTOL ST	D	xxxxx	0.898	D	xxxxx	0.898	+ 0.000 V/C
# 25 SANTA ANA AVE/DEL MAR AVE	A	xxxxx	0.594	A	xxxxx	0.594	+ 0.000 V/C

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 MACARTHUR BLVD/MICHELSON DR

Cycle (sec):	100	Critical Vol./Cap.(X):	0.862
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	4 0	1	2 0	3 1	0	2 0	1 0	1	2 0	1 0	1
Volume Module:												
Base Vol:	110	1580	120	510	1410	20	350	160	110	390	130	810
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1580	120	510	1410	20	350	160	110	390	130	810
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1580	120	510	1410	20	350	160	110	390	130	810
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1580	120	510	1410	20	350	160	110	390	130	810
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1580	120	510	1410	20	350	160	110	390	130	810
OvlAdjVol:												555
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Lanes:	1.00	4.00	1.00	2.00	3.94	0.06	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	6800	1700	3400	6705	95	3400	1700	1700	3400	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.07	0.15	0.21	0.21	0.10	0.09	0.06	0.11	0.08	0.48
OvlAdjV/S:												0.33
Crit Moves:	****			****			****					****

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 CAMPUS DR/NORTH BRISTOL ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.898
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 4	0 3	0	0 0	0 0	1 0	3 1	0
Volume Module:												
Base Vol:	510	840	0	0	1020	1490	0	0	0	270	2620	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	510	840	0	0	1020	1490	0	0	0	270	2620	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	510	840	0	0	1020	1490	0	0	0	270	2620	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	510	840	0	0	1020	1490	0	0	0	270	2620	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	510	840	0	0	1020	1490	0	0	0	270	2620	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	4.00	3.00	0.00	0.00	0.00	1.00	3.82	0.18
Final Sat.:	3200	4800	0	0	6400	4800	0	0	0	1600	6120	280
Capacity Analysis Module:												
Vol/Sat:	0.16	0.17	0.00	0.00	0.16	0.31	0.00	0.00	0.00	0.17	0.43	0.43
Crit Moves:	****					****					****	

JOHN WAYNE AIRPORT PROJECT (OC13-0266)
MITIGATED 2026 PLUS PROJECT CONDITIONS (MAP 12.5)
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 SANTA ANA AVE/DEL MAR AVE

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module:												
Base Vol:	40	160	30	100	330	90	50	200	60	40	240	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	160	30	100	330	90	50	200	60	40	240	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	160	30	100	330	90	50	200	60	40	240	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	160	30	100	330	90	50	200	60	40	240	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	160	30	100	330	90	50	200	60	40	240	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.70	0.13	0.19	0.64	0.17	0.16	0.65	0.19	0.12	0.70	0.18
Final Sat.:	278	1113	209	308	1015	277	258	1032	310	188	1129	282
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.14	0.06	0.32	0.32	0.03	0.19	0.19	0.03	0.21	0.21
Crit Moves:	****			****			****			****		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	866	531	2053	326	163	1228
v/c Ratio	0.78	0.70	0.87	0.27	0.49	0.36
Control Delay	29.5	12.1	31.4	3.5	39.1	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.5	12.1	31.4	3.5	39.1	12.1
Queue Length 50th (ft)	200	62	272	0	40	97
Queue Length 95th (ft)	233	152	#453	32	68	144
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	1416	867	2352	1229	431	3385
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.61	0.87	0.27	0.38	0.36

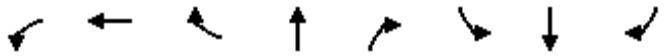
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	840	990	1950	310	150	1130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.97	0.97	0.95	0.95	0.92	0.92
Growth Factor (vph)	100%	52%	100%	100%	100%	100%
Adj. Flow (vph)	866	531	2053	326	163	1228
RTOR Reduction (vph)	0	247	0	206	0	0
Lane Group Flow (vph)	866	284	2053	120	163	1228
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	25.8	25.8	29.4	29.4	7.7	42.3
Effective Green, g (s)	25.8	25.8	29.4	29.4	7.7	42.3
Actuated g/C Ratio	0.32	0.32	0.37	0.37	0.10	0.53
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	1107	511	2355	1024	330	3388
v/s Ratio Prot	c0.25		c0.32		c0.05	0.19
v/s Ratio Perm		0.18		0.04		
v/c Ratio	0.78	0.56	0.87	0.12	0.49	0.36
Uniform Delay, d1	24.6	22.4	23.5	16.7	34.3	11.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.4	0.7	4.8	0.2	0.4	0.3
Delay (s)	27.9	23.1	28.3	17.0	34.7	11.3
Level of Service	C	C	C	B	C	B
Approach Delay (s)	26.1		26.8			14.0
Approach LOS	C		C			B

Intersection Summary			
HCM Average Control Delay	23.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		

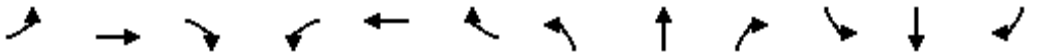
c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1215	204	1140	1258	392	152	1404	455
v/c Ratio	0.82	0.25	0.72	0.55	0.29	0.56	0.46	0.46
Control Delay	35.1	22.0	2.9	33.0	11.6	60.9	22.6	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.1	22.0	2.9	33.0	11.6	60.9	22.6	3.5
Queue Length 50th (ft)	401	95	0	297	197	59	217	0
Queue Length 95th (ft)	485	147	0	338	m265	92	254	58
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	1573	854	1583	2302	1375	458	3023	987
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.24	0.72	0.55	0.29	0.33	0.46	0.46

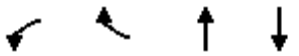
Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1130	190	1060	0	1220	380	150	1390	450
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.93	0.93	0.93	0.97	0.97	0.97	0.99	0.99	0.99
Adj. Flow (vph)	0	0	0	1215	204	1140	0	1258	392	152	1404	455
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	240
Lane Group Flow (vph)	0	0	0	1215	204	1140	0	1258	392	152	1404	215
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				51.8	51.8	120.0		43.1	94.9	9.5	56.6	56.6
Effective Green, g (s)				51.8	51.8	120.0		43.1	94.9	9.5	56.6	56.6
Actuated g/C Ratio				0.43	0.43	1.00		0.36	0.79	0.08	0.47	0.47
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				1482	804	1583		2302	1252	272	3022	747
v/s Ratio Prot				c0.35	0.11			0.20	0.14	0.04	0.22	
v/s Ratio Perm						c0.72			0.11			0.14
v/c Ratio				0.82	0.25	0.72		0.55	0.31	0.56	0.46	0.29
Uniform Delay, d1				30.0	21.8	0.0		30.7	3.5	53.2	21.4	19.4
Progression Factor				1.00	1.00	1.00		1.02	5.07	1.00	1.00	1.00
Incremental Delay, d2				3.5	0.1	2.9		0.6	0.0	1.4	0.5	1.0
Delay (s)				33.5	21.8	2.9		31.9	17.7	54.6	22.0	20.3
Level of Service				C	C	A		C	B	D	C	C
Approach Delay (s)		0.0			18.9			28.5			24.1	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM Average Control Delay	23.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	5.5
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	1250	688	2170	2104
v/c Ratio	0.99	0.43	0.72	0.56
Control Delay	52.4	0.9	8.2	10.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	52.4	0.9	8.2	10.1
Queue Length 50th (ft)	205	0	248	156
Queue Length 95th (ft)	#299	0	m186	187
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	2997	3776
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.99	0.43	0.72	0.56

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1200	660	2040	0	0	2020
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.96	0.96	0.94	0.94	0.96	0.96
Adj. Flow (vph)	1250	688	2170	0	0	2104
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1250	688	2170	0	0	2104
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	19.0	75.0	44.2			44.2
Effective Green, g (s)	19.0	75.0	44.2			44.2
Actuated g/C Ratio	0.25	1.00	0.59			0.59
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1264	1583	2997			3776
v/s Ratio Prot	c0.25		c0.43			0.33
v/s Ratio Perm		0.43				
v/c Ratio	0.99	0.43	0.72			0.56
Uniform Delay, d1	27.9	0.0	11.0			9.4
Progression Factor	1.00	1.00	0.67			1.00
Incremental Delay, d2	22.4	0.9	0.6			0.6
Delay (s)	50.3	0.9	8.0			10.0
Level of Service	D	A	A			B
Approach Delay (s)	32.7		8.0			10.0
Approach LOS	C		A			B

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	72.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

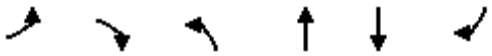
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1477	1335	933	3041	245
v/c Ratio	1.31	1.47	0.36	0.93	0.15
Control Delay	170.1	242.3	11.5	19.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	170.1	242.3	11.5	19.6	0.1
Queue Length 50th (ft)	~463	~505	89	412	0
Queue Length 95th (ft)	#589	#643	116	m447	m0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1130	908	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.31	1.47	0.36	0.93	0.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

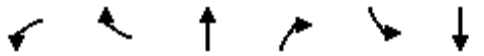
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1490	0	840	2980	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.98	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3390	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3390	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1552	0	933	3041	245
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1477	1335	0	933	3041	245
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1130	908		2597	3272	1583
v/s Ratio Prot	0.44			0.18	c0.47	
v/s Ratio Perm		c0.49				0.15
v/c Ratio	1.31	1.47		0.36	0.93	0.15
Uniform Delay, d1	25.0	25.0		11.0	17.1	0.0
Progression Factor	1.00	1.00		1.00	0.85	1.00
Incremental Delay, d2	144.7	217.6		0.4	4.3	0.1
Delay (s)	169.7	242.6		11.4	18.9	0.1
Level of Service	F	F		B	B	A
Approach Delay (s)	204.3			11.4	17.5	
Approach LOS	F			B	B	

Intersection Summary			
HCM Average Control Delay	91.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	482	276	2118	828	678	1793
v/c Ratio	0.74	0.53	0.90	0.54	0.78	0.41
Control Delay	41.1	7.7	33.8	2.9	40.0	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.1	7.7	33.8	2.9	40.0	7.2
Queue Length 50th (ft)	134	0	326	0	184	115
Queue Length 95th (ft)	161	49	379	40	#301	158
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	954	639	2342	1544	872	4340
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.43	0.90	0.54	0.78	0.41

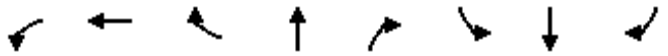
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	410	350	1970	770	590	1560
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.85	0.85	0.93	0.93	0.87	0.87
Growth Factor (vph)	100%	67%	100%	100%	100%	100%
Adj. Flow (vph)	482	276	2118	828	678	1793
RTOR Reduction (vph)	0	224	0	525	0	0
Lane Group Flow (vph)	482	52	2118	303	678	1793
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	17.1	17.1	32.9	32.9	22.9	61.0
Effective Green, g (s)	17.1	17.1	32.9	32.9	22.9	61.0
Actuated g/C Ratio	0.19	0.19	0.37	0.37	0.25	0.68
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	652	301	2342	1019	874	4343
v/s Ratio Prot	c0.14		c0.33		c0.20	0.28
v/s Ratio Perm		0.03		0.11		
v/c Ratio	0.74	0.17	0.90	0.30	0.78	0.41
Uniform Delay, d1	34.3	30.5	27.1	20.3	31.2	6.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.8	0.1	6.3	0.7	4.0	0.3
Delay (s)	38.1	30.6	33.4	21.1	35.1	6.8
Level of Service	D	C	C	C	D	A
Approach Delay (s)	35.4		29.9			14.6
Approach LOS	D		C			B

Intersection Summary			
HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	71.3%	ICU Level of Service	C
Analysis Period (min)	15		

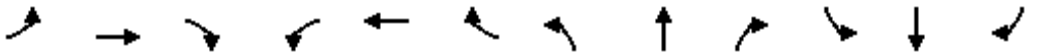
c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	576	152	598	2444	578	494	1348	360
v/c Ratio	0.79	0.39	0.38	0.79	0.49	0.81	0.30	0.30
Control Delay	53.5	43.3	0.7	30.4	18.0	58.0	7.6	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.5	43.3	0.7	30.4	18.0	58.0	7.6	1.3
Queue Length 50th (ft)	215	100	0	493	280	191	112	0
Queue Length 95th (ft)	279	164	0	m532	m391	236	128	28
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	772	419	1583	3078	1197	772	4432	1206
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.36	0.38	0.79	0.48	0.64	0.30	0.30

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	530	140	550	0	2200	520	440	1200	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.92	0.92	0.92	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	576	152	598	0	2444	578	494	1348	360
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	111
Lane Group Flow (vph)	0	0	0	576	152	598	0	2444	578	494	1348	249
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				25.4	25.4	120.0		57.6	83.0	21.4	83.0	83.0
Effective Green, g (s)				25.4	25.4	120.0		57.6	83.0	21.4	83.0	83.0
Actuated g/C Ratio				0.21	0.21	1.00		0.48	0.69	0.18	0.69	0.69
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				727	394	1583		3076	1095	612	4432	1095
v/s Ratio Prot				c0.17	0.08			c0.38	0.11	c0.14	0.21	
v/s Ratio Perm						0.38			0.25			0.16
v/c Ratio				0.79	0.39	0.38		0.79	0.53	0.81	0.30	0.23
Uniform Delay, d1				44.8	40.6	0.0		26.2	9.0	47.3	7.2	6.8
Progression Factor				1.00	1.00	1.00		1.07	2.45	1.00	1.00	1.00
Incremental Delay, d2				5.6	0.3	0.7		1.2	0.1	7.3	0.2	0.5
Delay (s)				50.4	40.9	0.7		29.2	22.1	54.6	7.4	7.3
Level of Service				D	D	A		C	C	D	A	A
Approach Delay (s)		0.0			26.9			27.8			18.0	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	24.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

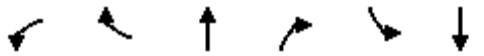
Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	844	506	3235	2033
v/c Ratio	0.73	0.32	1.04	0.52
Control Delay	30.7	0.5	35.4	9.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	30.7	0.5	35.4	9.1
Queue Length 50th (ft)	126	0	~635	146
Queue Length 95th (ft)	136	0	m#622	178
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	3110	3918
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.67	0.32	1.04	0.52

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	650	390	3170	0	0	1830
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.77	0.77	0.98	0.98	0.90	0.90
Adj. Flow (vph)	844	506	3235	0	0	2033
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	844	506	3235	0	0	2033
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	17.3	75.0	45.9			45.9
Effective Green, g (s)	17.3	75.0	45.9			45.9
Actuated g/C Ratio	0.23	1.00	0.61			0.61
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1151	1583	3112			3922
v/s Ratio Prot	c0.17		c0.64			0.32
v/s Ratio Perm		0.32				
v/c Ratio	0.73	0.32	1.04			0.52
Uniform Delay, d1	26.7	0.0	14.6			8.3
Progression Factor	1.00	1.00	0.65			1.00
Incremental Delay, d2	2.5	0.5	22.3			0.5
Delay (s)	29.2	0.5	31.8			8.8
Level of Service	C	A	C			A
Approach Delay (s)	18.4		31.8			8.8
Approach LOS	B		C			A

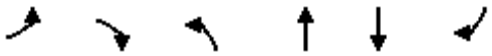
Intersection Summary			
HCM Average Control Delay	22.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1314	600	2051	1927	656
v/c Ratio	1.15	0.66	0.79	0.59	0.41
Control Delay	103.1	25.1	17.9	9.4	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	103.1	25.1	17.9	9.4	0.7
Queue Length 50th (ft)	~378	133	268	138	0
Queue Length 95th (ft)	#504	195	330	158	0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1145	914	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.15	0.66	0.79	0.59	0.41

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1160	620	0	2010	1850	630
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.99	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3424	2723		5085	6408	1583
Flt Permitted	0.95	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3424	2723		5085	6408	1583
Peak-hour factor, PHF	0.93	0.93	0.98	0.98	0.96	0.96
Adj. Flow (vph)	1247	667	0	2051	1927	656
RTOR Reduction (vph)	4	7	0	0	0	0
Lane Group Flow (vph)	1310	593	0	2051	1927	656
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1141	908		2597	3272	1583
v/s Ratio Prot	c0.38			c0.40	0.30	
v/s Ratio Perm		0.22				0.41
v/c Ratio	1.15	0.65		0.79	0.59	0.41
Uniform Delay, d1	25.0	21.3		15.0	12.8	0.0
Progression Factor	1.00	1.00		1.00	0.68	1.00
Incremental Delay, d2	77.2	1.5		2.5	0.7	0.7
Delay (s)	102.2	22.8		17.6	9.4	0.7
Level of Service	F	C		B	A	A
Approach Delay (s)	77.3			17.6	7.2	
Approach LOS	E			B	A	

Intersection Summary			
HCM Average Control Delay	30.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	856	531	2042	326	163	1228
v/c Ratio	0.78	0.70	0.86	0.26	0.49	0.36
Control Delay	29.5	12.2	30.7	3.5	39.1	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.5	12.2	30.7	3.5	39.1	12.0
Queue Length 50th (ft)	197	62	268	0	40	96
Queue Length 95th (ft)	230	153	#447	32	68	143
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	1416	867	2368	1236	431	3401
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.61	0.86	0.26	0.38	0.36

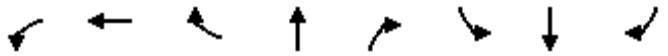
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	830	990	1940	310	150	1130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.97	0.97	0.95	0.95	0.92	0.92
Growth Factor (vph)	100%	52%	100%	100%	100%	100%
Adj. Flow (vph)	856	531	2042	326	163	1228
RTOR Reduction (vph)	0	248	0	205	0	0
Lane Group Flow (vph)	856	283	2042	121	163	1228
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	25.6	25.6	29.6	29.6	7.7	42.5
Effective Green, g (s)	25.6	25.6	29.6	29.6	7.7	42.5
Actuated g/C Ratio	0.32	0.32	0.37	0.37	0.10	0.53
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	1099	507	2371	1031	330	3404
v/s Ratio Prot	c0.25		c0.32		c0.05	0.19
v/s Ratio Perm		0.18		0.04		
v/c Ratio	0.78	0.56	0.86	0.12	0.49	0.36
Uniform Delay, d1	24.6	22.5	23.3	16.6	34.3	10.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2	0.8	4.4	0.2	0.4	0.3
Delay (s)	27.9	23.3	27.7	16.8	34.7	11.2
Level of Service	C	C	C	B	C	B
Approach Delay (s)	26.1		26.2			13.9
Approach LOS	C		C			B

Intersection Summary			
HCM Average Control Delay	22.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

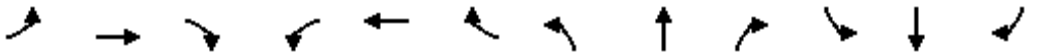
c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1215	172	1140	1247	371	152	1475	374
v/c Ratio	0.82	0.21	0.72	0.54	0.28	0.56	0.49	0.40
Control Delay	35.4	21.5	2.9	32.4	11.7	60.9	22.8	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.4	21.5	2.9	32.4	11.7	60.9	22.8	3.3
Queue Length 50th (ft)	404	79	0	294	182	59	229	0
Queue Length 95th (ft)	485	124	0	335	m276	92	269	54
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	1573	854	1583	2313	1378	458	3034	946
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.20	0.72	0.54	0.27	0.33	0.49	0.40

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1130	160	1060	0	1210	360	150	1460	370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.93	0.93	0.93	0.97	0.97	0.97	0.99	0.99	0.99
Adj. Flow (vph)	0	0	0	1215	172	1140	0	1247	371	152	1475	374
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	197
Lane Group Flow (vph)	0	0	0	1215	172	1140	0	1247	371	152	1475	177
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				51.6	51.6	120.0		43.3	94.9	9.5	56.8	56.8
Effective Green, g (s)				51.6	51.6	120.0		43.3	94.9	9.5	56.8	56.8
Actuated g/C Ratio				0.43	0.43	1.00		0.36	0.79	0.08	0.47	0.47
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				1476	801	1583		2312	1252	272	3033	749
v/s Ratio Prot				c0.35	0.09			0.19	0.13	0.04	0.23	
v/s Ratio Perm						c0.72			0.11			0.11
v/c Ratio				0.82	0.21	0.72		0.54	0.30	0.56	0.49	0.24
Uniform Delay, d1				30.2	21.5	0.0		30.4	3.4	53.2	21.6	18.7
Progression Factor				1.00	1.00	1.00		1.01	5.21	1.00	1.00	1.00
Incremental Delay, d2				3.7	0.1	2.9		0.6	0.0	1.4	0.6	0.7
Delay (s)				33.9	21.5	2.9		31.3	17.9	54.6	22.2	19.5
Level of Service				C	C	A		C	B	D	C	B
Approach Delay (s)		0.0			19.0			28.2			24.1	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM Average Control Delay	23.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	5.5
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	1250	698	2181	2135
v/c Ratio	0.99	0.44	0.73	0.57
Control Delay	52.4	0.9	8.2	10.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	52.4	0.9	8.2	10.2
Queue Length 50th (ft)	205	0	250	160
Queue Length 95th (ft)	#299	0	m182	191
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	2997	3776
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.99	0.44	0.73	0.57

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1200	670	2050	0	0	2050
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.96	0.96	0.94	0.94	0.96	0.96
Adj. Flow (vph)	1250	698	2181	0	0	2135
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1250	698	2181	0	0	2135
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	19.0	75.0	44.2			44.2
Effective Green, g (s)	19.0	75.0	44.2			44.2
Actuated g/C Ratio	0.25	1.00	0.59			0.59
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1264	1583	2997			3776
v/s Ratio Prot	c0.25		c0.43			0.33
v/s Ratio Perm		0.44				
v/c Ratio	0.99	0.44	0.73			0.57
Uniform Delay, d1	27.9	0.0	11.1			9.5
Progression Factor	1.00	1.00	0.67			1.00
Incremental Delay, d2	22.4	0.9	0.6			0.6
Delay (s)	50.3	0.9	8.0			10.1
Level of Service	D	A	A			B
Approach Delay (s)	32.6		8.0			10.1
Approach LOS	C		A			B

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

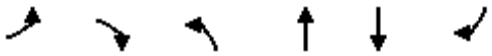
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1497	1346	944	3082	245
v/c Ratio	1.33	1.48	0.36	0.94	0.15
Control Delay	178.2	247.6	11.5	20.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	178.2	247.6	11.5	20.6	0.1
Queue Length 50th (ft)	~474	~511	90	420	0
Queue Length 95th (ft)	#600	#650	117	m456	m0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1129	908	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.33	1.48	0.36	0.94	0.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1520	0	850	3020	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.98	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3385	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3385	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1583	0	944	3082	245
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1497	1346	0	944	3082	245
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1128	908		2597	3272	1583
v/s Ratio Prot	0.44			0.19	c0.48	
v/s Ratio Perm		c0.49				0.15
v/c Ratio	1.33	1.48		0.36	0.94	0.15
Uniform Delay, d1	25.0	25.0		11.0	17.3	0.0
Progression Factor	1.00	1.00		1.00	0.85	1.00
Incremental Delay, d2	153.4	223.0		0.4	5.1	0.1
Delay (s)	178.4	248.0		11.4	19.7	0.1
Level of Service	F	F		B	B	A
Approach Delay (s)	211.4			11.4	18.3	
Approach LOS	F			B	B	

Intersection Summary			
HCM Average Control Delay	94.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	97.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	459	276	2129	817	678	1793
v/c Ratio	0.73	0.53	0.91	0.53	0.76	0.41
Control Delay	41.2	7.9	34.2	2.9	38.7	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.2	7.9	34.2	2.9	38.7	6.9
Queue Length 50th (ft)	128	0	329	0	182	111
Queue Length 95th (ft)	155	49	#384	40	#293	155
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	954	639	2342	1537	893	4380
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.43	0.91	0.53	0.76	0.41

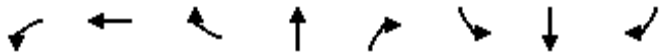
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	390	350	1980	760	590	1560
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.85	0.85	0.93	0.93	0.87	0.87
Growth Factor (vph)	100%	67%	100%	100%	100%	100%
Adj. Flow (vph)	459	276	2129	817	678	1793
RTOR Reduction (vph)	0	225	0	518	0	0
Lane Group Flow (vph)	459	51	2129	299	678	1793
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	16.6	16.6	32.9	32.9	23.4	61.5
Effective Green, g (s)	16.6	16.6	32.9	32.9	23.4	61.5
Actuated g/C Ratio	0.18	0.18	0.37	0.37	0.26	0.68
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	633	292	2342	1019	893	4379
v/s Ratio Prot	c0.13		c0.33		c0.20	0.28
v/s Ratio Perm		0.03		0.11		
v/c Ratio	0.73	0.17	0.91	0.29	0.76	0.41
Uniform Delay, d1	34.6	30.9	27.1	20.3	30.7	6.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.5	0.1	6.6	0.7	3.3	0.3
Delay (s)	38.1	31.0	33.7	21.0	34.0	6.6
Level of Service	D	C	C	C	C	A
Approach Delay (s)	35.4		30.2			14.1
Approach LOS	D		C			B

Intersection Summary			
HCM Average Control Delay	24.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		

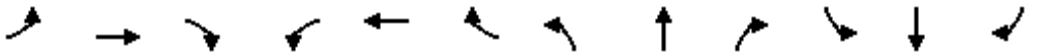
c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	587	120	598	2444	556	494	1416	281
v/c Ratio	0.80	0.30	0.38	0.80	0.47	0.81	0.32	0.24
Control Delay	54.1	41.5	0.7	31.9	16.6	58.0	7.7	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.1	41.5	0.7	31.9	16.6	58.0	7.7	1.3
Queue Length 50th (ft)	220	78	0	504	237	191	119	0
Queue Length 95th (ft)	286	133	0	m527	m388	236	136	25
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	772	419	1583	3072	1195	772	4426	1180
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.29	0.38	0.80	0.47	0.64	0.32	0.24

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	540	110	550	0	2200	500	440	1260	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.92	0.92	0.92	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	587	120	598	0	2444	556	494	1416	281
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	87
Lane Group Flow (vph)	0	0	0	587	120	598	0	2444	556	494	1416	194
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				25.5	25.5	120.0		57.5	83.0	21.4	82.9	82.9
Effective Green, g (s)				25.5	25.5	120.0		57.5	83.0	21.4	82.9	82.9
Actuated g/C Ratio				0.21	0.21	1.00		0.48	0.69	0.18	0.69	0.69
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				730	396	1583		3071	1095	612	4427	1094
v/s Ratio Prot				c0.17	0.06			c0.38	0.11	c0.14	0.22	
v/s Ratio Perm						0.38			0.24			0.12
v/c Ratio				0.80	0.30	0.38		0.80	0.51	0.81	0.32	0.18
Uniform Delay, d1				44.9	39.8	0.0		26.3	8.8	47.3	7.4	6.5
Progression Factor				1.00	1.00	1.00		1.12	2.30	1.00	1.00	1.00
Incremental Delay, d2				6.1	0.2	0.7		1.3	0.1	7.3	0.2	0.4
Delay (s)				51.0	40.0	0.7		30.7	20.3	54.6	7.6	6.9
Level of Service				D	D	A		C	C	D	A	A
Approach Delay (s)		0.0			26.9			28.8			18.1	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	24.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

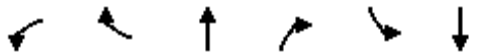
Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	857	506	3265	2089
v/c Ratio	0.74	0.32	1.05	0.53
Control Delay	30.8	0.5	40.6	9.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	30.8	0.5	40.6	9.3
Queue Length 50th (ft)	128	0	~649	153
Queue Length 95th (ft)	138	0	m#631	186
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	3101	3908
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.68	0.32	1.05	0.53

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	660	390	3200	0	0	1880
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.77	0.77	0.98	0.98	0.90	0.90
Adj. Flow (vph)	857	506	3265	0	0	2089
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	857	506	3265	0	0	2089
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	17.5	75.0	45.7			45.7
Effective Green, g (s)	17.5	75.0	45.7			45.7
Actuated g/C Ratio	0.23	1.00	0.61			0.61
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1164	1583	3098			3905
v/s Ratio Prot	c0.17		c0.64			0.33
v/s Ratio Perm		0.32				
v/c Ratio	0.74	0.32	1.05			0.53
Uniform Delay, d1	26.6	0.0	14.6			8.5
Progression Factor	1.00	1.00	0.66			1.00
Incremental Delay, d2	2.5	0.5	27.9			0.5
Delay (s)	29.1	0.5	37.6			9.0
Level of Service	C	A	D			A
Approach Delay (s)	18.5		37.6			9.0
Approach LOS	B		D			A

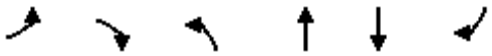
Intersection Summary			
HCM Average Control Delay	24.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1316	619	2041	1969	667
v/c Ratio	1.15	0.68	0.79	0.60	0.42
Control Delay	104.2	25.7	17.8	9.5	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	104.2	25.7	17.8	9.5	0.7
Queue Length 50th (ft)	~379	140	266	140	0
Queue Length 95th (ft)	#505	203	328	160	0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1144	914	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.15	0.68	0.79	0.60	0.42

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1160	640	0	2000	1890	640
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.99	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3423	2723		5085	6408	1583
Flt Permitted	0.95	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3423	2723		5085	6408	1583
Peak-hour factor, PHF	0.93	0.93	0.98	0.98	0.96	0.96
Adj. Flow (vph)	1247	688	0	2041	1969	667
RTOR Reduction (vph)	3	6	0	0	0	0
Lane Group Flow (vph)	1313	613	0	2041	1969	667
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1141	908		2597	3272	1583
v/s Ratio Prot	c0.38			c0.40	0.31	
v/s Ratio Perm		0.23				0.42
v/c Ratio	1.15	0.68		0.79	0.60	0.42
Uniform Delay, d1	25.0	21.5		15.0	13.0	0.0
Progression Factor	1.00	1.00		1.00	0.67	1.00
Incremental Delay, d2	78.2	1.8		2.5	0.7	0.7
Delay (s)	103.2	23.3		17.5	9.4	0.7
Level of Service	F	C		B	A	A
Approach Delay (s)	77.6			17.5	7.2	
Approach LOS	E			B	A	

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	85.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	887	531	2105	337	163	1391
v/c Ratio	0.79	0.69	0.91	0.28	0.49	0.42
Control Delay	29.4	11.7	34.1	3.6	39.1	12.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.4	11.7	34.1	3.6	39.1	12.8
Queue Length 50th (ft)	204	62	285	0	40	115
Queue Length 95th (ft)	238	151	#474	33	68	168
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	1416	867	2315	1222	431	3348
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.61	0.91	0.28	0.38	0.42

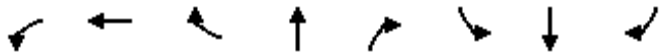
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	860	990	2000	320	150	1280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.97	0.97	0.95	0.95	0.92	0.92
Growth Factor (vph)	100%	52%	100%	100%	100%	100%
Adj. Flow (vph)	887	531	2105	337	163	1391
RTOR Reduction (vph)	0	245	0	215	0	0
Lane Group Flow (vph)	887	286	2105	122	163	1391
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	26.3	26.3	28.9	28.9	7.7	41.8
Effective Green, g (s)	26.3	26.3	28.9	28.9	7.7	41.8
Actuated g/C Ratio	0.33	0.33	0.36	0.36	0.10	0.52
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	1129	520	2315	1007	330	3348
v/s Ratio Prot	c0.26		c0.33		0.05	c0.22
v/s Ratio Perm		0.18		0.04		
v/c Ratio	0.79	0.55	0.91	0.12	0.49	0.42
Uniform Delay, d1	24.3	22.0	24.3	17.1	34.3	11.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.4	0.6	6.7	0.2	0.4	0.4
Delay (s)	27.7	22.6	31.0	17.3	34.7	12.0
Level of Service	C	C	C	B	C	B
Approach Delay (s)	25.8		29.1			14.4
Approach LOS	C		C			B

Intersection Summary			
HCM Average Control Delay	24.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

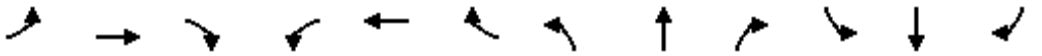
c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1226	194	1140	1320	402	152	1586	444
v/c Ratio	0.82	0.24	0.72	0.58	0.30	0.56	0.53	0.45
Control Delay	35.1	21.7	2.9	32.9	11.8	60.9	23.7	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.1	21.7	2.9	32.9	11.8	60.9	23.7	3.5
Queue Length 50th (ft)	403	89	0	312	192	59	257	0
Queue Length 95th (ft)	491	139	0	353	m271	92	295	58
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	1573	854	1583	2289	1371	458	3010	979
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.23	0.72	0.58	0.29	0.33	0.53	0.45

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1140	180	1060	0	1280	390	150	1570	440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.93	0.93	0.93	0.97	0.97	0.97	0.99	0.99	0.99
Adj. Flow (vph)	0	0	0	1226	194	1140	0	1320	402	152	1586	444
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	235
Lane Group Flow (vph)	0	0	0	1226	194	1140	0	1320	402	152	1586	209
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				52.0	52.0	120.0		42.9	94.9	9.5	56.4	56.4
Effective Green, g (s)				52.0	52.0	120.0		42.9	94.9	9.5	56.4	56.4
Actuated g/C Ratio				0.43	0.43	1.00		0.36	0.79	0.08	0.47	0.47
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				1488	807	1583		2291	1252	272	3012	744
v/s Ratio Prot				c0.36	0.10			0.21	0.14	0.04	0.25	
v/s Ratio Perm						c0.72			0.11			0.13
v/c Ratio				0.82	0.24	0.72		0.58	0.32	0.56	0.53	0.28
Uniform Delay, d1				30.0	21.5	0.0		31.2	3.5	53.2	22.4	19.4
Progression Factor				1.00	1.00	1.00		1.00	5.11	1.00	1.00	1.00
Incremental Delay, d2				3.7	0.1	2.9		0.7	0.0	1.4	0.7	0.9
Delay (s)				33.7	21.6	2.9		31.8	18.0	54.6	23.1	20.4
Level of Service				C	C	A		C	B	D	C	C
Approach Delay (s)		0.0			19.0			28.6			24.7	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM Average Control Delay	23.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	5.5
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

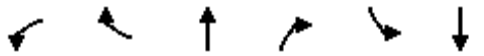
Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	1281	708	2234	2198
v/c Ratio	1.01	0.45	0.75	0.58
Control Delay	58.3	0.9	8.4	10.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	58.3	0.9	8.4	10.4
Queue Length 50th (ft)	~216	0	263	167
Queue Length 95th (ft)	#310	0	m188	199
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	2997	3776
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.01	0.45	0.75	0.58

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1230	680	2100	0	0	2110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.96	0.96	0.94	0.94	0.96	0.96
Adj. Flow (vph)	1281	708	2234	0	0	2198
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1281	708	2234	0	0	2198
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	19.0	75.0	44.2			44.2
Effective Green, g (s)	19.0	75.0	44.2			44.2
Actuated g/C Ratio	0.25	1.00	0.59			0.59
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1264	1583	2997			3776
v/s Ratio Prot	c0.26		c0.44			0.34
v/s Ratio Perm		0.45				
v/c Ratio	1.01	0.45	0.75			0.58
Uniform Delay, d1	28.0	0.0	11.3			9.6
Progression Factor	1.00	1.00	0.67			1.00
Incremental Delay, d2	28.7	0.9	0.6			0.7
Delay (s)	56.7	0.9	8.2			10.3
Level of Service	E	A	A			B
Approach Delay (s)	36.8		8.2			10.3
Approach LOS	D		A			B

Intersection Summary			
HCM Average Control Delay	17.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

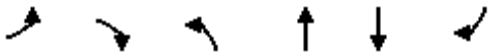
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1522	1373	989	3153	255
v/c Ratio	1.35	1.51	0.38	0.96	0.16
Control Delay	189.4	260.5	11.7	22.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	189.4	260.5	11.7	22.7	0.1
Queue Length 50th (ft)	~487	~527	95	434	0
Queue Length 95th (ft)	#613	#666	124	m#472	m0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1126	908	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.35	1.51	0.38	0.96	0.16

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1570	0	890	3090	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.97	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3380	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3380	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1635	0	989	3153	255
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1522	1373	0	989	3153	255
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1127	908		2597	3272	1583
v/s Ratio Prot	0.45			0.19	c0.49	
v/s Ratio Perm		c0.50				0.16
v/c Ratio	1.35	1.51		0.38	0.96	0.16
Uniform Delay, d1	25.0	25.0		11.1	17.7	0.0
Progression Factor	1.00	1.00		1.00	0.84	1.00
Incremental Delay, d2	163.7	236.2		0.4	6.7	0.1
Delay (s)	188.7	261.2		11.6	21.7	0.1
Level of Service	F	F		B	C	A
Approach Delay (s)	223.0			11.6	20.0	
Approach LOS	F			B	C	

Intersection Summary			
HCM Average Control Delay	99.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	506	276	2226	828	678	1908
v/c Ratio	0.75	0.52	0.95	0.54	0.80	0.44
Control Delay	40.9	7.4	38.5	2.9	41.7	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.9	7.4	38.5	2.9	41.7	7.8
Queue Length 50th (ft)	140	0	352	0	186	129
Queue Length 95th (ft)	168	48	#442	40	#309	176
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	954	639	2342	1544	848	4295
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.43	0.95	0.54	0.80	0.44

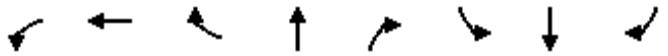
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	430	350	2070	770	590	1660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.85	0.85	0.93	0.93	0.87	0.87
Growth Factor (vph)	100%	67%	100%	100%	100%	100%
Adj. Flow (vph)	506	276	2226	828	678	1908
RTOR Reduction (vph)	0	221	0	525	0	0
Lane Group Flow (vph)	506	55	2226	303	678	1908
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	17.8	17.8	32.9	32.9	22.2	60.3
Effective Green, g (s)	17.8	17.8	32.9	32.9	22.2	60.3
Actuated g/C Ratio	0.20	0.20	0.37	0.37	0.25	0.67
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	679	313	2342	1019	847	4293
v/s Ratio Prot	c0.15		c0.35		c0.20	0.30
v/s Ratio Perm		0.03		0.11		
v/c Ratio	0.75	0.17	0.95	0.30	0.80	0.44
Uniform Delay, d1	34.0	30.0	27.8	20.3	31.8	7.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.9	0.1	10.1	0.7	5.2	0.3
Delay (s)	37.9	30.1	37.9	21.1	37.0	7.3
Level of Service	D	C	D	C	D	A
Approach Delay (s)	35.1		33.3			15.1
Approach LOS	D		C			B

Intersection Summary			
HCM Average Control Delay	26.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		

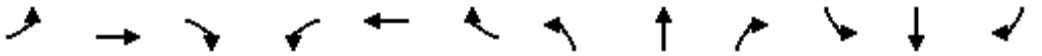
c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	598	141	598	2533	578	494	1506	337
v/c Ratio	0.81	0.35	0.38	0.83	0.49	0.81	0.34	0.28
Control Delay	54.6	42.5	0.7	31.4	17.1	58.0	8.0	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.6	42.5	0.7	31.4	17.1	58.0	8.0	1.3
Queue Length 50th (ft)	225	92	0	523	271	191	129	0
Queue Length 95th (ft)	291	153	0	m536	m375	236	146	27
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	772	419	1583	3064	1193	772	4418	1196
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.34	0.38	0.83	0.48	0.64	0.34	0.28

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	550	130	550	0	2280	520	440	1340	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.92	0.92	0.92	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	598	141	598	0	2533	578	494	1506	337
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	105
Lane Group Flow (vph)	0	0	0	598	141	598	0	2533	578	494	1506	232
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				25.7	25.7	120.0		57.3	83.0	21.4	82.7	82.7
Effective Green, g (s)				25.7	25.7	120.0		57.3	83.0	21.4	82.7	82.7
Actuated g/C Ratio				0.21	0.21	1.00		0.48	0.69	0.18	0.69	0.69
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				735	399	1583		3060	1095	612	4416	1091
v/s Ratio Prot				c0.17	0.08			c0.40	0.11	c0.14	0.24	
v/s Ratio Perm						0.38			0.25			0.15
v/c Ratio				0.81	0.35	0.38		0.83	0.53	0.81	0.34	0.21
Uniform Delay, d1				44.9	40.1	0.0		27.1	9.0	47.3	7.6	6.8
Progression Factor				1.00	1.00	1.00		1.07	2.33	1.00	1.00	1.00
Incremental Delay, d2				6.6	0.3	0.7		1.3	0.1	7.3	0.2	0.4
Delay (s)				51.5	40.4	0.7		30.3	21.0	54.6	7.8	7.2
Level of Service				D	D	A		C	C	D	A	A
Approach Delay (s)		0.0			27.6			28.6			17.6	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

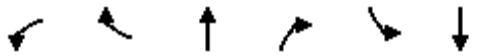
Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	909	506	3337	2189
v/c Ratio	0.76	0.32	1.09	0.57
Control Delay	31.1	0.5	55.9	9.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	31.1	0.5	55.9	9.8
Queue Length 50th (ft)	136	0	~680	166
Queue Length 95th (ft)	147	0	m#657	199
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	3069	3867
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.72	0.32	1.09	0.57

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	700	390	3270	0	0	1970
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.77	0.77	0.98	0.98	0.90	0.90
Adj. Flow (vph)	909	506	3337	0	0	2189
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	909	506	3337	0	0	2189
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	17.9	75.0	45.3			45.3
Effective Green, g (s)	17.9	75.0	45.3			45.3
Actuated g/C Ratio	0.24	1.00	0.60			0.60
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1191	1583	3071			3870
v/s Ratio Prot	c0.18		c0.66			0.34
v/s Ratio Perm		0.32				
v/c Ratio	0.76	0.32	1.09			0.57
Uniform Delay, d1	26.6	0.0	14.9			8.9
Progression Factor	1.00	1.00	0.67			1.00
Incremental Delay, d2	3.0	0.5	41.6			0.6
Delay (s)	29.5	0.5	51.7			9.5
Level of Service	C	A	D			A
Approach Delay (s)	19.2		51.7			9.5
Approach LOS	B		D			A

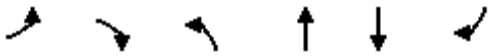
Intersection Summary			
HCM Average Control Delay	31.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1318	639	2051	2062	698
v/c Ratio	1.15	0.70	0.79	0.63	0.44
Control Delay	104.9	26.4	17.9	9.6	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	104.9	26.4	17.9	9.6	0.7
Queue Length 50th (ft)	~381	146	268	148	0
Queue Length 95th (ft)	#507	211	330	165	0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1144	912	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.15	0.70	0.79	0.63	0.44

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1160	660	0	2010	1980	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.99	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3423	2723		5085	6408	1583
Flt Permitted	0.95	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3423	2723		5085	6408	1583
Peak-hour factor, PHF	0.93	0.93	0.98	0.98	0.96	0.96
Adj. Flow (vph)	1247	710	0	2051	2062	698
RTOR Reduction (vph)	3	5	0	0	0	0
Lane Group Flow (vph)	1315	634	0	2051	2062	698
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1141	908		2597	3272	1583
v/s Ratio Prot	c0.38			c0.40	0.32	
v/s Ratio Perm		0.23				0.44
v/c Ratio	1.15	0.70		0.79	0.63	0.44
Uniform Delay, d1	25.0	21.7		15.0	13.2	0.0
Progression Factor	1.00	1.00		1.00	0.66	1.00
Incremental Delay, d2	79.1	2.2		2.5	0.7	0.7
Delay (s)	104.1	23.9		17.6	9.5	0.7
Level of Service	F	C		B	A	A
Approach Delay (s)	77.9			17.6	7.3	
Approach LOS	E			B	A	

Intersection Summary			
HCM Average Control Delay	30.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	918	531	2147	347	163	1543
v/c Ratio	0.79	0.68	0.95	0.29	0.50	0.47
Control Delay	29.1	11.3	38.8	3.6	39.2	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.1	11.3	38.8	3.6	39.2	13.8
Queue Length 50th (ft)	208	60	302	0	40	137
Queue Length 95th (ft)	246	149	#489	34	68	193
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	1416	867	2260	1208	429	3291
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.61	0.95	0.29	0.38	0.47

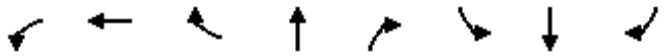
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	890	990	2040	330	150	1420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.97	0.97	0.95	0.95	0.92	0.92
Growth Factor (vph)	100%	52%	100%	100%	100%	100%
Adj. Flow (vph)	918	531	2147	347	163	1543
RTOR Reduction (vph)	0	242	0	225	0	0
Lane Group Flow (vph)	918	289	2147	122	163	1543
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	27.0	27.0	28.2	28.2	7.7	41.1
Effective Green, g (s)	27.0	27.0	28.2	28.2	7.7	41.1
Actuated g/C Ratio	0.34	0.34	0.35	0.35	0.10	0.51
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	1159	534	2259	982	330	3292
v/s Ratio Prot	c0.27		c0.34		0.05	c0.24
v/s Ratio Perm		0.18		0.04		
v/c Ratio	0.79	0.54	0.95	0.12	0.49	0.47
Uniform Delay, d1	24.0	21.5	25.2	17.5	34.3	12.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.5	0.6	10.4	0.3	0.4	0.5
Delay (s)	27.5	22.1	35.6	17.8	34.7	12.9
Level of Service	C	C	D	B	C	B
Approach Delay (s)	25.5		33.2			15.0
Approach LOS	C		C			B

Intersection Summary			
HCM Average Control Delay	25.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

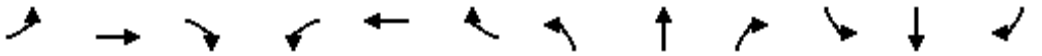
c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1226	204	1140	1371	412	152	1697	495
v/c Ratio	0.82	0.25	0.72	0.60	0.31	0.56	0.57	0.49
Control Delay	35.0	21.8	2.9	32.9	11.5	60.9	24.4	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	21.8	2.9	32.9	11.5	60.9	24.4	3.6
Queue Length 50th (ft)	403	94	0	324	204	59	282	0
Queue Length 95th (ft)	491	147	0	m364	m261	92	320	60
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	1573	854	1583	2282	1370	458	3003	1005
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.24	0.72	0.60	0.30	0.33	0.57	0.49

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	1140	190	1060	0	1330	400	150	1680	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.93	0.93	0.93	0.97	0.97	0.97	0.99	0.99	0.99
Adj. Flow (vph)	0	0	0	1226	204	1140	0	1371	412	152	1697	495
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	263
Lane Group Flow (vph)	0	0	0	1226	204	1140	0	1371	412	152	1697	232
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				52.2	52.2	120.0		42.7	94.9	9.5	56.2	56.2
Effective Green, g (s)				52.2	52.2	120.0		42.7	94.9	9.5	56.2	56.2
Actuated g/C Ratio				0.44	0.44	1.00		0.36	0.79	0.08	0.47	0.47
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				1493	810	1583		2280	1252	272	3001	741
v/s Ratio Prot				c0.36	0.11			0.21	0.14	0.04	0.26	
v/s Ratio Perm						c0.72			0.12			0.15
v/c Ratio				0.82	0.25	0.72		0.60	0.33	0.56	0.57	0.31
Uniform Delay, d1				29.8	21.5	0.0		31.7	3.5	53.2	23.1	19.9
Progression Factor				1.00	1.00	1.00		0.99	4.98	1.00	1.00	1.00
Incremental Delay, d2				3.6	0.1	2.9		0.7	0.0	1.4	0.8	1.1
Delay (s)				33.4	21.6	2.9		31.9	17.7	54.6	23.8	21.0
Level of Service				C	C	A		C	B	D	C	C
Approach Delay (s)		0.0			18.9			28.6			25.2	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM Average Control Delay	23.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	5.5
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	1292	719	2277	2260
v/c Ratio	1.02	0.45	0.76	0.60
Control Delay	60.6	0.9	8.5	10.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	60.6	0.9	8.5	10.6
Queue Length 50th (ft)	~221	0	273	175
Queue Length 95th (ft)	#314	0	m189	208
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	2997	3776
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.02	0.45	0.76	0.60

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1240	690	2140	0	0	2170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.96	0.96	0.94	0.94	0.96	0.96
Adj. Flow (vph)	1292	719	2277	0	0	2260
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1292	719	2277	0	0	2260
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	19.0	75.0	44.2			44.2
Effective Green, g (s)	19.0	75.0	44.2			44.2
Actuated g/C Ratio	0.25	1.00	0.59			0.59
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1264	1583	2997			3776
v/s Ratio Prot	c0.26		c0.45			0.35
v/s Ratio Perm		0.45				
v/c Ratio	1.02	0.45	0.76			0.60
Uniform Delay, d1	28.0	0.0	11.5			9.8
Progression Factor	1.00	1.00	0.67			1.00
Incremental Delay, d2	31.1	0.9	0.7			0.7
Delay (s)	59.1	0.9	8.3			10.5
Level of Service	E	A	A			B
Approach Delay (s)	38.3		8.3			10.5
Approach LOS	D		A			B

Intersection Summary			
HCM Average Control Delay	18.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

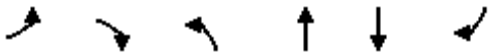
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1549	1409	1022	3214	265
v/c Ratio	1.38	1.55	0.39	0.98	0.17
Control Delay	200.4	277.9	11.8	25.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	200.4	277.9	11.8	25.4	0.1
Queue Length 50th (ft)	~501	~548	100	445	0
Queue Length 95th (ft)	#628	#687	129	m#503	m0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1125	908	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.38	1.55	0.39	0.98	0.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1630	0	920	3150	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.97	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3375	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3375	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1698	0	1022	3214	265
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1549	1409	0	1022	3214	265
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1125	908		2597	3272	1583
v/s Ratio Prot	0.46			0.20	c0.50	
v/s Ratio Perm		c0.52				0.17
v/c Ratio	1.38	1.55		0.39	0.98	0.17
Uniform Delay, d1	25.0	25.0		11.2	18.0	0.0
Progression Factor	1.00	1.00		1.00	0.84	1.00
Incremental Delay, d2	175.3	253.7		0.4	9.1	0.1
Delay (s)	200.3	278.7		11.7	24.1	0.1
Level of Service	F	F		B	C	A
Approach Delay (s)	237.6			11.7	22.3	
Approach LOS	F			B	C	

Intersection Summary			
HCM Average Control Delay	106.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	101.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	541	276	2312	828	678	2011
v/c Ratio	0.76	0.50	0.99	0.54	0.83	0.48
Control Delay	40.6	7.1	45.0	2.9	44.7	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.6	7.1	45.0	2.9	44.7	8.4
Queue Length 50th (ft)	150	0	373	0	189	145
Queue Length 95th (ft)	177	47	#472	40	#321	196
Internal Link Dist (ft)	433		1512			460
Turn Bay Length (ft)				650	345	
Base Capacity (vph)	954	639	2342	1544	814	4232
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.43	0.99	0.54	0.83	0.48

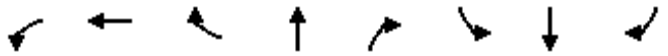
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	460	350	2150	770	590	1750
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Lane Util. Factor	0.97	1.00	0.86	0.88	0.97	0.86
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	6408	2787	3433	6408
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	6408	2787	3433	6408
Peak-hour factor, PHF	0.85	0.85	0.93	0.93	0.87	0.87
Growth Factor (vph)	100%	67%	100%	100%	100%	100%
Adj. Flow (vph)	541	276	2312	828	678	2011
RTOR Reduction (vph)	0	219	0	525	0	0
Lane Group Flow (vph)	541	57	2312	303	678	2011
Turn Type		Perm		Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	18.7	18.7	32.9	32.9	21.3	59.4
Effective Green, g (s)	18.7	18.7	32.9	32.9	21.3	59.4
Actuated g/C Ratio	0.21	0.21	0.37	0.37	0.24	0.66
Clearance Time (s)	5.6	5.6	6.3	6.3	5.2	6.3
Vehicle Extension (s)	2.0	2.0	3.5	3.5	1.5	3.5
Lane Grp Cap (vph)	713	329	2342	1019	812	4229
v/s Ratio Prot	c0.16		c0.36		c0.20	0.31
v/s Ratio Perm		0.04		0.11		
v/c Ratio	0.76	0.17	0.99	0.30	0.83	0.48
Uniform Delay, d1	33.5	29.3	28.3	20.3	32.7	7.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.1	0.1	15.8	0.7	7.1	0.4
Delay (s)	37.7	29.4	44.2	21.1	39.8	8.0
Level of Service	D	C	D	C	D	A
Approach Delay (s)	34.9		38.1			16.0
Approach LOS	C		D			B

Intersection Summary			
HCM Average Control Delay	28.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		

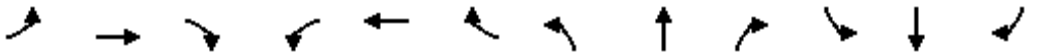
c Critical Lane Group



Lane Group	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	609	152	598	2600	589	494	1607	371
v/c Ratio	0.82	0.38	0.38	0.85	0.50	0.81	0.36	0.31
Control Delay	55.1	42.9	0.7	31.5	16.9	58.0	8.2	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.1	42.9	0.7	31.5	16.9	58.0	8.2	1.4
Queue Length 50th (ft)	230	100	0	540	287	191	141	0
Queue Length 95th (ft)	297	164	0	m540	m362	236	159	28
Internal Link Dist (ft)		424		1023			1512	
Turn Bay Length (ft)			160			355		270
Base Capacity (vph)	772	419	1583	3054	1191	772	4409	1205
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.36	0.38	0.85	0.49	0.64	0.36	0.31

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	560	140	550	0	2340	530	440	1430	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.5	5.5	4.0		6.1	5.5	4.0	6.1	6.1
Lane Util. Factor				0.97	1.00	1.00		0.86	1.00	0.97	0.86	1.00
Frt				1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)				3433	1863	1583		6408	1583	3433	6408	1583
Flt Permitted				0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)				3433	1863	1583		6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.92	0.92	0.92	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	609	152	598	0	2600	589	494	1607	371
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	116
Lane Group Flow (vph)	0	0	0	609	152	598	0	2600	589	494	1607	255
Turn Type				Split		Free			pm+ov	Prot		Perm
Protected Phases				3	3			2	3	1	6	
Permitted Phases						Free			2			6
Actuated Green, G (s)				25.8	25.8	120.0		57.2	83.0	21.4	82.6	82.6
Effective Green, g (s)				25.8	25.8	120.0		57.2	83.0	21.4	82.6	82.6
Actuated g/C Ratio				0.22	0.22	1.00		0.48	0.69	0.18	0.69	0.69
Clearance Time (s)				5.5	5.5			6.1	5.5	4.0	6.1	6.1
Vehicle Extension (s)				2.2	2.2			3.5	2.2	1.8	3.5	3.5
Lane Grp Cap (vph)				738	401	1583		3054	1095	612	4411	1090
v/s Ratio Prot				c0.18	0.08			c0.41	0.12	c0.14	0.25	
v/s Ratio Perm						0.38			0.26			0.16
v/c Ratio				0.83	0.38	0.38		0.85	0.54	0.81	0.36	0.23
Uniform Delay, d1				44.9	40.3	0.0		27.7	9.1	47.3	7.8	6.9
Progression Factor				1.00	1.00	1.00		1.05	2.29	1.00	1.00	1.00
Incremental Delay, d2				7.2	0.3	0.7		1.3	0.1	7.3	0.2	0.5
Delay (s)				52.2	40.6	0.7		30.4	20.9	54.6	8.0	7.5
Level of Service				D	D	A		C	C	D	A	A
Approach Delay (s)		0.0			28.2			28.6			17.2	
Approach LOS		A			C			C			B	

Intersection Summary			
HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBT	SBT
Lane Group Flow (vph)	948	519	3398	2278
v/c Ratio	0.79	0.33	1.11	0.59
Control Delay	31.8	0.6	67.3	10.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	31.8	0.6	67.3	10.2
Queue Length 50th (ft)	144	0	~702	176
Queue Length 95th (ft)	153	0	m#679	211
Internal Link Dist (ft)	1177		939	1131
Turn Bay Length (ft)	370			
Base Capacity (vph)	1264	1583	3055	3850
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.75	0.33	1.11	0.59

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	730	400	3330	0	0	2050
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.77	0.77	0.98	0.98	0.90	0.90
Adj. Flow (vph)	948	519	3398	0	0	2278
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	948	519	3398	0	0	2278
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	18.1	75.0	45.1			45.1
Effective Green, g (s)	18.1	75.0	45.1			45.1
Actuated g/C Ratio	0.24	1.00	0.60			0.60
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	1204	1583	3058			3853
v/s Ratio Prot	c0.19		c0.67			0.36
v/s Ratio Perm		0.33				
v/c Ratio	0.79	0.33	1.11			0.59
Uniform Delay, d1	26.6	0.0	14.9			9.2
Progression Factor	1.00	1.00	0.69			1.00
Incremental Delay, d2	3.5	0.6	52.4			0.7
Delay (s)	30.1	0.6	62.6			9.9
Level of Service	C	A	E			A
Approach Delay (s)	19.7		62.6			9.9
Approach LOS	B		E			A

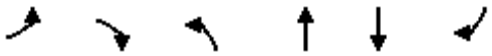
Intersection Summary			
HCM Average Control Delay	37.0	HCM Level of Service	D
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	1320	658	2051	2146	729
v/c Ratio	1.15	0.72	0.79	0.66	0.46
Control Delay	106.1	27.2	17.9	9.7	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	106.1	27.2	17.9	9.7	0.8
Queue Length 50th (ft)	~382	152	268	155	0
Queue Length 95th (ft)	#508	220	330	169	0
Internal Link Dist (ft)	740		1245	939	
Turn Bay Length (ft)	350	430			170
Base Capacity (vph)	1143	911	2597	3272	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.15	0.72	0.79	0.66	0.46

Intersection Summary

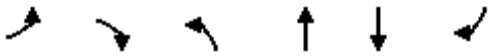
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



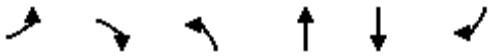
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1160	680	0	2010	2060	700
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.99	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3422	2723		5085	6408	1583
Flt Permitted	0.95	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3422	2723		5085	6408	1583
Peak-hour factor, PHF	0.93	0.93	0.98	0.98	0.96	0.96
Adj. Flow (vph)	1247	731	0	2051	2146	729
RTOR Reduction (vph)	2	3	0	0	0	0
Lane Group Flow (vph)	1318	655	0	2051	2146	729
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	25.0	25.0		38.3	38.3	75.0
Effective Green, g (s)	25.0	25.0		38.3	38.3	75.0
Actuated g/C Ratio	0.33	0.33		0.51	0.51	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1141	908		2597	3272	1583
v/s Ratio Prot	c0.39			c0.40	0.33	
v/s Ratio Perm		0.24				0.46
v/c Ratio	1.16	0.72		0.79	0.66	0.46
Uniform Delay, d1	25.0	21.9		15.0	13.5	0.0
Progression Factor	1.00	1.00		1.00	0.65	1.00
Incremental Delay, d2	80.1	2.7		2.5	0.8	0.7
Delay (s)	105.1	24.6		17.6	9.6	0.7
Level of Service	F	C		B	A	A
Approach Delay (s)	78.3			17.6	7.3	
Approach LOS	E			B	A	

Intersection Summary			
HCM Average Control Delay	30.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



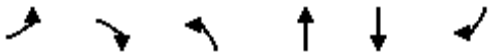
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1490	0	840	2980	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.98	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3390	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3390	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1552	0	933	3041	245
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1477	1335	0	933	3041	245
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	44.0	44.0		44.3	44.3	100.0
Effective Green, g (s)	44.0	44.0		44.3	44.3	100.0
Actuated g/C Ratio	0.44	0.44		0.44	0.44	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1492	1198		2253	2839	1583
v/s Ratio Prot	0.44			0.18	c0.47	
v/s Ratio Perm		c0.49				0.15
v/c Ratio	0.99	1.11		0.41	1.07	0.15
Uniform Delay, d1	27.8	28.0		19.0	27.9	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	20.7	63.4		0.6	39.7	0.2
Delay (s)	48.4	91.4		19.6	67.6	0.2
Level of Service	D	F		B	E	A
Approach Delay (s)	68.8			19.6	62.5	
Approach LOS	E			B	E	

Intersection Summary			
HCM Average Control Delay	59.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



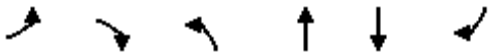
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1520	0	850	3020	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.98	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3385	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3385	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1583	0	944	3082	245
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1497	1346	0	944	3082	245
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	44.0	44.0		44.3	44.3	100.0
Effective Green, g (s)	44.0	44.0		44.3	44.3	100.0
Actuated g/C Ratio	0.44	0.44		0.44	0.44	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1489	1198		2253	2839	1583
v/s Ratio Prot	0.44			0.19	c0.48	
v/s Ratio Perm		c0.49				0.15
v/c Ratio	1.01	1.12		0.42	1.09	0.15
Uniform Delay, d1	28.0	28.0		19.0	27.9	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	24.6	66.9		0.6	45.3	0.2
Delay (s)	52.6	94.9		19.6	73.2	0.2
Level of Service	D	F		B	E	A
Approach Delay (s)	72.7			19.6	67.8	
Approach LOS	E			B	E	

Intersection Summary			
HCM Average Control Delay	63.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	97.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



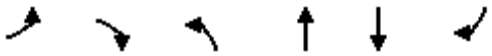
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1520	0	850	3020	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.98	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3385	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3385	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1583	0	944	3082	245
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1497	1346	0	944	3082	245
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	44.0	44.0		44.3	44.3	100.0
Effective Green, g (s)	44.0	44.0		44.3	44.3	100.0
Actuated g/C Ratio	0.44	0.44		0.44	0.44	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1489	1198		2253	2839	1583
v/s Ratio Prot	0.44			0.19	c0.48	
v/s Ratio Perm		c0.49				0.15
v/c Ratio	1.01	1.12		0.42	1.09	0.15
Uniform Delay, d1	28.0	28.0		19.0	27.9	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	24.6	66.9		0.6	45.3	0.2
Delay (s)	52.6	94.9		19.6	73.2	0.2
Level of Service	D	F		B	E	A
Approach Delay (s)	72.7			19.6	67.8	
Approach LOS	E			B	E	

Intersection Summary			
HCM Average Control Delay	63.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	97.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



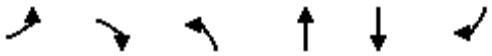
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1520	0	850	3020	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.98	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3385	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3385	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1583	0	944	3082	245
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1497	1346	0	944	3082	245
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	44.0	44.0		44.3	44.3	100.0
Effective Green, g (s)	44.0	44.0		44.3	44.3	100.0
Actuated g/C Ratio	0.44	0.44		0.44	0.44	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1489	1198		2253	2839	1583
v/s Ratio Prot	0.44			0.19	c0.48	
v/s Ratio Perm		c0.49				0.15
v/c Ratio	1.01	1.12		0.42	1.09	0.15
Uniform Delay, d1	28.0	28.0		19.0	27.9	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	24.6	66.9		0.6	45.3	0.2
Delay (s)	52.6	94.9		19.6	73.2	0.2
Level of Service	D	F		B	E	A
Approach Delay (s)	72.7			19.6	67.8	
Approach LOS	E			B	E	

Intersection Summary			
HCM Average Control Delay	63.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	97.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



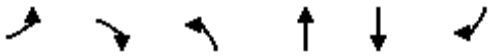
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1520	0	890	3040	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.98	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3385	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3385	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1583	0	989	3102	245
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1497	1346	0	989	3102	245
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	43.0	43.0		45.3	45.3	100.0
Effective Green, g (s)	43.0	43.0		45.3	45.3	100.0
Actuated g/C Ratio	0.43	0.43		0.45	0.45	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1456	1171		2304	2903	1583
v/s Ratio Prot	0.44			0.19	c0.48	
v/s Ratio Perm		c0.49				0.15
v/c Ratio	1.03	1.15		0.43	1.07	0.15
Uniform Delay, d1	28.5	28.5		18.6	27.4	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	31.1	77.5		0.6	38.6	0.2
Delay (s)	59.6	106.0		19.2	65.9	0.2
Level of Service	E	F		B	E	A
Approach Delay (s)	81.6			19.2	61.1	
Approach LOS	F			B	E	

Intersection Summary			
HCM Average Control Delay	63.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



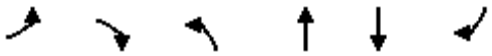
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1570	0	890	3090	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.97	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3380	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3380	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1635	0	989	3153	255
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1522	1373	0	989	3153	255
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	44.0	44.0		44.3	44.3	100.0
Effective Green, g (s)	44.0	44.0		44.3	44.3	100.0
Actuated g/C Ratio	0.44	0.44		0.44	0.44	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1487	1198		2253	2839	1583
v/s Ratio Prot	0.45			0.19	c0.49	
v/s Ratio Perm		c0.50				0.16
v/c Ratio	1.02	1.15		0.44	1.11	0.16
Uniform Delay, d1	28.0	28.0		19.3	27.9	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	29.5	75.9		0.6	55.5	0.2
Delay (s)	57.5	103.9		19.9	83.3	0.2
Level of Service	E	F		B	F	A
Approach Delay (s)	79.5			19.9	77.1	
Approach LOS	E			B	E	

Intersection Summary			
HCM Average Control Delay	70.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



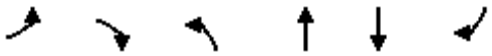
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1570	0	890	3090	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.97	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3380	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3380	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1635	0	989	3153	255
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1522	1373	0	989	3153	255
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	44.0	44.0		44.3	44.3	100.0
Effective Green, g (s)	44.0	44.0		44.3	44.3	100.0
Actuated g/C Ratio	0.44	0.44		0.44	0.44	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1487	1198		2253	2839	1583
v/s Ratio Prot	0.45			0.19	c0.49	
v/s Ratio Perm		c0.50				0.16
v/c Ratio	1.02	1.15		0.44	1.11	0.16
Uniform Delay, d1	28.0	28.0		19.3	27.9	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	29.5	75.9		0.6	55.5	0.2
Delay (s)	57.5	103.9		19.9	83.3	0.2
Level of Service	E	F		B	F	A
Approach Delay (s)	79.5			19.9	77.1	
Approach LOS	E			B	E	

Intersection Summary			
HCM Average Control Delay	70.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



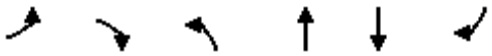
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1570	0	900	3090	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.97	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3380	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3380	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1635	0	1000	3153	255
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1522	1373	0	1000	3153	255
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	44.0	44.0		44.3	44.3	100.0
Effective Green, g (s)	44.0	44.0		44.3	44.3	100.0
Actuated g/C Ratio	0.44	0.44		0.44	0.44	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1487	1198		2253	2839	1583
v/s Ratio Prot	0.45			0.20	c0.49	
v/s Ratio Perm		c0.50				0.16
v/c Ratio	1.02	1.15		0.44	1.11	0.16
Uniform Delay, d1	28.0	28.0		19.3	27.9	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	29.5	75.9		0.6	55.5	0.2
Delay (s)	57.5	103.9		19.9	83.3	0.2
Level of Service	E	F		B	F	A
Approach Delay (s)	79.5			19.9	77.1	
Approach LOS	E			B	E	

Intersection Summary			
HCM Average Control Delay	70.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



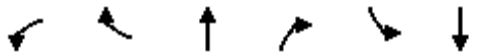
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1570	0	920	3100	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.97	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3380	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3380	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1635	0	1022	3163	255
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1522	1373	0	1022	3163	255
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	44.0	44.0		44.3	44.3	100.0
Effective Green, g (s)	44.0	44.0		44.3	44.3	100.0
Actuated g/C Ratio	0.44	0.44		0.44	0.44	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1487	1198		2253	2839	1583
v/s Ratio Prot	0.45			0.20	c0.49	
v/s Ratio Perm		c0.50				0.16
v/c Ratio	1.02	1.15		0.45	1.11	0.16
Uniform Delay, d1	28.0	28.0		19.4	27.9	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	29.5	75.9		0.7	56.9	0.2
Delay (s)	57.5	103.9		20.1	84.8	0.2
Level of Service	E	F		C	F	A
Approach Delay (s)	79.5			20.1	78.5	
Approach LOS	E			C	E	

Intersection Summary			
HCM Average Control Delay	70.8	HCM Level of Service	E
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	99.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



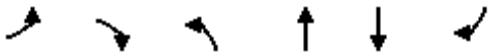
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1630	0	920	3150	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.97	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3375	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3375	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1698	0	1022	3214	265
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1549	1409	0	1022	3214	265
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	43.0	43.0		45.3	45.3	100.0
Effective Green, g (s)	43.0	43.0		45.3	45.3	100.0
Actuated g/C Ratio	0.43	0.43		0.45	0.45	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1451	1171		2304	2903	1583
v/s Ratio Prot	0.46			0.20	c0.50	
v/s Ratio Perm		c0.52				0.17
v/c Ratio	1.07	1.20		0.44	1.11	0.17
Uniform Delay, d1	28.5	28.5		18.7	27.4	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	44.0	99.8		0.6	53.9	0.2
Delay (s)	72.5	128.3		19.3	81.3	0.2
Level of Service	E	F		B	F	A
Approach Delay (s)	99.1			19.3	75.1	
Approach LOS	F			B	E	

Intersection Summary			
HCM Average Control Delay	77.0	HCM Level of Service	E
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	101.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



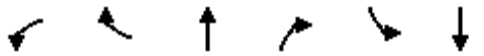
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	730	400	3330	0	0	2050
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.77	0.77	0.98	0.98	0.90	0.90
Adj. Flow (vph)	948	519	3398	0	0	2278
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	948	519	3398	0	0	2278
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	20.0	100.0	68.2			68.2
Effective Green, g (s)	20.0	100.0	68.2			68.2
Actuated g/C Ratio	0.20	1.00	0.68			0.68
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	998	1583	3468			4370
v/s Ratio Prot	c0.19		c0.67			0.36
v/s Ratio Perm		0.33				
v/c Ratio	0.95	0.33	0.98			0.52
Uniform Delay, d1	39.5	0.0	15.2			7.8
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	17.4	0.6	11.3			0.4
Delay (s)	56.9	0.6	26.5			8.3
Level of Service	E	A	C			A
Approach Delay (s)	37.0		26.5			8.3
Approach LOS	D		C			A

Intersection Summary			
HCM Average Control Delay	22.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



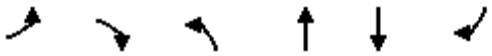
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1630	0	930	3150	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.97	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3375	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3375	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1698	0	1033	3214	265
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1549	1409	0	1033	3214	265
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	43.0	43.0		45.3	45.3	100.0
Effective Green, g (s)	43.0	43.0		45.3	45.3	100.0
Actuated g/C Ratio	0.43	0.43		0.45	0.45	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1451	1171		2304	2903	1583
v/s Ratio Prot	0.46			0.20	c0.50	
v/s Ratio Perm		c0.52				0.17
v/c Ratio	1.07	1.20		0.45	1.11	0.17
Uniform Delay, d1	28.5	28.5		18.8	27.4	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	44.0	99.8		0.6	53.9	0.2
Delay (s)	72.5	128.3		19.4	81.3	0.2
Level of Service	E	F		B	F	A
Approach Delay (s)	99.1			19.4	75.1	
Approach LOS	F			B	E	

Intersection Summary			
HCM Average Control Delay	76.9	HCM Level of Service	E
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	101.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	730	400	3330	0	0	2050
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.77	0.77	0.98	0.98	0.90	0.90
Adj. Flow (vph)	948	519	3398	0	0	2278
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	948	519	3398	0	0	2278
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	20.0	100.0	68.2			68.2
Effective Green, g (s)	20.0	100.0	68.2			68.2
Actuated g/C Ratio	0.20	1.00	0.68			0.68
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	998	1583	3468			4370
v/s Ratio Prot	c0.19		c0.67			0.36
v/s Ratio Perm		0.33				
v/c Ratio	0.95	0.33	0.98			0.52
Uniform Delay, d1	39.5	0.0	15.2			7.8
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	17.4	0.6	11.3			0.4
Delay (s)	56.9	0.6	26.5			8.3
Level of Service	E	A	C			A
Approach Delay (s)	37.0		26.5			8.3
Approach LOS	D		C			A

Intersection Summary			
HCM Average Control Delay	22.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

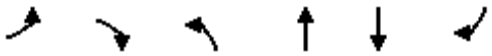


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1630	0	940	3160	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.97	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3375	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3375	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1698	0	1044	3224	265
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1549	1409	0	1044	3224	265
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	43.0	43.0		45.3	45.3	100.0
Effective Green, g (s)	43.0	43.0		45.3	45.3	100.0
Actuated g/C Ratio	0.43	0.43		0.45	0.45	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1451	1171		2304	2903	1583
v/s Ratio Prot	0.46			0.21	c0.50	
v/s Ratio Perm		c0.52				0.17
v/c Ratio	1.07	1.20		0.45	1.11	0.17
Uniform Delay, d1	28.5	28.5		18.8	27.4	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	44.0	99.8		0.6	55.4	0.2
Delay (s)	72.5	128.3		19.5	82.7	0.2
Level of Service	E	F		B	F	A
Approach Delay (s)	99.1			19.5	76.4	
Approach LOS	F			B	E	

Intersection Summary			
HCM Average Control Delay	77.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	101.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

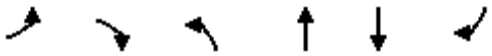
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	730	400	3340	0	0	2050
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.6	4.0	6.2			6.2
Lane Util. Factor	0.94	1.00	0.91			0.86
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	4990	1583	5085			6408
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	4990	1583	5085			6408
Peak-hour factor, PHF	0.77	0.77	0.98	0.98	0.90	0.90
Adj. Flow (vph)	948	519	3408	0	0	2278
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	948	519	3408	0	0	2278
Turn Type		Free				
Protected Phases	8		2			2
Permitted Phases		Free				
Actuated Green, G (s)	20.0	100.0	68.2			68.2
Effective Green, g (s)	20.0	100.0	68.2			68.2
Actuated g/C Ratio	0.20	1.00	0.68			0.68
Clearance Time (s)	5.6		6.2			6.2
Vehicle Extension (s)	3.0		5.0			5.0
Lane Grp Cap (vph)	998	1583	3468			4370
v/s Ratio Prot	c0.19		c0.67			0.36
v/s Ratio Perm		0.33				
v/c Ratio	0.95	0.33	0.98			0.52
Uniform Delay, d1	39.5	0.0	15.3			7.8
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	17.4	0.6	11.7			0.4
Delay (s)	56.9	0.6	27.1			8.3
Level of Service	E	A	C			A
Approach Delay (s)	37.0		27.1			8.3
Approach LOS	D		C			A

Intersection Summary			
HCM Average Control Delay	23.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	88.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1210	1630	0	950	3160	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.97	0.85		1.00	1.00	0.85
Flt Protected	0.96	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3375	2723		5085	6408	1583
Flt Permitted	0.96	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3375	2723		5085	6408	1583
Peak-hour factor, PHF	0.96	0.96	0.90	0.90	0.98	0.98
Adj. Flow (vph)	1260	1698	0	1056	3224	265
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1549	1409	0	1056	3224	265
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	43.0	43.0		45.3	45.3	100.0
Effective Green, g (s)	43.0	43.0		45.3	45.3	100.0
Actuated g/C Ratio	0.43	0.43		0.45	0.45	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1451	1171		2304	2903	1583
v/s Ratio Prot	0.46			0.21	c0.50	
v/s Ratio Perm		c0.52				0.17
v/c Ratio	1.07	1.20		0.46	1.11	0.17
Uniform Delay, d1	28.5	28.5		18.9	27.4	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	44.0	99.8		0.7	55.4	0.2
Delay (s)	72.5	128.3		19.5	82.7	0.2
Level of Service	E	F		B	F	A
Approach Delay (s)	99.1			19.5	76.4	
Approach LOS	F			B	E	

Intersection Summary			
HCM Average Control Delay	77.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	101.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	1160	680	0	2030	2070	700
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		6.7	6.7	4.0
Lane Util. Factor	0.97	0.86		0.91	0.86	1.00
Frt	0.99	0.85		1.00	1.00	0.85
Flt Protected	0.95	1.00		1.00	1.00	1.00
Satd. Flow (prot)	3422	2723		5085	6408	1583
Flt Permitted	0.95	1.00		1.00	1.00	1.00
Satd. Flow (perm)	3422	2723		5085	6408	1583
Peak-hour factor, PHF	0.93	0.93	0.98	0.98	0.96	0.96
Adj. Flow (vph)	1247	731	0	2071	2156	729
RTOR Reduction (vph)	1	2	0	0	0	0
Lane Group Flow (vph)	1319	656	0	2071	2156	729
Turn Type		Perm				Free
Protected Phases	4			2	6	
Permitted Phases		4				Free
Actuated Green, G (s)	41.3	41.3		47.0	47.0	100.0
Effective Green, g (s)	41.3	41.3		47.0	47.0	100.0
Actuated g/C Ratio	0.41	0.41		0.47	0.47	1.00
Clearance Time (s)	5.0	5.0		6.7	6.7	
Vehicle Extension (s)	2.5	2.5		3.2	3.2	
Lane Grp Cap (vph)	1413	1125		2390	3012	1583
v/s Ratio Prot	c0.39			c0.41	0.34	
v/s Ratio Perm		0.24				0.46
v/c Ratio	0.93	0.58		0.87	0.72	0.46
Uniform Delay, d1	28.0	22.7		23.7	21.2	0.0
Progression Factor	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	11.5	0.6		4.5	1.5	1.0
Delay (s)	39.5	23.3		28.2	22.7	1.0
Level of Service	D	C		C	C	A
Approach Delay (s)	34.1			28.2	17.2	
Approach LOS	C			C	B	

Intersection Summary			
HCM Average Control Delay	25.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX I: NO PROJECT FREEWAY RESULTS

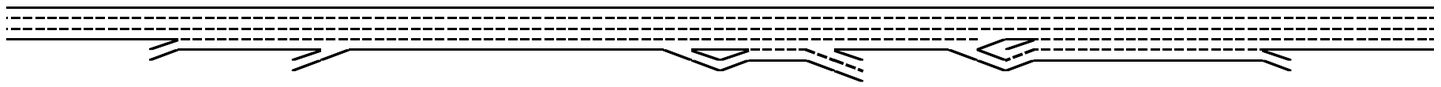
Project: John Wayne Airport Expansion **Scenario:** 2016 Baseline
Freeway Corridor: 73N **Peak Hour:** AM

Location	1	2	3	4	5	6	7	8	9	10

Key
<> Express Lane (HOV)
No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*6,280*	6,280	7,950	8,660	8,660	7,680	6,380	5,650		5,310
On Ramp Volume		*1,670*	*710*			*680*		*630*		
Off Ramp Volume					*980*	*1,980*	*730*	*970*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	6,280	7,950	8,660	8,660	8,660	8,360	6,380	6,280		5,310
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	6,688	8,467	9,223	9,223	9,223	8,903	6,795	6,688		5,655
GP Flow (pcphpl)	2,229	2,117	2,306	2,306	2,306	1,781	1,699	1,338		1,414
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*62.3*	*62.3*	*62.3*	*66.1*	*66.1*	*66.1*	*66.1*	*65.5*		*65.5*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.95	0.90	0.98	0.98	0.98	0.76	0.72	0.57		0.60
Speed (mph)	55.2	57.7	53.4	53.4	53.4	62.9	63.7	65.0		65.0
Density (pcphpl)	40.4	36.7	43.2	43.2	43.2	28.3	26.7	20.6		21.8
LOS	E	E	E	E	E	D	D	C		C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		6,691	8,468			8,180		6,017		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.95	0.90			0.87		0.85		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					8,181	6,795	6,017	5,657		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.87	0.72	0.85	0.80		

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,670	710			680		630		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,775	755			723		671		
On Flow (pcphpl)		1,775	755			723		335		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.89	0.38			0.36		0.15		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					980	1,980	730	970		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					1,042	2,109	777	1,031		
Off Flow (pcphpl)					1,042	1,054	777	1,031		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.52	0.47	0.35	0.46		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			8,468							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.123							
v_{12} (pcph)			1,045							
v_3 (pcph)										
v_{34} (pcph)			7,423							
v_{12a} (pcph)			3,387							
v_{R12a} (pcph)			4,142							
Merge Speed Index			0.54							
Merge Area Speed			52.6							
Outer Lanes Volume			2,540							
Outer Lanes Speed			57.0							
Segment Speed			55.0							
Merge v/c ratio			0.90							
Merge Density			34.9							
Merge LOS			D							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					9,223		6,795			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.482		0.554			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					4,609		3,401			
v_3 (pcph)										
v_{34} (pcph)					4,614		3,394			
v_{12a} (pcph)					4,609		3,401			
Diverge Speed Index					0.52		0.24			
Diverge Area Speed					53.0		59.5			
Outer Lanes Volume					2,307		1,697			
Outer Lanes Speed					66.2		68.6			
Segment Speed					58.9		63.7			
Diverge v/c ratio					1.05		0.77			
Diverge Density					42.1		31.7			
Diverge LOS					F		D			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,680 680 6,380 1,980 8,360		5,650 630 5,310 970 6,280		
On to Off Volume (vph)						*161*		*97*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						171		103		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						519		533		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						552		567		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,819		873		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,937		929		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						5,861		4,777		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,242		5,088		

Location	1	2	3	4	5	6	7	8	9	10

Key

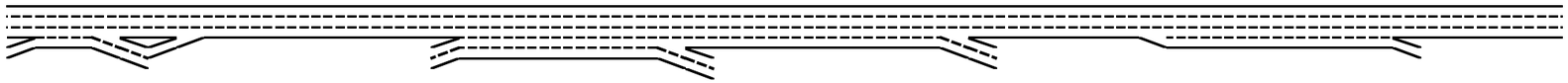
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						2,489		1,497		
Non-Weave Flow						6,413		5,191		
Segment Flow						8,902		6,688		
Max Weave Length						5,366		3,215		
Length Check						OK		OK		
Ideal Weave Capacity						2,068		2,219		
f_{HV}						0.989		0.988		
f_P						0.999		0.999		
Capacity Condition 1						8,171		6,573		
Capacity Condition 2						8,480		15,443		
Weave v/c ratio						1.08		1.00		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						552		1,859		
Weave LC Rate						1,069		2,367		
Non-Weave LC Rate 1						1,459		1,305		
Non-Weave LC Rate 2						3,119		2,847		
Non-Weave LC Rate 3						-948		-1,164		
Segment LC Rate						2,528		3,672		
Weave Intensity Factor						0.313		0.458		
Weave Speed						53.1		49.3		
Non-Weave Speed						50.3		40.9		
Segment Speed						51.1		42.5		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.95	0.90	0.90	0.98	1.05	1.08	0.77	1.00		0.60
Segment Density	40.4	36.7	34.9	43.2	-	-	31.7	-		21.8
Segment LOS	E	E	D	E	F	F	D	F		C
Over Capacity					Diverge	Weave		Weave		

Project: John Wayne Airport Expansion **Scenario:** 2016 Baseline
Freeway Corridor: 73S **Peak Hour:** AM

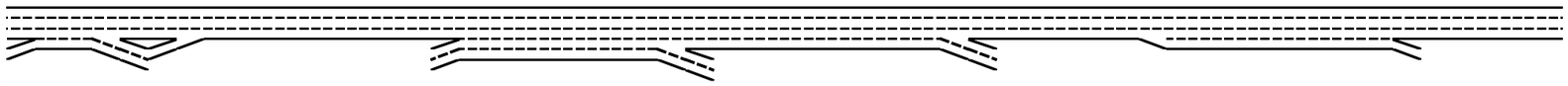
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,800	4,660	5,390	5,390		5,490	5,490	3,740	3,740		2,770
On Ramp Volume	*790*	*730*		*2,410*							
Off Ramp Volume	*930*			*2,310*			*1,750*		*970*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	5,590	5,390	5,390	7,800		5,490	5,490	3,740	3,740		2,770
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,953	5,740	5,740	8,307		5,847	5,847	3,983	3,983		2,950
GP Flow (pcphpl)	1,488	1,913	1,913	1,661		1,462	1,462	1,328	797		983
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*62.8*	*62.8*	*52.5*	*52.5*		*63.4*	*63.4*	*63.4*	*63.4*		*63.4*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.63	0.81	0.81	0.71		0.62	0.62	0.56	0.34		0.42
Speed (mph)	64.9	61.3	61.3	64.0		64.9	64.9	65.0	65.0		65.0
Density (pcphpl)	22.9	31.2	31.2	25.9		22.5	22.5	20.4	12.3		15.1
LOS	C	D	D	C		C	C	C	B		B
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	5,113	4,963		5,740					3,983		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.73	0.70		0.81					0.56		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	4,963			5,851			3,986		2,952		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.70			0.83			0.57		0.31		

Location	2	3	4	5	6	7	8	9	10	11	12



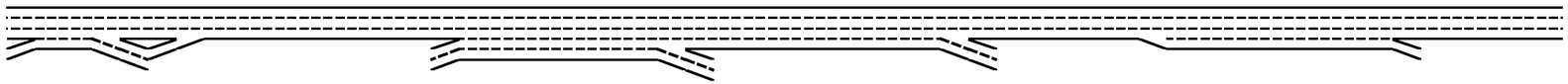
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	790	730		2,410							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	840	777		2,567							
On Flow (pcphpl)	840	777		1,283							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.42	0.35		0.57							

Location	2	3	4	5	6	7	8	9	10	11	12



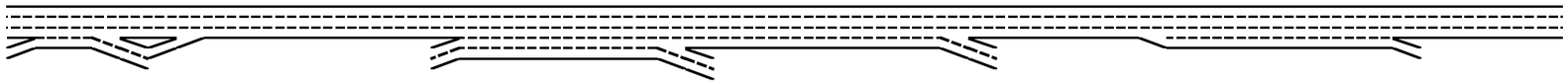
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	930			2,310			1,750		970		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	990			2,456			1,861		1,031		
Off Flow (pcphpl)	495			1,228			930		1,031		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.22			0.61			0.47		0.52		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		4,963									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,952									
v_3 (pcph)		2,011									
v_{34} (pcph)											
v_{12a} (pcph)		2,952									
v_{R12a} (pcph)		3,729									
Merge Speed Index		0.42									
Merge Area Speed		55.4									
Outer Lanes Volume		2,011									
Outer Lanes Speed		59.6									
Segment Speed		56.8									
Merge v/c ratio		0.81									
Merge Density		30.3									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



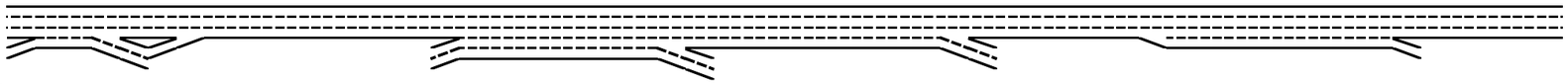
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							5,847				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.528				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,897				
v_3 (pcph)											
v_{34} (pcph)							2,950				
v_{12a} (pcph)							2,897				
Diverge Speed Index							0.60				
Diverge Area Speed							51.3				
Outer Lanes Volume							1,475				
Outer Lanes Speed							69.5				
Segment Speed							59.1				
Diverge v/c ratio							0.66				
Diverge Density							27.9				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,800 790 4,660 930 5,590			5,390 2,410 5,490 2,310 7,800							
On to Off Volume (vph)	*131*			*714*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	140			759							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	659			1,696							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	700			1,807							

Location	2	3	4	5	6	7	8	9	10	11	12



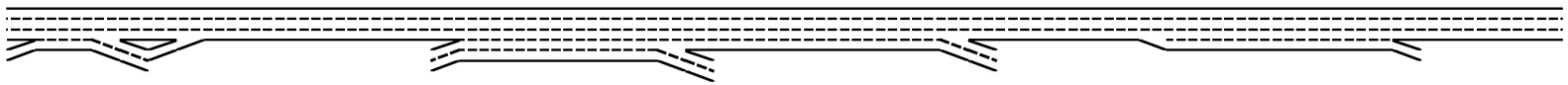
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	799			1,596							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	850			1,697							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	4,001			3,794							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	4,262			4,040							

Location	2	3	4	5	6	7	8	9	10	11	12



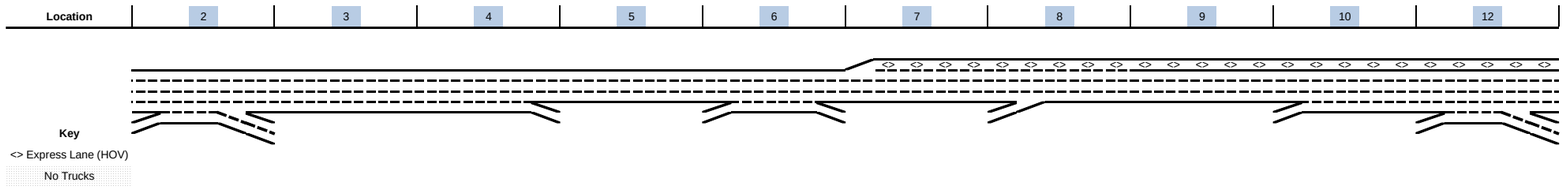
Key

<> Express Lane (HOV)

No Trucks

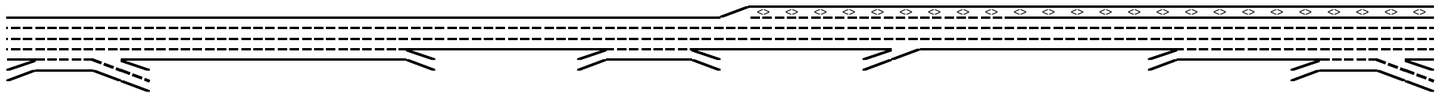
Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,551			3,504							
Non-Weave Flow	4,401			4,799							
Segment Flow	5,952			8,303							
Max Weave Length	5,164			5,363							
Length Check	OK			OK							
Ideal Weave Capacity	2,085			2,028							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,177			6,003							
Capacity Condition 2	9,097			8,181							
Weave v/c ratio	0.95			1.36							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	700			1,697							
Weave LC Rate	1,287			2,073							
Non-Weave LC Rate 1	1,250			1,040							
Non-Weave LC Rate 2	2,670			2,759							
Non-Weave LC Rate 3	-1,045			-1,909							
Segment LC Rate	2,537			3,112							
Weave Intensity Factor	0.310			0.492							
Weave Speed	53.2			48.5							
Non-Weave Speed	50.4			39.5							
Segment Speed	51.1			42.9							
Weave Density	38.8			-							
Weave LOS	E			F							
Summarize Segment Operations											
Segment v/c ratio	0.95	0.81	0.81	1.36		0.62	0.66	0.56	0.34		0.42
Segment Density	38.8	30.3	31.2	-		22.5	27.9	20.4	12.3		15.1
Segment LOS	E	D	D	F		C	C	C	B		B
Over Capacity				Weave							

Project: John Wayne Airport Expansion **Scenario:** 2016 Baseline
Freeway Corridor: 55N **Peak Hour:** AM



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	6,250	6,750	6,750	6,020	6,020	6,550	6,550	7,260	7,260	9,840
On Ramp Volume	*1,850*				*1,980*		*710*		*2,580*	*1,260*
Off Ramp Volume	*1,350*		*730*		*1,450*					*1,760*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	8,100	6,750	6,750	6,020	8,000	6,550	7,260	7,260	9,840	11,100
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,676	7,230	7,230	6,448	8,568	7,015	7,776	7,776	10,467	11,807
GP Flow (pcphpl)	1,735	1,807	1,807	2,149	2,142	2,338	2,592	2,592	2,617	2,361
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*53.0*	*53.0*	*53.0*	*29.2*	*32.9*	*32.9*	*43.6*	*43.6*	*43.6*	*64.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

Location	2	3	4	5	6	7	8	9	10	12



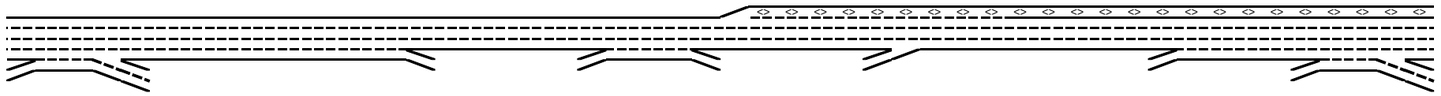
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	1,850				1,980		710		2,580	1,260
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,967				2,121		755		2,744	1,340
On Flow (pcphpl)	1,967				2,121		755		2,744	1,340
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.98				0.94		0.38		1.37	0.60

Location	2	3	4	5	6	7	8	9	10	12



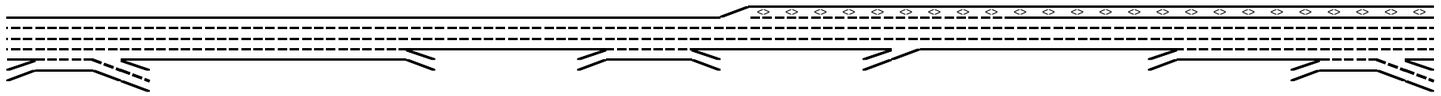
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	1,350		730		1,450					1,260
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	1,446		776		1,553					1,340
Off Flow (pcphpl)	723		776		1,553					670
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.32		0.39		0.69					0.34
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							7,021			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							4,267			
v_3 (pcph)							2,754			
v_{34} (pcph)										
v_{12a} (pcph)							4,321			
v_{R12a} (pcph)							5,076			
Merge Speed Index							-			
Merge Area Speed							-			
Outer Lanes Volume										
Outer Lanes Speed										
Segment Speed										
Merge v/c ratio							1.10			
Merge Density							-			
Merge LOS							F			

Location	2	3	4	5	6	7	8	9	10	12



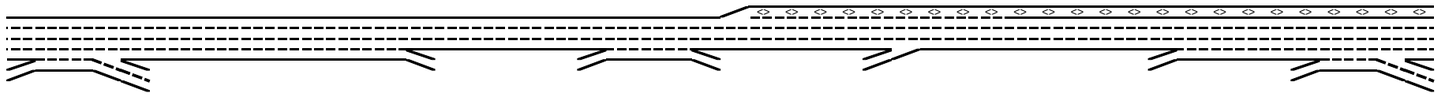
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			7,230							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.544							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			3,590							
v_3 (pcph)										
v_{34} (pcph)			3,640							
v_{12a} (pcph)			3,590							
Diverge Speed Index			0.50							
Diverge Area Speed			53.5							
Outer Lanes Volume			1,820							
Outer Lanes Speed			68.1							
Segment Speed			60.0							
Diverge v/c ratio			0.82							
Diverge Density			21.6							
Diverge LOS			C							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	6,250 1,850 6,750 1,350 8,100				6,020 1,980 6,550 1,450 8,000					9,840 1,260 9,340 1,760 11,100
On to Off Volume (vph)	*308*				*359*					*200*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	328				382					212
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	1,542				1,621					1,060
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	1,639				1,736					1,128

Location	2	3	4	5	6	7	8	9	10	12



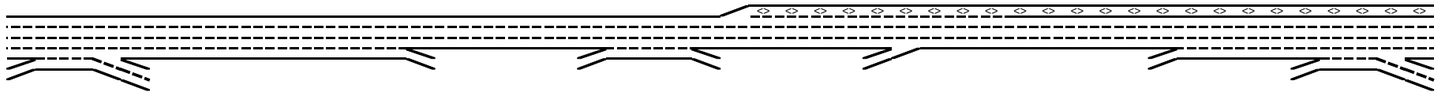
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,042				1,091					1,060
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	1,116				1,169					1,128
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	5,208				4,929					8,780
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	5,578				5,279					9,339

Location	2	3	4	5	6	7	8	9	10	12



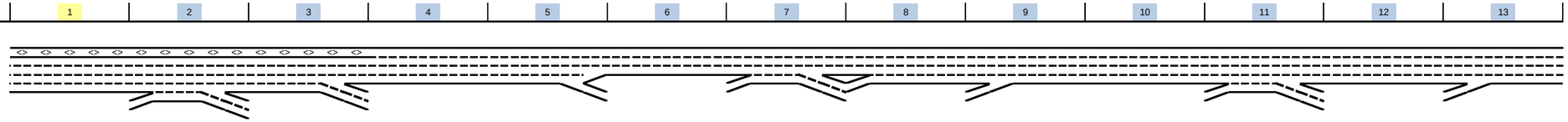
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,755				2,905					2,255
Non-Weave Flow	5,906				5,661					9,551
Segment Flow	8,661				8,566					11,807
Max Weave Length	5,778				6,008					4,445
Length Check	OK				OK					OK
Ideal Weave Capacity	1,968				1,921					2,160
f_{HV}	0.984				0.983					0.990
f_P	0.998				0.997					0.999
Capacity Condition 1	7,735				5,646					8,543
Capacity Condition 2	7,414				6,933					12,421
Weave v/c ratio	1.15				1.49					1.37
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	1,639				2,905					1,128
Weave LC Rate	1,809				2,984					1,758
Non-Weave LC Rate 1	872				805					2,262
Non-Weave LC Rate 2	3,006				2,951					3,819
Non-Weave LC Rate 3	-2,889				-3,238					647
Segment LC Rate	2,681				3,790					4,020
Weave Intensity Factor	0.596				1.332					0.398
Weave Speed	46.3				36.4					50.8
Non-Weave Speed	42.8				30.4					42.7
Segment Speed	43.9				32.2					44.0
Weave Density	-				-					-
Weave LOS	F				F					F
Summarize Segment Operations										
Segment v/c ratio	1.15	0.77	0.82	0.91	1.49	1.00	1.10	1.10	1.11	1.37
Segment Density	-	28.9	21.6	37.7	-	44.5	-	-	-	-
Segment LOS	F	D	C	E	F	E	F	F	F	F
Over Capacity	Weave				Weave		Segment GP Lanes Merge	Segment GP Lanes	Segment GP Lanes In GP Lanes On Ramp Roadway	Segment GP Lanes In GP Lanes Out GP Lanes Weave

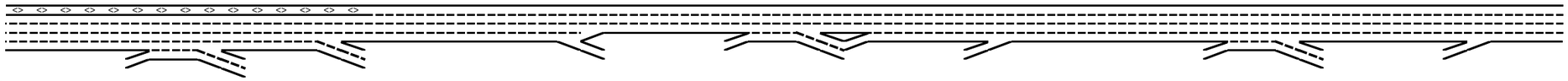
Project: John Wayne Airport Expansion **Scenario:** 2016 Baseline
Freeway Corridor: 55S **Peak Hour:** AM



Key
<> Express Lane (HOV)
No Trucks

Location	1	2	3	4	5	6	7	8	9	10	11	12	13
Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*7,630*	7,630	6,190	5,540	5,540	4,910	4,910	3,750	4,060	4,790	4,790	4,960	4,960
On Ramp Volume		*870*					*1,250*	*310*	*730*		*930*		*290*
Off Ramp Volume		*2,310*	*650*		*630*		*2,410*				*760*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	7,630	8,500	6,190	5,540	5,540	4,910	6,160	4,060	4,790	4,790	5,720	4,960	5,250
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,116	9,041	6,584	5,934	5,934	5,259	6,598	4,348	5,130	5,130	6,126	5,312	5,623
GP Flow (pcphpl)	2,029	1,808	1,646	1,483	1,483	1,753	1,649	1,087	1,283	1,283	1,225	1,328	1,406
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*64.0*	*64.0*	*65.9*	*65.9*	*65.9*	*65.9*	*62.2*	*52.4*	*52.4*	*52.4*	*52.4*	*68.0*	*68.0*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.86	0.77	0.70	0.63	0.63	0.75	0.70	0.46	0.55	0.55	0.52	0.57	0.60
Speed (mph)	59.4	62.6	64.1	64.9	64.9	63.2	64.1	65.0	65.0	65.0	65.0	65.0	65.0
Density (pcphpl)	34.2	28.9	25.7	22.9	22.9	27.7	25.7	16.7	19.7	19.7	18.9	20.4	21.6
LOS	D	D	C	C	C	D	C	B	C	C	C	C	C
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,116					5,259	4,019	4,348		5,130		5,315
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.86					0.75	0.57	0.46		0.55		0.57
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		6,584	5,893		5,264		4,016				5,318		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.70	0.84		0.75		0.57				0.57		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



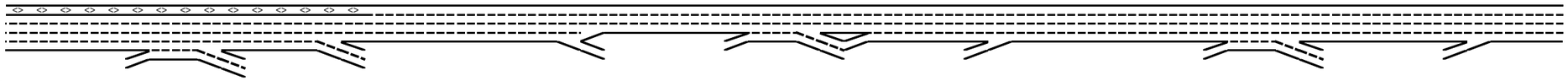
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		870					1,250	310	730		930		290
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		925					1,339	330	782		996		308
On Flow (pcphpl)		925					1,339	330	782		996		308
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.46					0.60	0.16	0.36		0.44		0.15

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



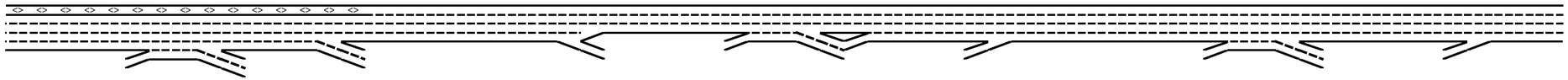
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		2,310	650		630		2,410				760		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		2,457	691		670		2,581				808		
Off Flow (pcphpl)		1,229	346		670		1,291				404		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.55	0.15		0.33		0.57				0.20		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									4,348				5,315
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.120				0.179
v_{12} (pcph)									522				953
v_3 (pcph)													
v_{34} (pcph)									3,826				4,362
v_{12a} (pcph)									1,739				2,126
v_{R12a} (pcph)									2,521				2,434
Merge Speed Index									0.30				0.33
Merge Area Speed									58.1				57.5
Outer Lanes Volume									1,305				1,594
Outer Lanes Speed									62.1				61.1
Segment Speed									60.1				59.5
Merge v/c ratio									0.55				0.53
Merge Density									20.7				20.9
Merge LOS									C				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



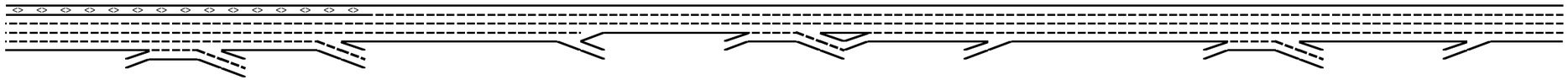
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			6,584		5,934								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.564		0.581								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,224		2,965								
v_3 (pcph)													
v_{34} (pcph)			4,361		2,969								
v_{12a} (pcph)			2,634		2,965								
Diverge Speed Index			0.23		0.49								
Diverge Area Speed			59.7		53.8								
Outer Lanes Volume			1,975		1,484								
Outer Lanes Speed			67.5		69.4								
Segment Speed			64.2		60.6								
Diverge v/c ratio			0.60		0.67								
Diverge Density			28.8		28.1								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		7,630 870 6,190 2,310 8,500					4,910 1,250 3,750 2,410 6,160				4,790 930 4,960 760 5,720		
On to Off Volume (vph)		*236*					*489*				*124*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		251					520				131		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		634					761				806		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		674					815				864		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



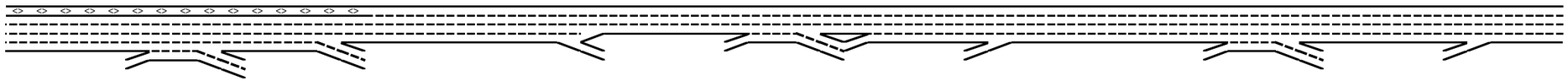
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		2,074					1,921				636		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		2,206					2,057				677		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		5,556					2,989				4,154		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		5,910					3,201				4,449		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



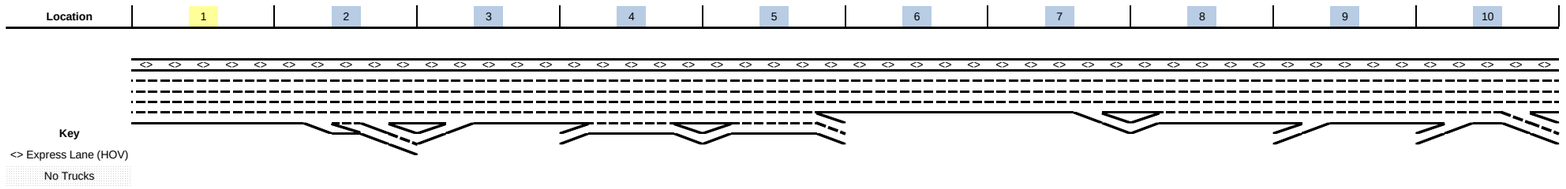
Key

<> Express Lane (HOV)

No Trucks

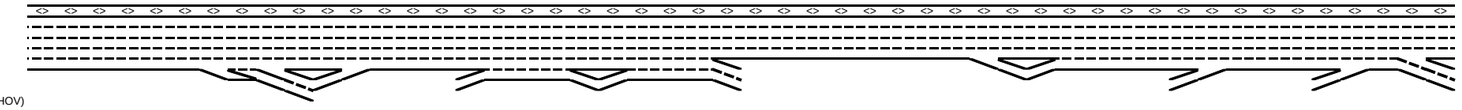
Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,879					2,872				1,540		
Non-Weave Flow		6,162					3,721				4,580		
Segment Flow		9,041					6,594				6,120		
Max Weave Length		5,783					7,084				5,071		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,056					1,981				2,042		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.998				0.998		
Capacity Condition 1		8,131					5,833				8,014		
Capacity Condition 2		7,453					5,406				9,358		
Weave v/c ratio		1.20					1.20				0.75		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		674					815				864		
Weave LC Rate		1,292					1,622				1,133		
Non-Weave LC Rate 1		1,548					1,416				737		
Non-Weave LC Rate 2		3,063					2,519				2,710		
Non-Weave LC Rate 3		-557					-312				-2,728		
Segment LC Rate		2,840					3,038				1,870		
Weave Intensity Factor		0.306					0.285				0.359		
Weave Speed		53.3					53.9				51.8		
Non-Weave Speed		49.3					48.6				51.4		
Segment Speed		50.5					50.8				51.5		
Weave Density		-					-				29.7		
Weave LOS		F					F				D		
Summarize Segment Operations													
Segment v/c ratio	0.86	1.20	0.60	0.63	0.67	0.75	1.20	0.46	0.55	0.55	0.75	0.57	0.53
Segment Density	34.2	-	28.8	22.9	28.1	27.7	-	16.7	20.7	19.7	29.7	20.4	20.9
Segment LOS	D	F	D	C	D	D	F	B	C	C	D	C	C
Over Capacity		Weave					Weave						

Project: John Wayne Airport Expansion **Scenario:** 2016 Baseline
Freeway Corridor: 405N **Peak Hour:** AM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*10,610*	10,610	8,760	9,200	8,600	6,540	6,540	5,920	7,360	7,540
On Ramp Volume			*440*	*1,190*	*450*			*1,440*	*180*	*290*
Off Ramp Volume		*1,850*		*1,790*	*2,510*		*620*			*2,660*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	10,610	10,610	9,200	10,390	9,050	6,540	6,540	7,360	7,540	7,830
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	11,481	11,481	9,926	11,210	9,693	7,005	7,005	7,883	8,076	8,386
GP Flow (pcphpl)	2,296	2,296	1,985	1,868	1,616	1,751	1,751	1,577	1,615	1,398
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*47.1*	*47.1*	*65.4*	*61.3*	*66.2*	*66.2*	*66.2*	*66.2*	*64.9*	*66.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.98	0.98	0.84	0.80	0.69	0.75	0.75	0.67	0.69	0.59
Speed (mph)	53.6	53.6	60.1	61.9	64.3	63.3	63.3	64.6	64.3	65.0
Density (pcphpl)	42.8	42.8	33.0	30.2	25.1	27.7	27.7	24.4	25.1	21.5
LOS	E	E	D	D	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			9,459	9,945	9,215			6,341	7,884	8,078
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.80	0.85	0.78			0.67	0.67	0.69
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		9,514		9,307	7,005		6,346			5,558
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.81		0.79	0.75		0.68			0.59

Location	1	2	3	4	5	6	7	8	9	10



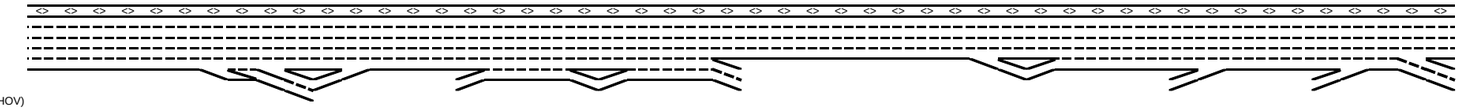
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			440	1,190	450			1,440	180	290
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			468	1,265	478			1,542	191	308
On Flow (pcphpl)			468	1,265	478			1,542	191	308
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.23	0.63	0.24			0.69	0.10	0.15

Location	1	2	3	4	5	6	7	8	9	10

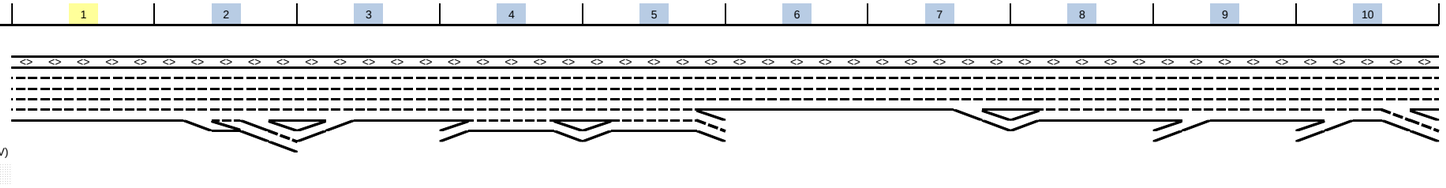


Key

<> Express Lane (HOV)

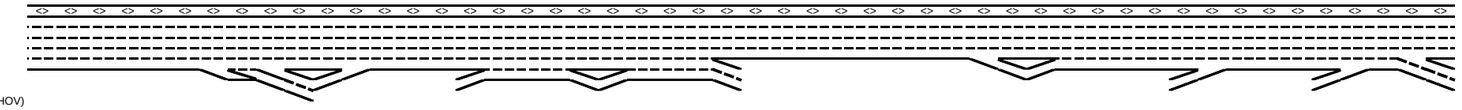
No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,850		1,790	2,510		620			2,660
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,967		1,903	2,688		659			2,828
Off Flow (pcphpl)		983		1,903	1,344		659			1,414
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.49		0.95	0.60		0.33			0.71
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			6,959						5,637	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.159						0.194	
v_{12} (pcph)			1,109						1,093	
v_3 (pcph)										
v_{34} (pcph)			5,850						4,544	
v_{12a} (pcph)			2,783						2,255	
v_{R12a} (pcph)			3,251						2,446	
Merge Speed Index			0.38						0.33	
Merge Area Speed			56.2						57.3	
Outer Lanes Volume			2,088						1,691	
Outer Lanes Speed			59.3						60.7	
Segment Speed			57.9						59.3	
Merge v/c ratio			0.71						0.53	
Merge Density			27.1						21.5	
Merge LOS			C						C	



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		9,185					7,005			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.440					0.555			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		3,844					3,426			
v_3 (pcph)										
v_{34} (pcph)		5,341					3,579			
v_{12a} (pcph)		3,844					3,426			
Diverge Speed Index		0.61					0.49			
Diverge Area Speed		51.1					53.8			
Outer Lanes Volume		2,671					1,789			
Outer Lanes Speed		64.8					68.2			
Segment Speed		58.3					60.3			
Diverge v/c ratio		0.87					0.78			
Diverge Density		28.8					32.2			
Diverge LOS		D					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				9,200 1,190 8,600 1,790 10,390	8,600 450 6,540 2,510 9,050					7,540 290 5,170 2,660 7,830
On to Off Volume (vph)				*205*	*125*					*99*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				218	133					105
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				985	325					191
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,047	346					204

Location	1	2	3	4	5	6	7	8	9	10



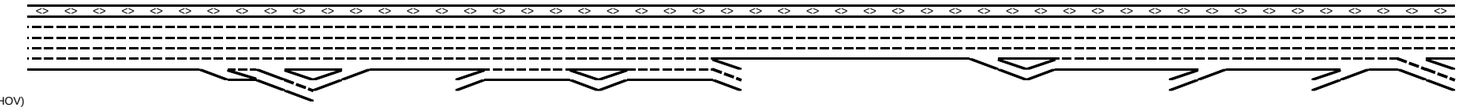
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				1,585	2,385					2,561
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				1,685	2,555					2,723
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				7,615	6,215					4,979
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				8,216	6,656					5,332

Location	1	2	3	4	5	6	7	8	9	10



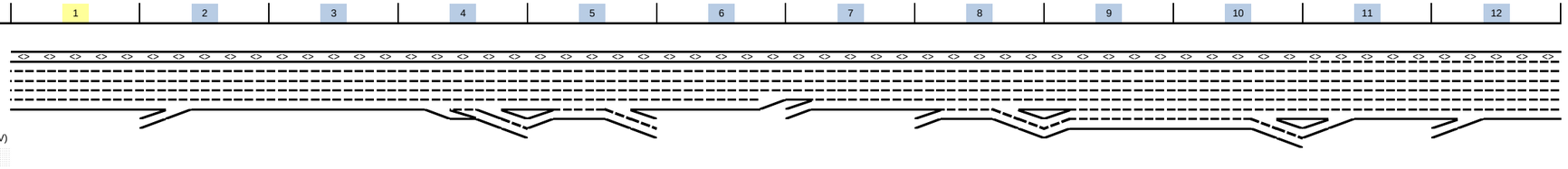
Key

<> Express Lane (HOV)

No Trucks

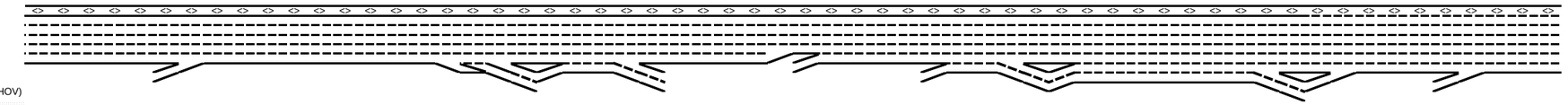
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				2,732	2,900					2,927
Non-Weave Flow				8,434	6,789					5,437
Segment Flow				11,166	9,689					8,364
Max Weave Length				4,998	4,011					6,126
Length Check				OK	OK					OK
Ideal Weave Capacity				2,131	2,210					1,920
f_{HV}				0.979	0.983					0.985
f_P				0.999	1.000					1.000
Capacity Condition 1				10,424	10,858					9,456
Capacity Condition 2				9,598	11,492					6,757
Weave v/c ratio				1.14	0.88					1.22
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				2,732	691					204
Weave LC Rate				3,350	1,327					186
Non-Weave LC Rate 1				1,929	1,614					428
Non-Weave LC Rate 2				3,570	3,203					2,901
Non-Weave LC Rate 3				159	-360					-4,174
Segment LC Rate				5,279	2,942					614
Weave Intensity Factor				0.463	0.287					0.266
Weave Speed				49.2	53.9					54.5
Non-Weave Speed				34.6	50.7					55.5
Segment Speed				37.3	51.6					55.1
Weave Density				-	37.5					-
Weave LOS				F	E					F
Summarize Segment Operations										
Segment v/c ratio	0.98	0.87	0.71	1.14	0.88	0.75	0.78	0.67	0.53	1.22
Segment Density	42.8	28.8	27.1	-	37.5	27.7	32.2	24.4	21.5	-
Segment LOS	E	D	C	F	E	D	D	C	C	F
Over Capacity				Weave						Weave

Project: John Wayne Airport Expansion **Scenario:** 2016 Baseline
Freeway Corridor: 405S **Peak Hour:** AM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*8,870*	8,870	10,190	10,190	9,050	7,580	7,580	9,580	9,320		5,917	6,117
On Ramp Volume		*1,320*			*1,110*		*2,000*	*2,060*	*480*		*240*	*530*
Off Ramp Volume				*1,140*	*2,580*			*2,320*	*2,700*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	8,870	10,190	10,190	10,190	10,160	7,580	9,580	11,640	9,800		6,157	6,647
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	9,500	10,914	10,914	10,914	10,882	8,119	10,261	12,467	10,574		6,662	7,192
GP Flow (pcphpl)	1,900	2,183	2,183	2,183	1,814	2,030	2,052	2,078	1,511		1,332	1,438
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*35.7*	*35.7*	*35.7*	*35.7*	*44.8*	*44.8*	*44.8*	*50.1*	*50.1*		*54.0*	*54.0*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.81	0.93	0.93	0.93	0.77	0.86	0.87	0.88	0.64		0.57	0.61
Speed (mph)	61.5	56.3	56.3	56.3	62.6	59.4	59.0	58.5	64.8		65.0	65.0
Density (pcphpl)	30.9	38.8	38.8	38.8	29.0	34.2	34.8	35.5	23.3		20.5	22.1
LOS	D	E	E	E	D	D	D	E	C		C	C
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		9,511			9,702		8,119	10,261	10,063		6,407	6,629
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.81			0.83		0.86	0.87	0.86		0.55	0.56
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				9,702	8,119	8,119		10,001	7,703			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.83	0.69	0.86		0.85	0.66			

Location	1	2	3	4	5	6	7	8	9	10	11	12



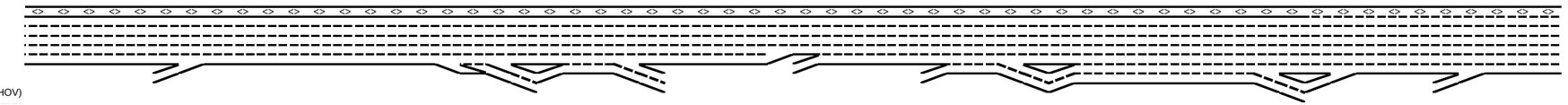
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,320			1,110		2,000	2,060	480		240	530
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,403			1,180		2,142	2,206	510		255	563
On Flow (pcphpl)		1,403			1,180		2,142	2,206	255		255	563
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.70			0.59		0.95	0.98	0.13		0.13	0.28

Location	1	2	3	4	5	6	7	8	9	10	11	12



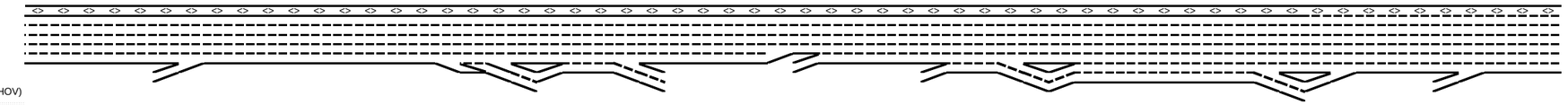
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,140	2,580			2,320	2,700			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,212	2,763			2,467	2,871			
Off Flow (pcphpl)				606	1,382			1,233	1,435			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.30	0.61			0.62	0.72			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		7,011									4,869	4,839
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.042									0.186	0.147
v_{12} (pcph)		297									905	713
v_3 (pcph)												
v_{34} (pcph)		6,714									3,964	4,126
v_{12a} (pcph)		2,804									1,948	1,936
v_{R12a} (pcph)		4,208									2,203	2,499
Merge Speed Index		0.54									0.32	0.29
Merge Area Speed		52.5									57.7	58.4
Outer Lanes Volume		2,103									1,461	1,452
Outer Lanes Speed		59.2									61.5	61.6
Segment Speed		55.6									59.8	60.1
Merge v/c ratio		0.91									0.48	0.54
Merge Density		34.2									19.2	17.3
Merge LOS		D									B	B

Location	1	2	3	4	5	6	7	8	9	10	11	12



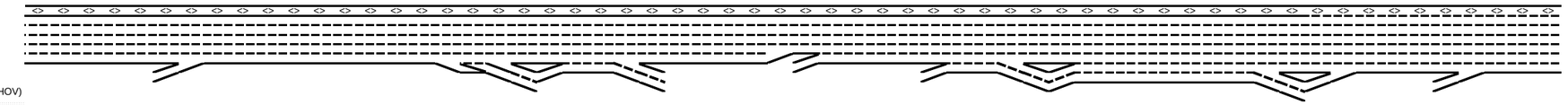
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				8,731								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.486								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				3,167								
v_3 (pcph)												
v_{34} (pcph)				5,564								
v_{12a} (pcph)				3,492								
Diverge Speed Index				0.54								
Diverge Area Speed				52.6								
Outer Lanes Volume				2,619								
Outer Lanes Speed				65.0								
Segment Speed				59.4								
Diverge v/c ratio				0.79								
Diverge Density				27.3								
Diverge LOS				C								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					9,050 1,110 7,580 2,580 10,160			9,580 2,060 9,320 2,320 11,640	9,320 480 7,100 2,700 9,800			
On to Off Volume (vph)					*282*			*411*	*132*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					300			437	141			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					828			1,649	348			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					880			1,767	370			

Location	1	2	3	4	5	6	7	8	9	10	11	12



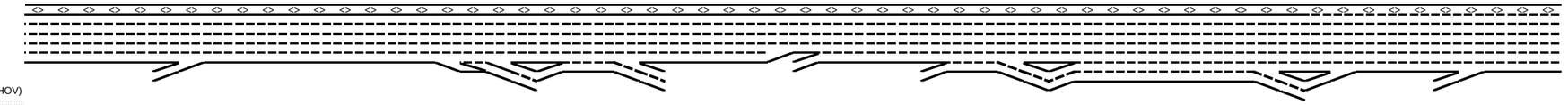
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					2,298			1,909	2,568			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					2,461			2,030	2,730			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					6,752			7,671	6,752			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					7,232			8,216	7,285			

Location	1	2	3	4	5	6	7	8	9	10	11	12



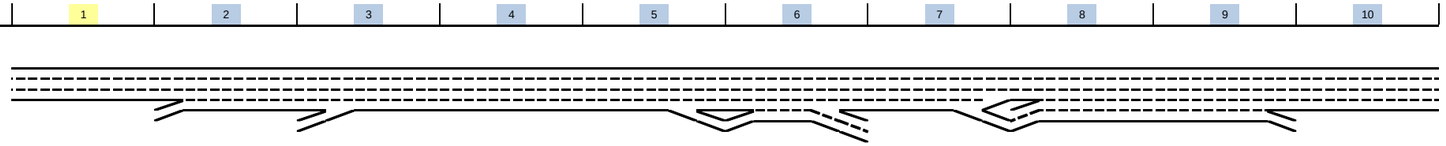
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					3,342			3,797	3,100			
Non-Weave Flow					7,531			8,652	7,426			
Segment Flow					10,873			12,449	10,526			
Max Weave Length					5,663			5,637	3,959			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,037			1,957	2,085			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	1.000			
Capacity Condition 1					10,011			9,607	10,216			
Capacity Condition 2					7,674			7,726	11,644			
Weave v/c ratio					1.39			1.58	1.01			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					880			1,767	2,730			
Weave LC Rate					1,282			1,749	2,712			
Non-Weave LC Rate 1					1,442			1,090	838			
Non-Weave LC Rate 2					3,368			3,618	3,345			
Non-Weave LC Rate 3					-1,239			-3,405	-3,699			
Segment LC Rate					2,724			2,839	3,550			
Weave Intensity Factor					0.348			0.890	1.061			
Weave Speed					52.1			41.5	39.3			
Non-Weave Speed					48.2			40.3	35.2			
Segment Speed					49.3			40.7	36.3			
Weave Density					-			-	-			
Weave LOS					F			F	F			
Summarize Segment Operations												
Segment v/c ratio	0.81	0.91	0.93	0.79	1.39	0.86	0.87	1.58	1.01		0.48	0.54
Segment Density	30.9	34.2	38.8	27.3	-	34.2	34.8	-	-		19.2	17.3
Segment LOS	D	D	E	C	F	D	D	F	F		B	B
Over Capacity					Weave			Weave	Weave			

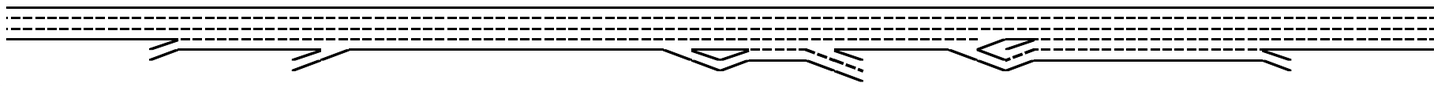
Project: John Wayne Airport Expansion **Scenario:** 2016 Baseline
Freeway Corridor: 73N **Peak Hour:** PM



Key
<> Express Lane (HOV)
No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*4,930*	4,930	6,760	7,650	7,650	7,090	8,060	6,830		7,490
On Ramp Volume		*1,830*	*890*			*2,380*		*1,220*		
Off Ramp Volume					*560*	*1,410*	*1,230*	*560*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	4,930	6,760	7,650	7,650	7,650	9,470	8,060	8,050		7,490
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,250	7,199	8,147	8,147	8,147	10,086	8,584	8,573		7,977
GP Flow (pcphpl)	1,750	1,800	2,037	2,037	2,037	2,017	2,146	1,715		1,994
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*57.9*	*57.9*	*57.9*	*65.1*	*65.1*	*64.5*	*64.5*	*60.4*		*60.4*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.74	0.77	0.87	0.87	0.87	0.86	0.91	0.73		0.85
Speed (mph)	63.3	62.7	59.2	59.2	59.2	59.6	57.1	63.6		60.0
Density (pcphpl)	27.7	28.7	34.4	34.4	34.4	33.8	37.6	27.0		33.2
LOS	D	D	D	D	D	D	E	D		D
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		5,254	7,201			7,555		7,274		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.75	0.77			0.80		1.03		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					7,552	8,584	7,274	7,978		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.80	0.91	1.03	1.13		

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,830	890			2,380		1,220		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,946	946			2,530		1,299		
On Flow (pcphpl)		1,946	946			2,530		650		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.97	0.47			1.27		0.29		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					560	1,410	1,230	560		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					595	1,502	1,310	595		
Off Flow (pcphpl)					595	751	1,310	595		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.30	0.33	0.60	0.26		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			7,201							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.100							
v_{12} (pcph)			717							
v_3 (pcph)										
v_{34} (pcph)			6,484							
v_{12a} (pcph)			2,880							
v_{R12a} (pcph)			3,827							
Merge Speed Index			0.47							
Merge Area Speed			54.1							
Outer Lanes Volume			2,160							
Outer Lanes Speed			59.0							
Segment Speed			56.6							
Merge v/c ratio			0.83							
Merge Density			32.4							
Merge LOS			D							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					8,147		8,584			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.529		0.485			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					3,888		4,481			
v_3 (pcph)										
v_{34} (pcph)					4,259		4,103			
v_{12a} (pcph)					3,888		4,481			
Diverge Speed Index					0.48		-			
Diverge Area Speed					53.9		-			
Outer Lanes Volume					2,130					
Outer Lanes Speed					66.9					
Segment Speed					60.0					
Diverge v/c ratio					0.88		1.02			
Diverge Density					35.9		-			
Diverge LOS					E		F			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,090 2,380 8,060 1,410 9,470		6,830 1,220 7,490 560 8,050		
On to Off Volume (vph)						*354*		*85*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						377		90		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						2,026		1,135		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						2,154		1,209		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,056		475		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,124		506		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						6,034		6,355		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,427		6,768		

Location	1	2	3	4	5	6	7	8	9	10

Key

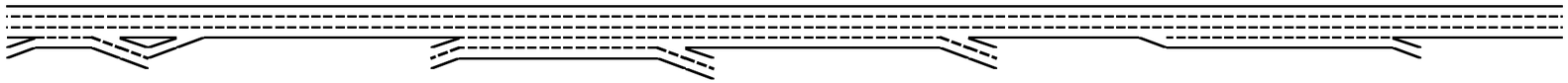
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						3,278		1,715		
Non-Weave Flow						6,803		6,858		
Segment Flow						10,081		8,573		
Max Weave Length						5,855		2,971		
Length Check						OK		OK		
Ideal Weave Capacity						2,030		2,237		
f_{HV}						0.989		0.988		
f_P						0.998		0.998		
Capacity Condition 1						8,013		6,624		
Capacity Condition 2						7,283		17,266		
Weave v/c ratio						1.37		1.28		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						2,154		1,012		
Weave LC Rate						2,671		1,521		
Non-Weave LC Rate 1						1,539		1,648		
Non-Weave LC Rate 2						3,206		3,218		
Non-Weave LC Rate 3						-821		-664		
Segment LC Rate						4,210		3,168		
Weave Intensity Factor						0.468		0.408		
Weave Speed						49.1		50.5		
Non-Weave Speed						37.4		44.0		
Segment Speed						40.5		45.2		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.74	0.77	0.83	0.87	0.88	1.37	1.02	1.28		0.85
Segment Density	27.7	28.7	32.4	34.4	35.9	-	-	-		33.2
Segment LOS	D	D	D	D	E	F	F	F		D
Over Capacity						On Ramp Roadway Weave	Out GP Lanes Diverge	In GP Lanes Out GP Lanes Weave		

Project: John Wayne Airport Expansion **Scenario:** 2016 Baseline
Freeway Corridor: 73S **Peak Hour:** PM

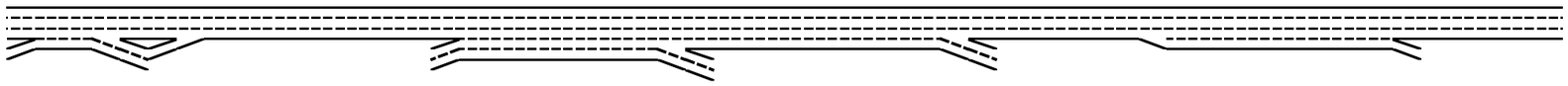
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,230	3,680	4,910	4,910		6,020	6,020	5,090	5,090		4,520
On Ramp Volume	*660*	*1,230*		*2,090*							
Off Ramp Volume	*1,210*			*980*			*930*		*570*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	4,890	4,910	4,910	7,000		6,020	6,020	5,090	5,090		4,520
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,208	5,229	5,229	7,455		6,411	6,411	5,421	5,421		4,814
GP Flow (pcphpl)	1,302	1,743	1,743	1,491		1,603	1,603	1,807	1,084		1,605
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*63.8*	*63.8*	*63.9*	*63.9*		*72.7*	*72.7*	*72.7*	*72.7*		*72.7*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.55	0.74	0.74	0.63		0.68	0.68	0.77	0.46		0.68
Speed (mph)	65.0	63.3	63.3	64.9		64.4	64.4	62.7	65.0		64.4
Density (pcphpl)	20.0	27.5	27.5	23.0		24.9	24.9	28.8	16.7		24.9
LOS	C	D	D	C		C	C	D	B		C
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	4,506	3,919		5,229					5,421		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.64	0.56		0.74					0.77		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	3,919			6,413			5,423		4,815		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.56			0.91			0.77		0.51		

Location	2	3	4	5	6	7	8	9	10	11	12



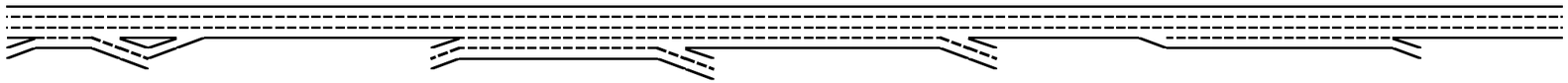
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	660	1,230		2,090							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	702	1,310		2,226							
On Flow (pcphpl)	702	1,310		1,113							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.35	0.60		0.49							

Location	2	3	4	5	6	7	8	9	10	11	12



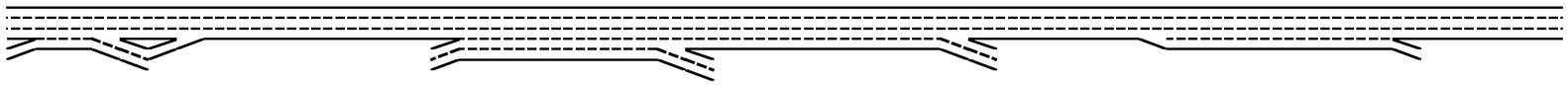
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	1,210			980			930		570		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	1,289			1,042			989		606		
Off Flow (pcphpl)	644			521			494		606		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.29			0.26			0.25		0.30		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		3,919									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,331									
v_3 (pcph)		1,588									
v_{34} (pcph)											
v_{12a} (pcph)		2,331									
v_{R12a} (pcph)		3,641									
Merge Speed Index		0.40									
Merge Area Speed		55.8									
Outer Lanes Volume		1,588									
Outer Lanes Speed		61.1									
Segment Speed		57.3									
Merge v/c ratio		0.79									
Merge Density		29.4									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



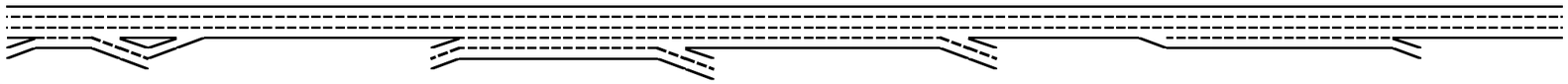
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							6,411				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.554				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,399				
v_3 (pcph)											
v_{34} (pcph)							4,013				
v_{12a} (pcph)							2,565				
Diverge Speed Index							0.52				
Diverge Area Speed							53.1				
Outer Lanes Volume							1,923				
Outer Lanes Speed							67.7				
Segment Speed							61.0				
Diverge v/c ratio							0.58				
Diverge Density							25.0				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,230 660 3,680 1,210 4,890			4,910 2,090 6,020 980 7,000							
On to Off Volume (vph)	*163*			*293*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	174			311							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	497			1,797							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	528			1,914							

Location	2	3	4	5	6	7	8	9	10	11	12



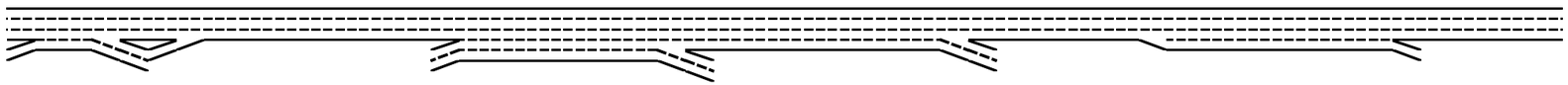
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	1,047			687							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	1,115			731							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	3,183			4,223							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	3,390			4,497							

Location	2	3	4	5	6	7	8	9	10	11	12



Key

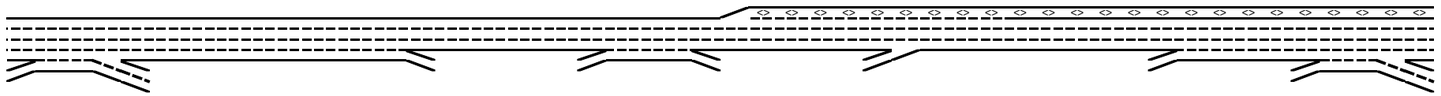
<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,643			2,645							
Non-Weave Flow	3,564			4,808							
Segment Flow	5,207			7,453							
Max Weave Length	5,751			4,614							
Length Check	OK			OK							
Ideal Weave Capacity	2,040			2,086							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,045			6,168							
Capacity Condition 2	7,512			9,721							
Weave v/c ratio	0.85			1.19							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	528			731							
Weave LC Rate	1,115			1,107							
Non-Weave LC Rate 1	1,078			1,041							
Non-Weave LC Rate 2	2,484			2,761							
Non-Weave LC Rate 3	-1,297			-1,906							
Segment LC Rate	2,192			2,148							
Weave Intensity Factor	0.276			0.367							
Weave Speed	54.2			51.6							
Non-Weave Speed	52.9			47.8							
Segment Speed	53.3			49.1							
Weave Density	32.6			-							
Weave LOS	D			F							
Summarize Segment Operations											
Segment v/c ratio	0.85	0.79	0.74	1.19		0.68	0.58	0.77	0.46		0.68
Segment Density	32.6	29.4	27.5	-		24.9	25.0	28.8	16.7		24.9
Segment LOS	D	D	D	F		C	C	D	B		C
Over Capacity				Weave							

Project: John Wayne Airport Expansion **Scenario:** 2016 Baseline
Freeway Corridor: 55N **Peak Hour:** PM

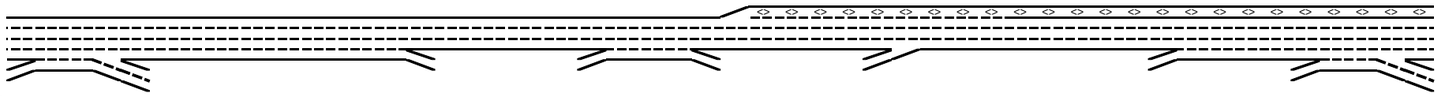
Location	2	3	4	5	6	7	8	9	10	12



Key
<> Express Lane (HOV)
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Define Freeway Segment										
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	4,080	2,610	2,610	2,180	2,180	2,470	2,470	3,040	3,040	3,950
On Ramp Volume	*970*				*1,410*		*570*		*910*	*1,100*
Off Ramp Volume	*2,440*		*430*		*1,120*					*1,050*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	5,050	2,610	2,610	2,180	3,590	2,470	3,040	3,040	3,950	5,050
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	5,409	2,795	2,795	2,335	3,845	2,646	3,256	3,256	4,202	5,372
GP Flow (pcphpl)	1,082	699	699	778	961	882	1,085	1,085	1,050	1,074
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*63.2*	*63.2*	*63.2*	*62.3*	*60.5*	*60.5*	*13.5*	*13.5*	*13.5*	*14.0*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

Location	2	3	4	5	6	7	8	9	10	12

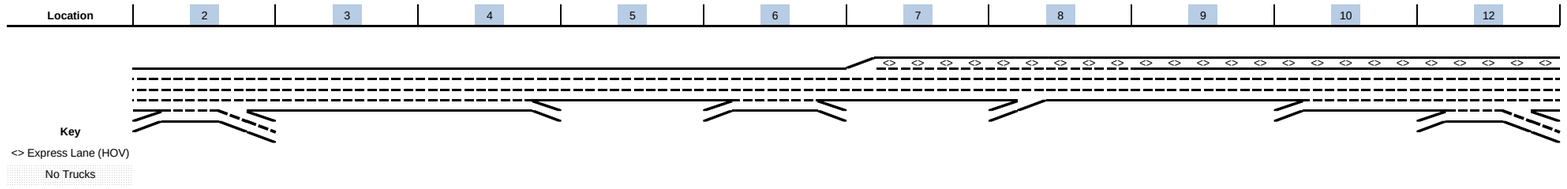


Key

<> Express Lane (HOV)

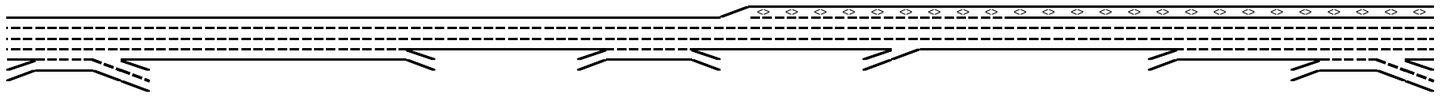
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	970				1,410		570		910	1,100
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,031				1,510		606		968	1,170
On Flow (pcphpl)	1,031				1,510		606		968	1,170
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.52				0.67		0.30		0.48	0.52



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	2,440		430		1,120					1,100
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	2,613		457		1,200					1,170
Off Flow (pcphpl)	1,307		457		1,200					585
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.58		0.23		0.53					0.29
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							2,650			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							1,611			
v_3 (pcph)							1,039			
v_{34} (pcph)										
v_{12a} (pcph)							1,611			
v_{R12a} (pcph)							2,217			
Merge Speed Index							0.28			
Merge Area Speed							58.5			
Outer Lanes Volume							1,039			
Outer Lanes Speed							63.1			
Segment Speed							59.9			
Merge v/c ratio							0.48			
Merge Density							15.7			
Merge LOS							B			

Location	2	3	4	5	6	7	8	9	10	12



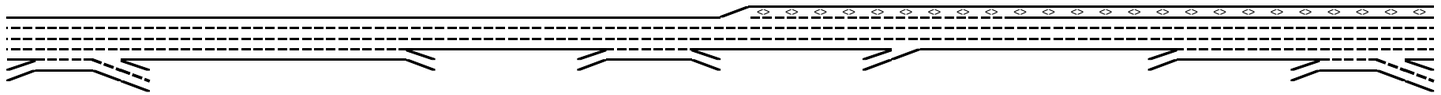
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			2,795							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.669							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			1,477							
v_3 (pcph)										
v_{34} (pcph)			1,319							
v_{12a} (pcph)			1,477							
Diverge Speed Index			0.47							
Diverge Area Speed			54.2							
Outer Lanes Volume			659							
Outer Lanes Speed			71.3							
Segment Speed			61.1							
Diverge v/c ratio			0.34							
Diverge Density			3.5							
Diverge LOS			A							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	4,080 970 2,610 2,440 5,050				2,180 1,410 2,470 1,120 3,590					3,950 1,100 4,000 1,050 5,050
On to Off Volume (vph)	*469*				*440*					*229*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	498				468					243
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	501				970					871
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	533				1,039					927

Location	2	3	4	5	6	7	8	9	10	12



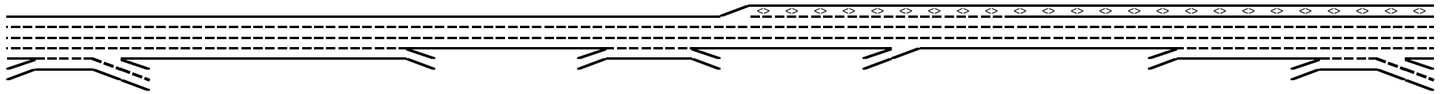
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,971				680					871
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	2,111				728					927
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	2,109				1,500					3,079
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	2,259				1,606					3,275

Location	2	3	4	5	6	7	8	9	10	12



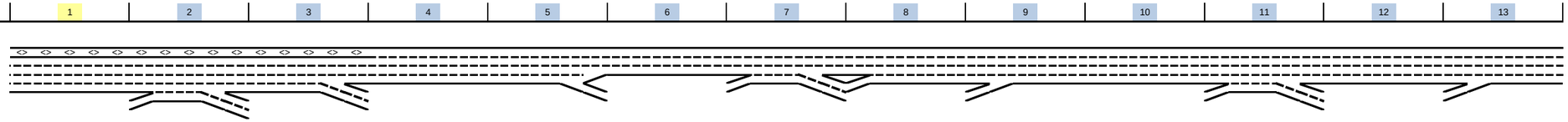
Key

<> Express Lane (HOV)

No Trucks

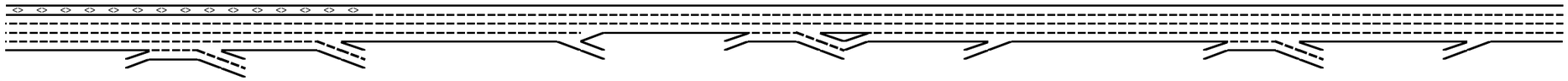
Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,644				1,767					1,854
Non-Weave Flow	2,757				2,074					3,518
Segment Flow	5,401				3,842					5,371
Max Weave Length	7,705				7,364					6,072
Length Check	OK				OK					OK
Ideal Weave Capacity	1,821				1,817					2,036
f_{HV}	0.984				0.984					0.990
f_P	0.999				0.995					0.998
Capacity Condition 1	7,160				5,338					8,044
Capacity Condition 2	4,820				5,107					6,871
Weave v/c ratio	1.10				0.74					0.77
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	533				1,767					927
Weave LC Rate	703				1,847					1,557
Non-Weave LC Rate 1	223				66					1,019
Non-Weave LC Rate 2	2,304				2,152					2,473
Non-Weave LC Rate 3	-3,708				-4,016					-1,374
Segment LC Rate	926				1,913					2,576
Weave Intensity Factor	0.257				0.777					0.280
Weave Speed	54.8				43.1					54.1
Non-Weave Speed	54.7				46.1					51.9
Segment Speed	54.7				44.7					52.6
Weave Density	-				28.6					25.5
Weave LOS	F				D					C
Summarize Segment Operations										
Segment v/c ratio	1.10	0.30	0.34	0.33	0.74	0.38	0.48	0.46	0.45	0.77
Segment Density	-	10.8	3.5	12.0	28.6	13.6	15.7	16.7	16.2	25.5
Segment LOS	F	A	A	B	D	B	B	B	B	C
Over Capacity	Weave									

Project: John Wayne Airport Expansion **Scenario:** 2016 Baseline
Freeway Corridor: 55S **Peak Hour:** PM



Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*7,950*	7,950	7,240	6,170	6,170	5,540	5,540	5,110	5,730	6,960	6,960	6,430	6,430
On Ramp Volume		*900*					*1,660*	*620*	*1,230*		*1,210*		*250*
Off Ramp Volume		*1,610*	*1,070*		*630*		*2,090*				*1,740*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	7,950	8,850	7,240	6,170	6,170	5,540	7,200	5,730	6,960	6,960	8,170	6,430	6,680
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,456	9,414	7,701	6,608	6,608	5,934	7,712	6,137	7,455	7,455	8,751	6,887	7,155
GP Flow (pcphpl)	2,114	1,883	1,925	1,652	1,652	1,978	1,928	1,534	1,864	1,864	1,750	1,722	1,789
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*55.7*	*55.7*	*63.9*	*63.9*	*63.9*	*63.9*	*58.0*	*51.0*	*51.0*	*51.0*	*51.0*	*65.1*	*65.1*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.90	0.80	0.82	0.70	0.70	0.84	0.82	0.65	0.79	0.79	0.74	0.73	0.76
Speed (mph)	57.8	61.7	61.1	64.1	64.1	60.3	61.0	64.7	62.0	62.0	63.3	63.5	62.9
Density (pcphpl)	36.6	30.5	31.5	25.8	25.8	32.8	31.6	23.7	30.1	30.1	27.7	27.1	28.5
LOS	E	D	D	C	C	D	D	C	D	D	D	D	D
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,457					5,934	5,478	6,137		7,455		6,889
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.90					0.84	0.78	0.65		0.79		0.73
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		7,701	6,563		5,939		5,473				6,901		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.82	0.93		0.84		0.78				0.73		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



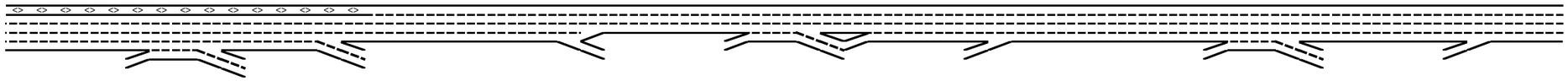
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		900					1,660	620	1,230		1,210		250
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		957					1,778	659	1,317		1,296		266
On Flow (pcphpl)		957					1,778	659	1,317		1,296		266
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.48					0.79	0.33	0.60		0.58		0.13

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



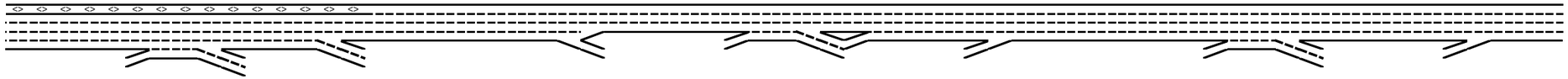
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		1,610	1,070		630		2,090				1,740		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		1,713	1,138		670		2,239				1,850		
Off Flow (pcphpl)		856	569		670		1,119				925		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.38	0.25		0.33		0.50				0.46		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									6,137				6,889
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.053				0.185
v_{12} (pcph)									326				1,272
v_3 (pcph)													
v_{34} (pcph)									5,811				5,617
v_{12a} (pcph)									2,455				2,756
v_{R12a} (pcph)									3,772				3,021
Merge Speed Index									0.42				0.36
Merge Area Speed									55.4				56.7
Outer Lanes Volume									1,841				2,067
Outer Lanes Speed									60.2				59.4
Segment Speed									57.6				58.2
Merge v/c ratio									0.82				0.66
Merge Density									30.2				25.5
Merge LOS									D				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



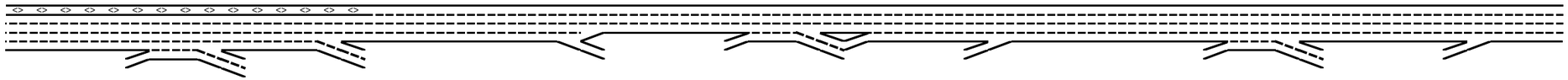
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			7,701		6,608								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.515		0.564								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,845		3,259								
v_3 (pcph)													
v_{34} (pcph)			4,857		3,349								
v_{12a} (pcph)			3,080		3,259								
Diverge Speed Index			0.27		0.49								
Diverge Area Speed			58.8		53.8								
Outer Lanes Volume			2,310		1,675								
Outer Lanes Speed			66.2		68.7								
Segment Speed			63.0		60.4								
Diverge v/c ratio			0.70		0.74								
Diverge Density			33.7		30.6								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		7,950 900 7,240 1,610 8,850					5,540 1,660 5,110 2,090 7,200				6,960 1,210 6,430 1,740 8,170		
On to Off Volume (vph)		*164*					*482*				*258*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		174					512				274		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		736					1,178				952		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		783					1,262				1,020		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



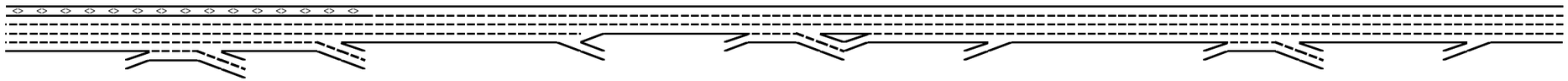
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		1,446					1,608				1,482		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		1,538					1,722				1,576		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		6,504					3,932				5,478		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		6,918					4,211				5,867		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



Key

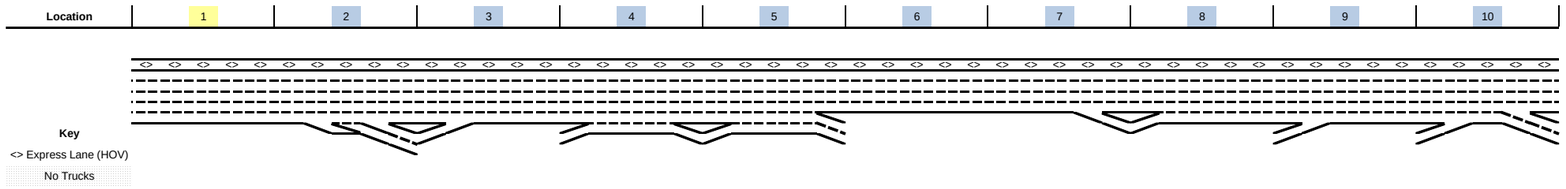
<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,321					2,984				2,596		
Non-Weave Flow		7,092					4,724				6,141		
Segment Flow		9,413					7,708				8,737		
Max Weave Length		5,018					6,538				5,553		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,114					2,023				2,005		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.997				0.998		
Capacity Condition 1		8,362					5,951				7,878		
Capacity Condition 2		9,624					6,078				7,935		
Weave v/c ratio		1.11					1.27				1.09		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		783					1,262				1,020		
Weave LC Rate		1,401					2,069				1,290		
Non-Weave LC Rate 1		1,739					1,623				1,058		
Non-Weave LC Rate 2		3,271					2,742				3,058		
Non-Weave LC Rate 3		-246					-2				-2,287		
Segment LC Rate		3,141					3,692				2,348		
Weave Intensity Factor		0.331					0.332				0.430		
Weave Speed		52.6					52.5				50.0		
Non-Weave Speed		48.1					43.6				47.2		
Segment Speed		49.1					46.7				48.0		
Weave Density		-					-				-		
Weave LOS		F					F				F		
Summarize Segment Operations													
Segment v/c ratio	0.90	1.11	0.70	0.70	0.74	0.84	1.27	0.65	0.82	0.79	1.09	0.73	0.66
Segment Density	36.6	-	33.7	25.8	30.6	32.8	-	23.7	30.2	30.1	-	27.1	25.5
Segment LOS	E	F	D	C	D	D	F	C	D	D	F	D	C
Over Capacity		Weave					Weave				Weave		

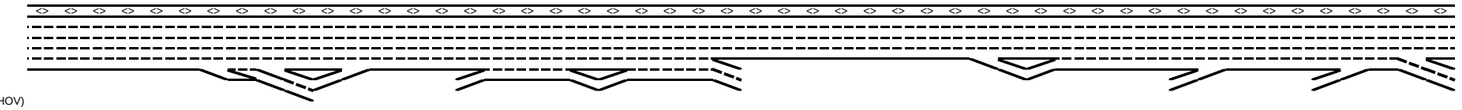
Project: John Wayne Airport Expansion **Scenario:** 2016 Baseline

Freeway Corridor: 405N **Peak Hour:** PM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*7,580*	7,580	6,550	7,280	7,690	6,290	6,290	5,700	6,810	7,100
On Ramp Volume			*730*	*1,120*	*1,350*			*1,110*	*290*	*540*
Off Ramp Volume		*1,030*		*710*	*2,750*		*590*			*2,750*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	7,580	7,580	7,280	8,400	9,040	6,290	6,290	6,810	7,100	7,640
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,202	8,202	7,855	9,063	9,682	6,737	6,737	7,294	7,604	8,183
GP Flow (pcphpl)	1,640	1,640	1,571	1,511	1,614	1,684	1,684	1,459	1,521	1,364
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*23.5*	*23.5*	*22.3*	*20.6*	*26.8*	*26.8*	*26.8*	*26.8*	*11.4*	*11.3*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.70	0.70	0.67	0.64	0.69	0.72	0.72	0.62	0.65	0.58
Speed (mph)	64.2	64.2	64.6	64.8	64.4	63.9	63.9	65.0	64.8	65.0
Density (pcphpl)	25.6	25.6	24.3	23.3	25.1	26.4	26.4	22.5	23.5	21.0
LOS	C	C	C	C	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			7,079	7,872	8,247			6,105	7,296	7,609
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.60	0.67	0.70			0.65	0.62	0.65
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		7,107		8,308	6,737		6,110			5,259
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.60		0.71	0.72		0.65			0.56

Location	1	2	3	4	5	6	7	8	9	10



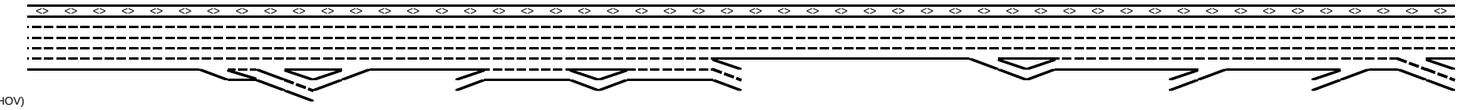
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			730	1,120	1,350			1,110	290	540
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			776	1,191	1,435			1,189	308	574
On Flow (pcphpl)			776	1,191	1,435			1,189	308	574
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.39	0.60	0.72			0.53	0.15	0.29

Location	1	2	3	4	5	6	7	8	9	10



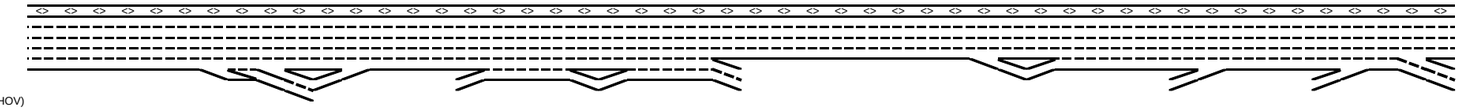
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,030		710	2,750		590			2,750
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,095		755	2,945		627			2,924
Off Flow (pcphpl)		548		755	1,473		627			1,462
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.27		0.38	0.65		0.31			0.73
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			5,167						5,326	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.121						0.179	
v_{12} (pcph)			624						955	
v_3 (pcph)										
v_{34} (pcph)			4,543						4,371	
v_{12a} (pcph)			2,067						2,130	
v_{R12a} (pcph)			2,843						2,439	
Merge Speed Index			0.35						0.33	
Merge Area Speed			57.0						57.4	
Outer Lanes Volume			1,550						1,598	
Outer Lanes Speed			61.2						61.0	
Segment Speed			59.1						59.4	
Merge v/c ratio			0.62						0.53	
Merge Density			23.8						21.4	
Merge LOS			C						C	

Location	1	2	3	4	5	6	7	8	9	10



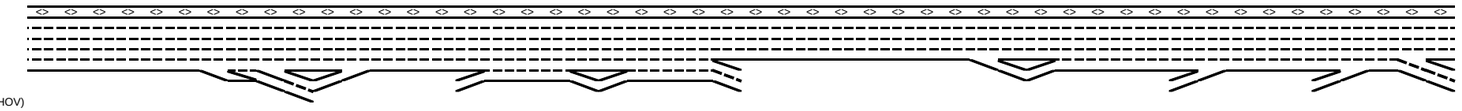
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		6,562					6,737			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.546					0.563			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		2,516					3,291			
v_3 (pcph)										
v_{34} (pcph)		4,045					3,446			
v_{12a} (pcph)		2,625					3,291			
Diverge Speed Index		0.53					0.48			
Diverge Area Speed		52.9					53.9			
Outer Lanes Volume		1,969					1,723			
Outer Lanes Speed		67.5					68.5			
Segment Speed		60.8					60.5			
Diverge v/c ratio		0.60					0.75			
Diverge Density		18.3					31.0			
Diverge LOS		B					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				7,280 1,120 7,690 710 8,400	7,690 1,350 6,290 2,750 9,040					7,100 540 4,890 2,750 7,640
On to Off Volume (vph)				*95*	*411*					*194*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				101	437					207
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				1,025	939					346
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,090	999					367

Location	1	2	3	4	5	6	7	8	9	10



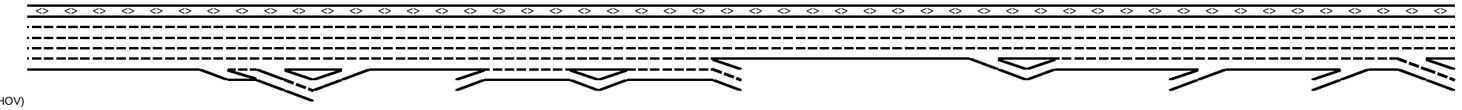
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				615	2,339					2,556
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				654	2,506					2,717
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				6,665	5,351					4,544
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				7,191	5,731					4,867

Location	1	2	3	4	5	6	7	8	9	10



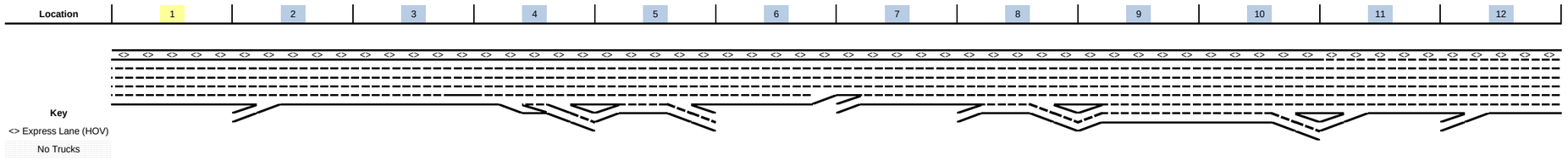
Key

<> Express Lane (HOV)

No Trucks

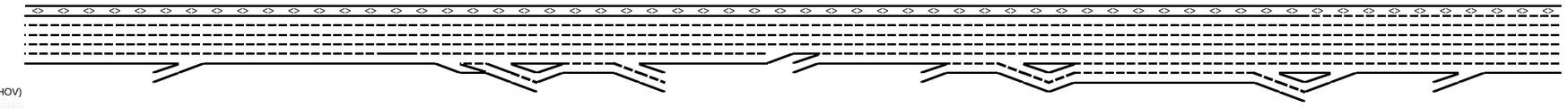
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				1,744	3,504					3,084
Non-Weave Flow				7,291	6,167					5,074
Segment Flow				9,036	9,672					8,158
Max Weave Length				4,465	4,696					6,436
Length Check				OK	OK					OK
Ideal Weave Capacity				2,171	2,157					1,896
f_{HV}				0.979	0.984					0.986
f_P				0.999	0.999					1.000
Capacity Condition 1				10,611	10,601					9,340
Capacity Condition 2				12,151	9,495					6,255
Weave v/c ratio				0.83	1.00					1.29
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				1,744	1,997					367
Weave LC Rate				2,362	2,633					350
Non-Weave LC Rate 1				1,694	1,486					353
Non-Weave LC Rate 2				3,315	3,064					2,820
Non-Weave LC Rate 3				-258	-584					-4,260
Segment LC Rate				4,056	4,119					703
Weave Intensity Factor				0.376	0.374					0.296
Weave Speed				51.3	51.4					53.6
Non-Weave Speed				43.8	41.3					54.5
Segment Speed				45.1	44.5					54.2
Weave Density				40.1	-					-
Weave LOS				E	F					F
Summarize Segment Operations										
Segment v/c ratio	0.70	0.60	0.62	0.83	1.00	0.72	0.75	0.62	0.53	1.29
Segment Density	25.6	18.3	23.8	40.1	-	26.4	31.0	22.5	21.4	-
Segment LOS	C	B	C	E	F	D	D	C	C	F
Over Capacity					Weave					Weave

Project: John Wayne Airport Expansion **Scenario:** 2016 Baseline
Freeway Corridor: 405S **Peak Hour:** PM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment	405S-1	405S-2	405S-3	405S-4	405S-5 405S-5b 405S-5c	405S-6	405S-7	405S-8 405S-8b 405S-8c	405S-9 405S-9b 405S-9c	405S-10	405S-11 405S-11b	405S-12
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave	Basic	Merge	Merge
Density	19.7	25.6	23.3	18.1	30.4	26.3	26.4	-	44.2	####	22.4	22.6
LOS	C	C	C	B	D	D	D	F	E	####	C	C
Speed	67.6	67.6	67.6	67.6	70.8	70.8	70.8	50.3	50.3	50.3	23.7	23.7
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*5,970*	5,970	7,050	7,050	6,020	6,270	6,270	7,880	8,020		5,958	6,483
On Ramp Volume		*1,080*			*1,160*		*1,610*	*1,420*	*910*		*630*	*1,080*
Off Ramp Volume				*1,030*	*910*			*1,280*	*1,780*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	5,970	7,050	7,050	7,050	7,180	6,270	7,880	9,300	8,930		6,588	7,563
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	6,394	7,551	7,551	7,551	7,690	6,716	8,440	9,961	9,635		7,129	8,184
GP Flow (pcphpl)	1,279	1,510	1,510	1,510	1,282	1,679	1,688	1,660	1,376		1,426	1,637
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*67.6*	*67.6*	*67.6*	*67.6*	*70.8*	*70.8*	*70.8*	*50.3*	*50.3*		*23.7*	*23.7*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.54	0.64	0.64	0.64	0.55	0.71	0.72	0.71	0.59		0.61	0.70
Speed (mph)	65.0	64.8	64.8	64.8	65.0	63.9	63.8	64.0	65.0		65.0	64.2
Density (pcphpl)	19.7	23.3	23.3	23.3	19.7	26.3	26.4	25.9	21.2		21.9	25.5
LOS	C	C	C	C	C	D	D	C	C		C	C
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		6,403			6,457		6,716	8,440	8,668		6,459	7,036

Location	1	2	3	4	5	6	7	8	9	10	11	12



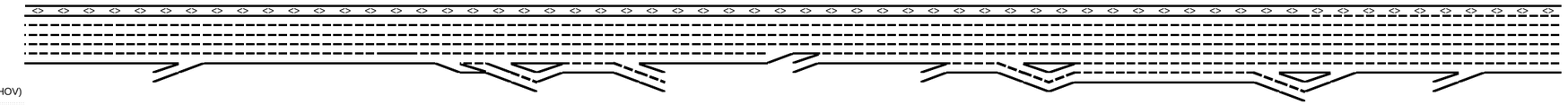
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.54			0.55		0.71	0.72	0.74		0.55	0.60
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				6,456	6,716	6,716		8,600	7,743			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.55	0.57	0.71		0.73	0.66			

Location	1	2	3	4	5	6	7	8	9	10	11	12



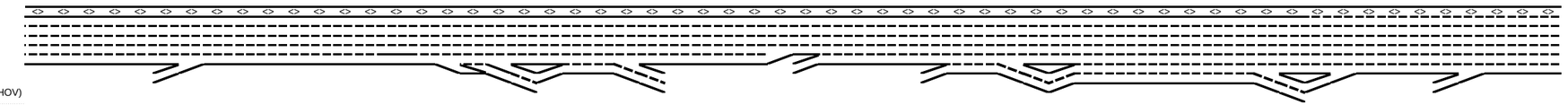
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,080			1,160		1,610	1,420	910		630	1,080
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,148			1,233		1,724	1,521	967		670	1,148
On Flow (pcphpl)		1,148			1,233		1,724	1,521	484		670	1,148
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.57			0.62		0.77	0.68	0.24		0.33	0.57

Location	1	2	3	4	5	6	7	8	9	10	11	12



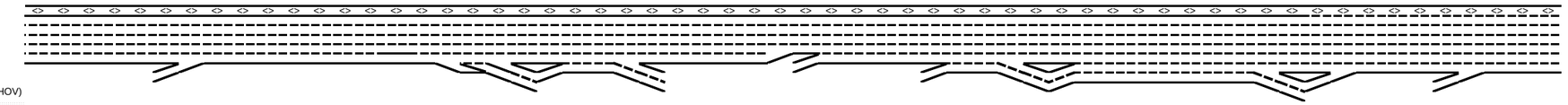
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,030	910			1,280	1,780			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,095	975			1,361	1,892			
Off Flow (pcphpl)				548	487			680	946			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.27	0.22			0.34	0.47			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		4,866									4,909	5,136
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.074									0.134	0.074
v_{12} (pcph)		361									658	381
v_3 (pcph)												
v_{34} (pcph)		4,505									4,251	4,755
v_{12a} (pcph)		1,946									1,964	2,055
v_{R12a} (pcph)		3,095									2,633	3,203
Merge Speed Index		0.37									0.34	0.33
Merge Area Speed		56.5									57.2	57.3
Outer Lanes Volume		1,460									1,473	1,541
Outer Lanes Speed		61.5									61.5	61.3
Segment Speed		58.9									59.4	59.2
Merge v/c ratio		0.67									0.57	0.70
Merge Density		25.6									22.4	22.6
Merge LOS		C									C	C

Location	1	2	3	4	5	6	7	8	9	10	11	12



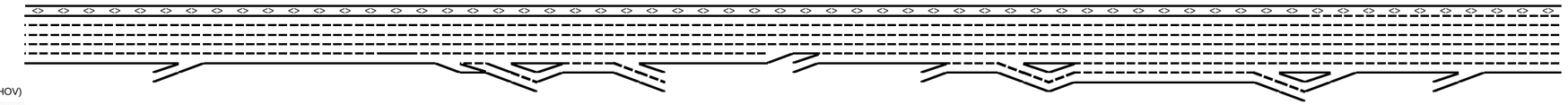
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				6,041								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.559								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				2,381								
v_3 (pcph)												
v_{34} (pcph)				3,660								
v_{12a} (pcph)				2,416								
Diverge Speed Index				0.53								
Diverge Area Speed				52.9								
Outer Lanes Volume				1,812								
Outer Lanes Speed				68.1								
Segment Speed				61.1								
Diverge v/c ratio				0.55								
Diverge Density				18.1								
Diverge LOS				B								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					6,020 1,160 6,270 910 7,180			7,880 1,420 8,020 1,280 9,300	8,020 910 7,150 1,780 8,930			
On to Off Volume (vph)					*147*			*195*	*181*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					156			208	193			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					1,013			1,225	729			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					1,077			1,312	775			

Location	1	2	3	4	5	6	7	8	9	10	11	12



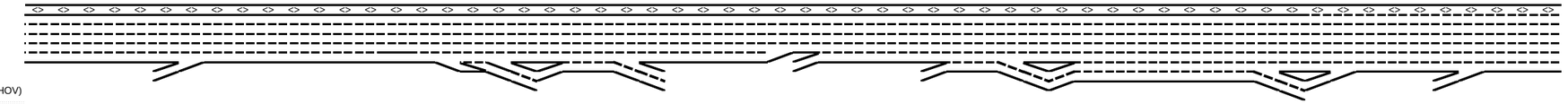
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					763			1,085	1,599			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					817			1,153	1,700			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					5,257			6,795	6,421			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					5,631			7,278	6,928			

Location	1	2	3	4	5	6	7	8	9	10	11	12



Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					1,894			2,465	2,474			
Non-Weave Flow					5,787			7,486	7,121			
Segment Flow					7,681			9,951	9,595			
Max Weave Length					5,018			5,030	3,570			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,087			2,003	2,115			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	0.999			
Capacity Condition 1					10,251			9,833	10,352			
Capacity Condition 2					9,563			9,511	13,287			
Weave v/c ratio					0.79			1.03	0.91			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					1,077			1,312	1,700			
Weave LC Rate					1,479			1,294	1,682			
Non-Weave LC Rate 1					1,083			850	775			
Non-Weave LC Rate 2					2,979			3,358	3,277			
Non-Weave LC Rate 3					-1,824			-3,685	-3,772			
Segment LC Rate					2,561			2,144	2,457			
Weave Intensity Factor					0.332			0.713	0.794			
Weave Speed					52.5			44.2	42.9			
Non-Weave Speed					49.9			46.0	43.6			
Segment Speed					50.5			45.5	43.4			
Weave Density					30.4			-	44.2			
Weave LOS					D			F	E			
Summarize Segment Operations												
Segment v/c ratio	0.54	0.67	0.64	0.55	0.79	0.71	0.72	1.03	0.91		0.57	0.70
Segment Density	19.7	25.6	23.3	18.1	30.4	26.3	26.4	-	44.2		22.4	22.6
Segment LOS	C	C	C	B	D	D	D	F	E		C	C
Over Capacity								Weave				

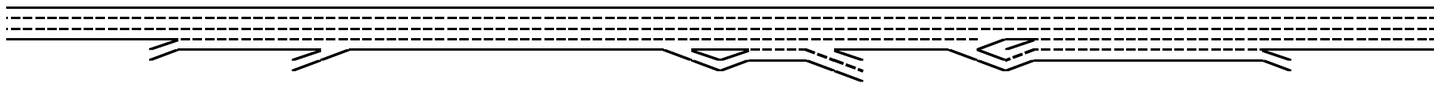
Project: John Wayne Airport Expansion **Scenario:** 2021 Baseline
Freeway Corridor: 73N **Peak Hour:** AM

Location	1	2	3	4	5	6	7	8	9	10

Key
<> Express Lane (HOV)
No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*6,280*	6,280	7,950	8,660	8,660	7,680	6,370	5,640		5,300
On Ramp Volume		*1,670*	*710*			*680*		*630*		
Off Ramp Volume					*980*	*1,990*	*730*	*970*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	6,280	7,950	8,660	8,660	8,660	8,360	6,370	6,270		5,300
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	6,688	8,467	9,223	9,223	9,223	8,903	6,784	6,678		5,645
GP Flow (pcphpl)	2,229	2,117	2,306	2,306	2,306	1,781	1,696	1,336		1,411
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*62.3*	*62.3*	*62.3*	*66.1*	*66.1*	*66.1*	*66.1*	*65.5*		*65.5*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.95	0.90	0.98	0.98	0.98	0.76	0.72	0.57		0.60
Speed (mph)	55.2	57.7	53.4	53.4	53.4	62.9	63.8	65.0		65.0
Density (pcphpl)	40.4	36.7	43.2	43.2	43.2	28.3	26.6	20.5		21.7
LOS	E	E	E	E	E	D	D	C		C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		6,691	8,468			8,180		6,007		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.95	0.90			0.87		0.85		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					8,181	6,784	6,007	5,646		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.87	0.72	0.85	0.80		

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,670	710			680		630		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,775	755			723		671		
On Flow (pcphpl)		1,775	755			723		335		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.89	0.38			0.36		0.15		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					980	1,990	730	970		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					1,042	2,119	777	1,031		
Off Flow (pcphpl)					1,042	1,060	777	1,031		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.52	0.47	0.35	0.46		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			8,468							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.123							
v_{12} (pcph)			1,045							
v_3 (pcph)										
v_{34} (pcph)			7,423							
v_{12a} (pcph)			3,387							
v_{R12a} (pcph)			4,142							
Merge Speed Index			0.54							
Merge Area Speed			52.6							
Outer Lanes Volume			2,540							
Outer Lanes Speed			57.0							
Segment Speed			55.0							
Merge v/c ratio			0.90							
Merge Density			34.9							
Merge LOS			D							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					9,223		6,784			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.482		0.555			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					4,609		3,396			
v_3 (pcph)										
v_{34} (pcph)					4,614		3,388			
v_{12a} (pcph)					4,609		3,396			
Diverge Speed Index					0.52		0.24			
Diverge Area Speed					53.0		59.5			
Outer Lanes Volume					2,307		1,694			
Outer Lanes Speed					66.2		68.6			
Segment Speed					58.9		63.7			
Diverge v/c ratio					1.05		0.77			
Diverge Density					42.1		31.7			
Diverge LOS					F		D			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,680 680 6,370 1,990 8,360		5,640 630 5,300 970 6,270		
On to Off Volume (vph)						*162*		*97*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						172		104		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						518		533		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						551		567		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,828		873		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,947		929		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						5,852		4,767		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,232		5,077		

Location	1	2	3	4	5	6	7	8	9	10

Key

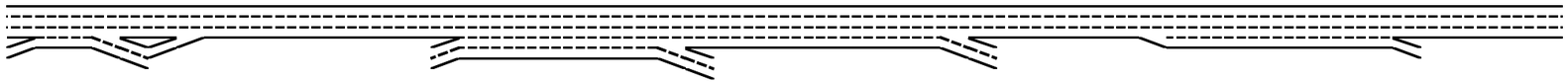
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						2,498		1,496		
Non-Weave Flow						6,404		5,181		
Segment Flow						8,902		6,677		
Max Weave Length						5,377		3,218		
Length Check						OK		OK		
Ideal Weave Capacity						2,067		2,219		
f_{HV}						0.989		0.988		
f_P						0.999		0.999		
Capacity Condition 1						8,167		6,572		
Capacity Condition 2						8,450		15,422		
Weave v/c ratio						1.08		1.00		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						551		1,859		
Weave LC Rate						1,068		2,367		
Non-Weave LC Rate 1						1,457		1,302		
Non-Weave LC Rate 2						3,117		2,844		
Non-Weave LC Rate 3						-951		-1,167		
Segment LC Rate						2,525		3,669		
Weave Intensity Factor						0.312		0.458		
Weave Speed						53.1		49.3		
Non-Weave Speed						50.4		40.9		
Segment Speed						51.1		42.6		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.95	0.90	0.90	0.98	1.05	1.08	0.77	1.00		0.60
Segment Density	40.4	36.7	34.9	43.2	-	-	31.7	-		21.7
Segment LOS	E	E	D	E	F	F	D	F		C
Over Capacity					Diverge	Weave		Weave		

Project: John Wayne Airport Expansion **Scenario:** 2021 Baseline
Freeway Corridor: 73S **Peak Hour:** AM

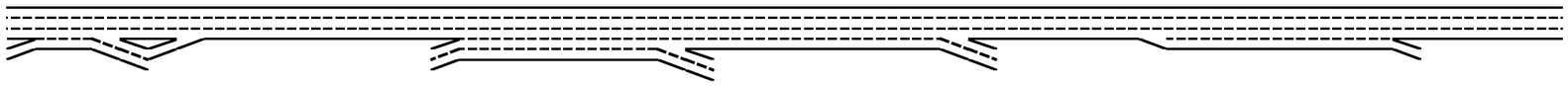
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,810	4,670	5,400	5,400		5,510	5,510	3,760	3,760		2,790
On Ramp Volume	*790*	*730*		*2,420*							
Off Ramp Volume	*930*			*2,310*			*1,750*		*970*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	5,600	5,400	5,400	7,820		5,510	5,510	3,760	3,760		2,790
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,964	5,751	5,751	8,328		5,868	5,868	4,004	4,004		2,971
GP Flow (pcphpl)	1,491	1,917	1,917	1,666		1,467	1,467	1,335	801		990
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*62.8*	*62.8*	*52.5*	*52.5*		*63.4*	*63.4*	*63.4*	*63.4*		*63.4*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.63	0.82	0.82	0.71		0.62	0.62	0.57	0.34		0.42
Speed (mph)	64.9	61.2	61.2	64.0		64.9	64.9	65.0	65.0		65.0
Density (pcphpl)	23.0	31.3	31.3	26.0		22.6	22.6	20.5	12.3		15.2
LOS	C	D	D	D		C	C	C	B		B
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	5,124	4,974		5,751					4,004		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.73	0.71		0.82					0.57		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	4,974			5,872			4,008		2,973		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.71			0.83			0.57		0.32		

Location	2	3	4	5	6	7	8	9	10	11	12



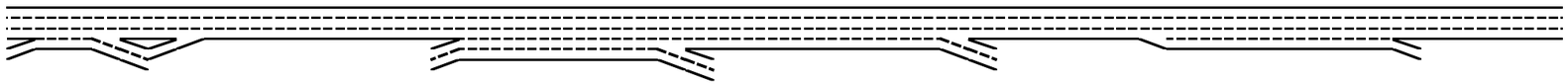
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	790	730		2,420							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	840	777		2,577							
On Flow (pcphpl)	840	777		1,289							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.42	0.35		0.57							

Location	2	3	4	5	6	7	8	9	10	11	12



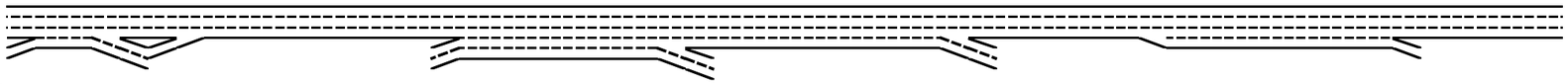
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	930			2,310			1,750		970		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	990			2,456			1,861		1,031		
Off Flow (pcphpl)	495			1,228			930		1,031		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.22			0.61			0.47		0.52		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		4,974									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,958									
v_3 (pcph)		2,016									
v_{34} (pcph)											
v_{12a} (pcph)		2,958									
v_{R12a} (pcph)		3,735									
Merge Speed Index		0.42									
Merge Area Speed		55.4									
Outer Lanes Volume		2,016									
Outer Lanes Speed		59.5									
Segment Speed		56.8									
Merge v/c ratio		0.81									
Merge Density		30.4									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



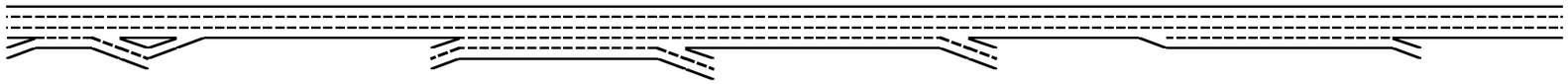
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							5,868				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.528				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,903				
v_3 (pcph)											
v_{34} (pcph)							2,966				
v_{12a} (pcph)							2,903				
Diverge Speed Index							0.60				
Diverge Area Speed							51.3				
Outer Lanes Volume							1,483				
Outer Lanes Speed							69.4				
Segment Speed							59.1				
Diverge v/c ratio							0.66				
Diverge Density							27.9				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,810 790 4,670 930 5,600			5,400 2,420 5,510 2,310 7,820							
On to Off Volume (vph)	*131*			*715*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	139			760							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	659			1,705							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	700			1,816							

Location	2	3	4	5	6	7	8	9	10	11	12



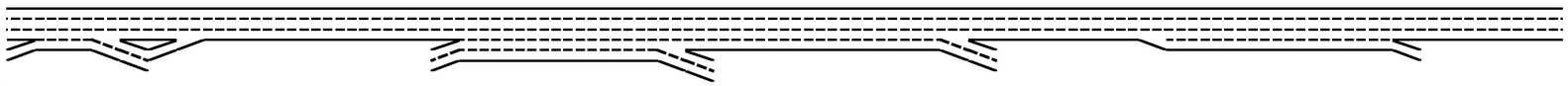
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	799			1,595							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	851			1,696							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	4,011			3,805							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	4,272			4,052							

Location	2	3	4	5	6	7	8	9	10	11	12



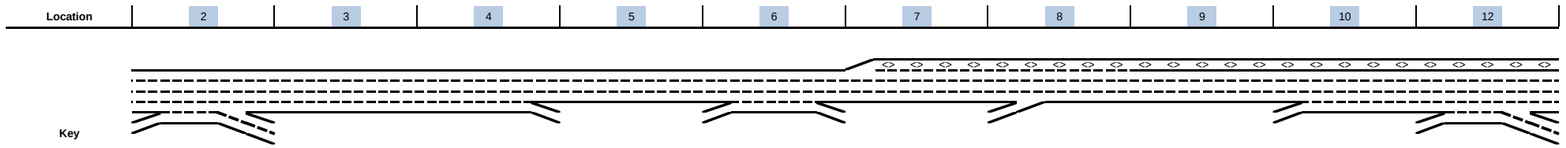
Key

<> Express Lane (HOV)

No Trucks

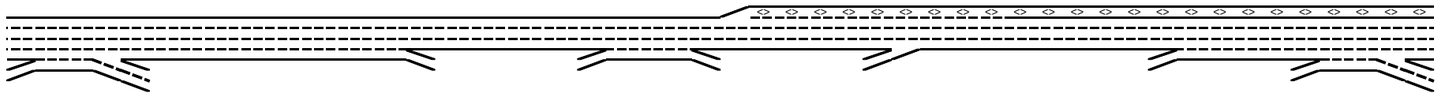
Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,551			3,512							
Non-Weave Flow	4,411			4,812							
Segment Flow	5,963			8,324							
Max Weave Length	5,160			5,362							
Length Check	OK			OK							
Ideal Weave Capacity	2,085			2,029							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,177			6,003							
Capacity Condition 2	9,110			8,183							
Weave v/c ratio	0.95			1.37							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	700			1,696							
Weave LC Rate	1,287			2,072							
Non-Weave LC Rate 1	1,252			1,042							
Non-Weave LC Rate 2	2,673			2,762							
Non-Weave LC Rate 3	-1,042			-1,905							
Segment LC Rate	2,539			3,114							
Weave Intensity Factor	0.310			0.493							
Weave Speed	53.2			48.5							
Non-Weave Speed	50.4			39.5							
Segment Speed	51.1			42.8							
Weave Density	38.9			-							
Weave LOS	E			F							
Summarize Segment Operations											
Segment v/c ratio	0.95	0.81	0.82	1.37		0.62	0.66	0.57	0.34		0.42
Segment Density	38.9	30.4	31.3	-		22.6	27.9	20.5	12.3		15.2
Segment LOS	E	D	D	F		C	C	C	B		B
Over Capacity				Weave							

Project: John Wayne Airport Expansion **Scenario:** 2021 Baseline
Freeway Corridor: 55N **Peak Hour:** AM



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	6,270	6,770	6,770	6,040	6,040	6,570	6,570	7,290	7,290	9,870
On Ramp Volume	*1,850*				*1,990*		*720*		*2,580*	*1,260*
Off Ramp Volume	*1,350*		*730*		*1,460*					*1,760*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	8,120	6,770	6,770	6,040	8,030	6,570	7,290	7,290	9,870	11,130
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,697	7,251	7,251	6,469	8,601	7,037	7,808	7,808	10,499	11,839
GP Flow (pcphpl)	1,739	1,813	1,813	2,156	2,150	2,346	2,603	2,603	2,625	2,368
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*53.0*	*53.0*	*53.0*	*29.2*	*32.9*	*32.9*	*43.6*	*43.6*	*43.6*	*64.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

Location	2	3	4	5	6	7	8	9	10	12



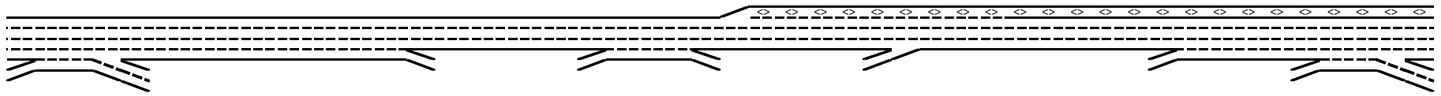
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	1,850				1,990		720		2,580	1,260
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,967				2,131		765		2,744	1,340
On Flow (pcphpl)	1,967				2,131		765		2,744	1,340
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.98				0.95		0.38		1.37	0.60

Location	2	3	4	5	6	7	8	9	10	12



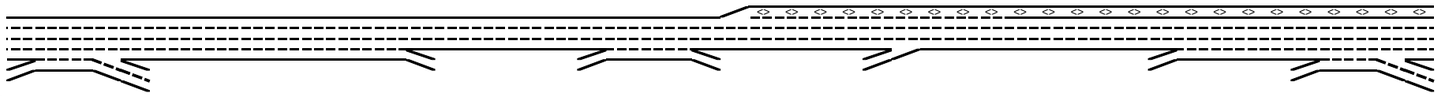
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	1,350		730		1,460					1,260
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	1,446		776		1,564					1,340
Off Flow (pcphpl)	723		776		1,564					670
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.32		0.39		0.69					0.34
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							7,043			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							4,280			
v_3 (pcph)							2,762			
v_{34} (pcph)										
v_{12a} (pcph)							4,343			
v_{R12a} (pcph)							5,108			
Merge Speed Index							-			
Merge Area Speed							-			
Outer Lanes Volume										
Outer Lanes Speed										
Segment Speed										
Merge v/c ratio							1.11			
Merge Density							-			
Merge LOS							F			

Location	2	3	4	5	6	7	8	9	10	12

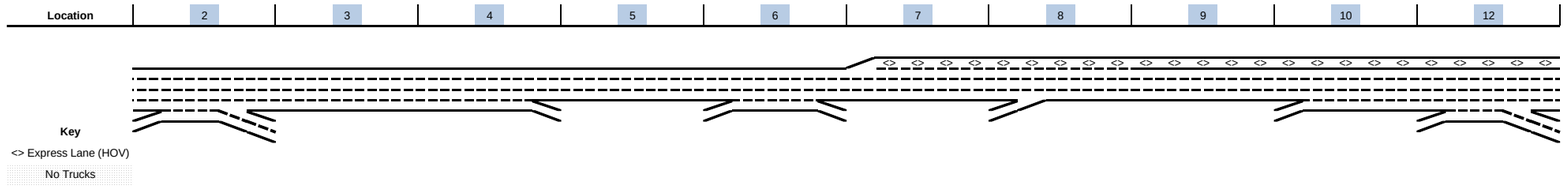


Key

<> Express Lane (HOV)

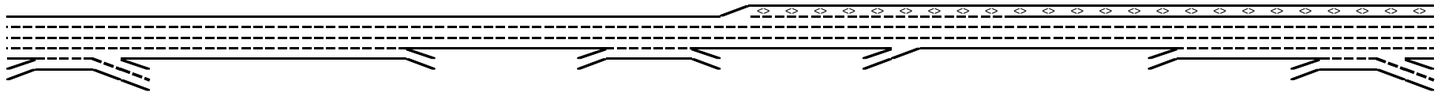
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			7,251							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.543							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			3,599							
v_3 (pcph)										
v_{34} (pcph)			3,652							
v_{12a} (pcph)			3,599							
Diverge Speed Index			0.50							
Diverge Area Speed			53.5							
Outer Lanes Volume			1,826							
Outer Lanes Speed			68.1							
Segment Speed			60.0							
Diverge v/c ratio			0.82							
Diverge Density			21.7							
Diverge LOS			C							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	6,270 1,850 6,770 1,350 8,120				6,040 1,990 6,570 1,460 8,030					9,870 1,260 9,370 1,760 11,130
On to Off Volume (vph)	*308*				*362*					*199*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	327				385					212
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	1,542				1,628					1,061
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	1,640				1,744					1,128



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,042				1,098					1,061
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	1,116				1,176					1,128
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	5,228				4,942					8,809
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	5,599				5,293					9,370

Location	2	3	4	5	6	7	8	9	10	12



Key

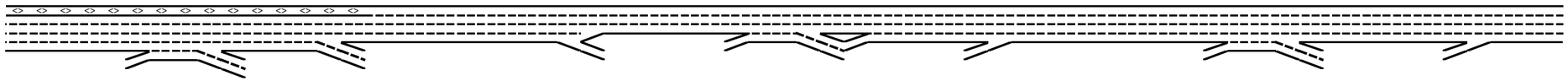
<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,756				2,920					2,257
Non-Weave Flow	5,926				5,678					9,582
Segment Flow	8,682				8,598					11,839
Max Weave Length	5,772				6,013					4,440
Length Check	OK				OK					OK
Ideal Weave Capacity	1,968				1,921					2,161
f_{HV}	0.984				0.983					0.990
f_P	0.998				0.997					0.999
Capacity Condition 1	7,737				5,645					8,544
Capacity Condition 2	7,428				6,923					12,448
Weave v/c ratio	1.15				1.49					1.37
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	1,640				2,920					1,128
Weave LC Rate	1,810				3,000					1,759
Non-Weave LC Rate 1	876				809					2,269
Non-Weave LC Rate 2	3,010				2,955					3,826
Non-Weave LC Rate 3	-2,884				-3,234					658
Segment LC Rate	2,686				3,808					4,027
Weave Intensity Factor	0.596				1.337					0.398
Weave Speed	46.3				36.4					50.8
Non-Weave Speed	42.8				30.2					42.7
Segment Speed	43.8				32.1					44.0
Weave Density	-				-					-
Weave LOS	F				F					F
Summarize Segment Operations										
Segment v/c ratio	1.15	0.77	0.82	0.92	1.49	1.00	1.11	1.11	1.12	1.37
Segment Density	-	29.0	21.7	37.9	-	44.8	-	-	-	-
Segment LOS	F	D	C	E	F	E	F	F	F	F
Over Capacity	Weave				Weave		Segment GP Lanes Merge	Segment GP Lanes	Segment GP Lanes In GP Lanes On Ramp Roadway	Segment GP Lanes In GP Lanes Out GP Lanes Weave

Project: John Wayne Airport Expansion **Scenario:** 2021 Baseline
Freeway Corridor: 55S **Peak Hour:** AM

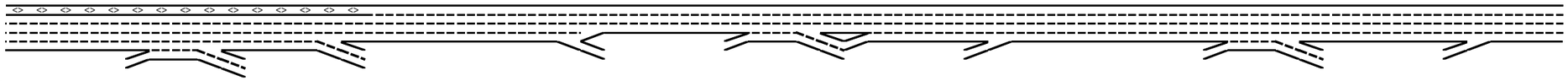
Location	1	2	3	4	5	6	7	8	9	10	11	12	13



Key
<> Express Lane (HOV)
No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*7,630*	7,630	6,190	5,540	5,540	4,910	4,910	3,750	4,060	4,790	4,790	4,960	4,960
On Ramp Volume		*870*					*1,260*	*310*	*730*		*930*		*290*
Off Ramp Volume		*2,310*	*650*		*630*		*2,420*				*760*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	7,630	8,500	6,190	5,540	5,540	4,910	6,170	4,060	4,790	4,790	5,720	4,960	5,250
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,116	9,041	6,584	5,934	5,934	5,259	6,608	4,348	5,130	5,130	6,126	5,312	5,623
GP Flow (pcphpl)	2,029	1,808	1,646	1,483	1,483	1,753	1,652	1,087	1,283	1,283	1,225	1,328	1,406
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*64.0*	*64.0*	*65.9*	*65.9*	*65.9*	*65.9*	*62.2*	*52.4*	*52.4*	*52.4*	*52.4*	*68.0*	*68.0*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.86	0.77	0.70	0.63	0.63	0.75	0.70	0.46	0.55	0.55	0.52	0.57	0.60
Speed (mph)	59.4	62.6	64.1	64.9	64.9	63.2	64.1	65.0	65.0	65.0	65.0	65.0	65.0
Density (pcphpl)	34.2	28.9	25.7	22.9	22.9	27.7	25.8	16.7	19.7	19.7	18.9	20.4	21.6
LOS	D	D	C	C	C	D	C	B	C	C	C	C	C
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,116					5,259	4,019	4,348		5,130		5,315
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.86					0.75	0.57	0.46		0.55		0.57
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		6,584	5,893		5,264		4,016				5,318		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.70	0.84		0.75		0.57				0.57		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



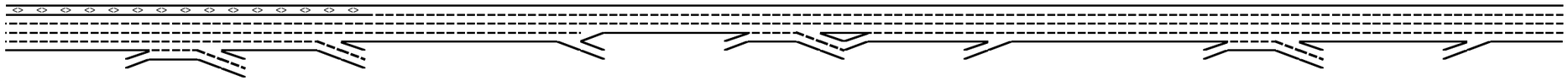
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		870					1,260	310	730		930		290
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		925					1,350	330	782		996		308
On Flow (pcphpl)		925					1,350	330	782		996		308
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.46					0.60	0.16	0.36		0.44		0.15

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



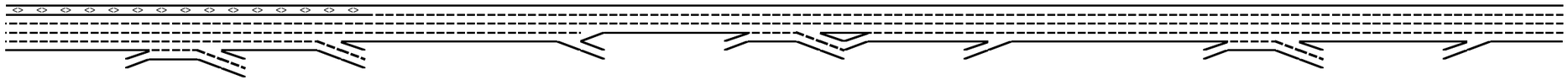
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		2,310	650		630		2,420				760		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		2,457	691		670		2,592				808		
Off Flow (pcphpl)		1,229	346		670		1,296				404		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.55	0.15		0.33		0.58				0.20		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									4,348				5,315
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.120				0.179
v_{12} (pcph)									522				953
v_3 (pcph)													
v_{34} (pcph)									3,826				4,362
v_{12a} (pcph)									1,739				2,126
v_{R12a} (pcph)									2,521				2,434
Merge Speed Index									0.30				0.33
Merge Area Speed									58.1				57.5
Outer Lanes Volume									1,305				1,594
Outer Lanes Speed									62.1				61.1
Segment Speed									60.1				59.5
Merge v/c ratio									0.55				0.53
Merge Density									20.7				20.9
Merge LOS									C				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



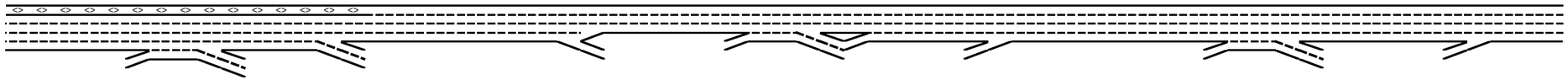
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			6,584		5,934								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.564		0.581								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,224		2,965								
v_3 (pcph)													
v_{34} (pcph)			4,361		2,969								
v_{12a} (pcph)			2,634		2,965								
Diverge Speed Index			0.23		0.49								
Diverge Area Speed			59.7		53.8								
Outer Lanes Volume			1,975		1,484								
Outer Lanes Speed			67.5		69.4								
Segment Speed			64.2		60.6								
Diverge v/c ratio			0.60		0.67								
Diverge Density			28.8		28.1								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		7,630 870 6,190 2,310 8,500					4,910 1,260 3,750 2,420 6,170				4,790 930 4,960 760 5,720		
On to Off Volume (vph)		*236*					*494*				*124*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		251					525				131		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		634					766				806		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		674					820				864		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



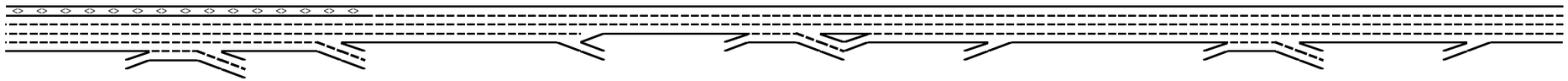
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		2,074					1,926				636		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		2,206					2,063				677		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		5,556					2,984				4,154		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		5,910					3,196				4,449		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



Key

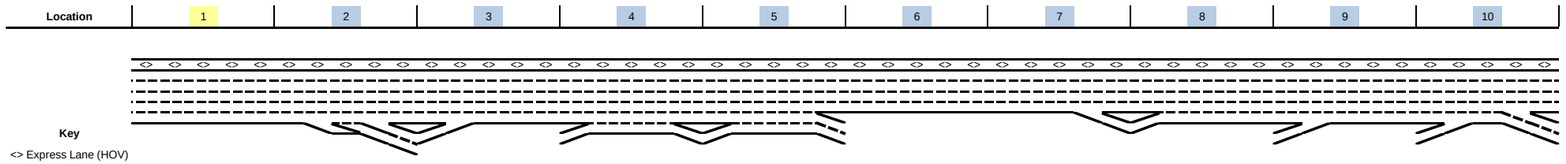
<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,879					2,883				1,540		
Non-Weave Flow		6,162					3,722				4,580		
Segment Flow		9,041					6,604				6,120		
Max Weave Length		5,783					7,094				5,071		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,056					1,981				2,042		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.998				0.998		
Capacity Condition 1		8,131					5,831				8,014		
Capacity Condition 2		7,453					5,395				9,358		
Weave v/c ratio		1.20					1.20				0.75		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		674					820				864		
Weave LC Rate		1,292					1,627				1,133		
Non-Weave LC Rate 1		1,548					1,416				737		
Non-Weave LC Rate 2		3,063					2,519				2,710		
Non-Weave LC Rate 3		-557					-312				-2,728		
Segment LC Rate		2,840					3,044				1,870		
Weave Intensity Factor		0.306					0.285				0.359		
Weave Speed		53.3					53.9				51.8		
Non-Weave Speed		49.3					48.5				51.4		
Segment Speed		50.5					50.7				51.5		
Weave Density		-					-				29.7		
Weave LOS		F					F				D		
Summarize Segment Operations													
Segment v/c ratio	0.86	1.20	0.60	0.63	0.67	0.75	1.20	0.46	0.55	0.55	0.75	0.57	0.53
Segment Density	34.2	-	28.8	22.9	28.1	27.7	-	16.7	20.7	19.7	29.7	20.4	20.9
Segment LOS	D	F	D	C	D	D	F	B	C	C	D	C	C
Over Capacity		Weave					Weave						

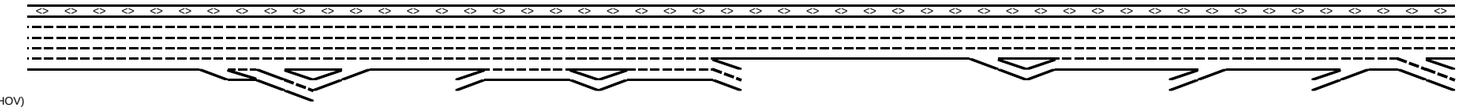
Project: John Wayne Airport Expansion **Scenario:** 2021 Baseline

Freeway Corridor: 405N **Peak Hour:** AM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*10,620*	10,620	8,770	9,210	8,610	6,540	6,540	5,920	7,360	7,540
On Ramp Volume			*440*	*1,190*	*450*			*1,440*	*180*	*290*
Off Ramp Volume		*1,850*		*1,790*	*2,520*		*620*			*2,660*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	10,620	10,620	9,210	10,400	9,060	6,540	6,540	7,360	7,540	7,830
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	11,492	11,492	9,937	11,221	9,704	7,005	7,005	7,883	8,076	8,386
GP Flow (pcphpl)	2,298	2,298	1,987	1,870	1,617	1,751	1,751	1,577	1,615	1,398
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*47.1*	*47.1*	*65.4*	*61.3*	*66.2*	*66.2*	*66.2*	*66.2*	*64.9*	*66.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.98	0.98	0.85	0.80	0.69	0.75	0.75	0.67	0.69	0.59
Speed (mph)	53.6	53.6	60.1	61.9	64.3	63.3	63.3	64.6	64.3	65.0
Density (pcphpl)	42.9	42.9	33.1	30.2	25.1	27.7	27.7	24.4	25.1	21.5
LOS	E	E	D	D	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			9,469	9,956	9,225			6,341	7,884	8,078
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.81	0.85	0.79			0.67	0.67	0.69
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		9,525		9,318	7,005		6,346			5,558
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.81		0.79	0.75		0.68			0.59

Location	1	2	3	4	5	6	7	8	9	10



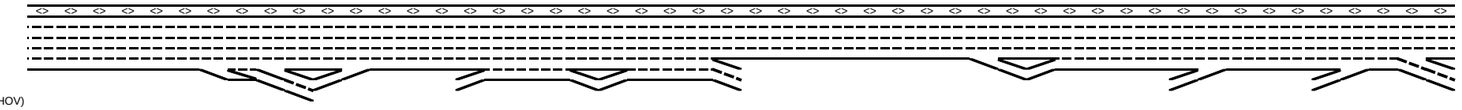
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			440	1,190	450			1,440	180	290
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			468	1,265	478			1,542	191	308
On Flow (pcphpl)			468	1,265	478			1,542	191	308
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.23	0.63	0.24			0.69	0.10	0.15

Location	1	2	3	4	5	6	7	8	9	10



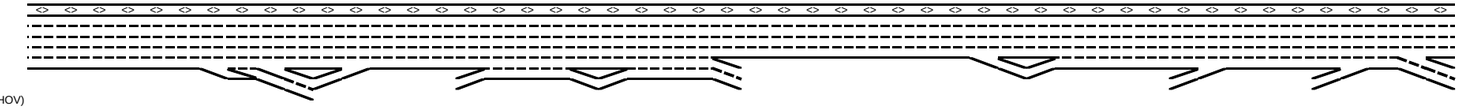
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,850		1,790	2,520		620			2,660
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,967		1,903	2,699		659			2,828
Off Flow (pcphpl)		983		1,903	1,350		659			1,414
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.49		0.95	0.60		0.33			0.71
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			6,969						5,637	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.159						0.194	
v_{12} (pcph)			1,110						1,093	
v_3 (pcph)										
v_{34} (pcph)			5,859						4,544	
v_{12a} (pcph)			2,788						2,255	
v_{R12a} (pcph)			3,256						2,446	
Merge Speed Index			0.38						0.33	
Merge Area Speed			56.2						57.3	
Outer Lanes Volume			2,091						1,691	
Outer Lanes Speed			59.3						60.7	
Segment Speed			57.9						59.3	
Merge v/c ratio			0.71						0.53	
Merge Density			27.1						21.5	
Merge LOS			C						C	

Location	1	2	3	4	5	6	7	8	9	10



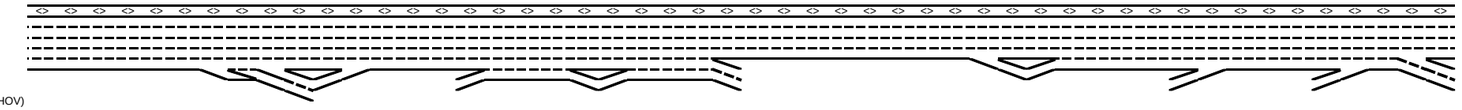
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		9,194					7,005			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.440					0.555			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		3,846					3,426			
v_3 (pcph)										
v_{34} (pcph)		5,348					3,579			
v_{12a} (pcph)		3,846					3,426			
Diverge Speed Index		0.61					0.49			
Diverge Area Speed		51.1					53.8			
Outer Lanes Volume		2,674					1,789			
Outer Lanes Speed		64.8					68.2			
Segment Speed		58.2					60.3			
Diverge v/c ratio		0.87					0.78			
Diverge Density		28.8					32.2			
Diverge LOS		D					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				9,210 1,190 8,610 1,790 10,400	8,610 450 6,540 2,520 9,060					7,540 290 5,170 2,660 7,830
On to Off Volume (vph)				*205*	*125*					*99*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				218	133					105
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				985	325					191
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,047	345					204

Location	1	2	3	4	5	6	7	8	9	10



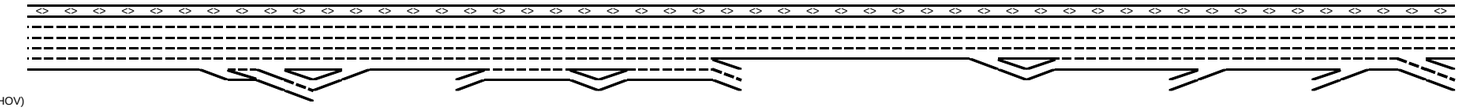
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				1,585	2,395					2,561
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				1,685	2,565					2,723
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				7,625	6,215					4,979
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				8,227	6,657					5,332

Location	1	2	3	4	5	6	7	8	9	10



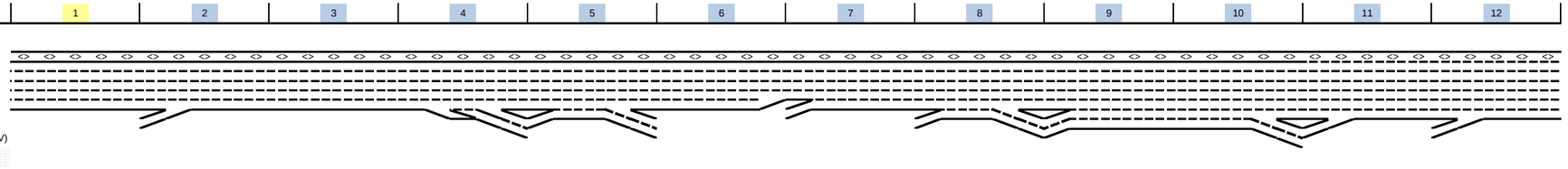
Key

<> Express Lane (HOV)

No Trucks

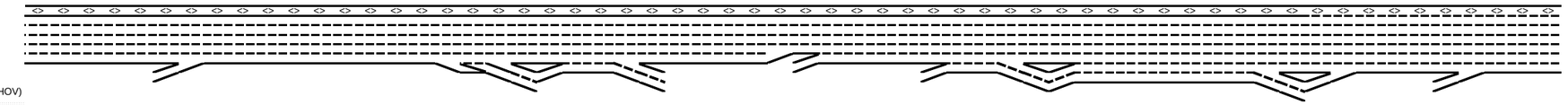
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				2,733	2,910					2,927
Non-Weave Flow				8,445	6,790					5,437
Segment Flow				11,177	9,700					8,364
Max Weave Length				4,996	4,018					6,126
Length Check				OK	OK					OK
Ideal Weave Capacity				2,131	2,209					1,920
f_{HV}				0.979	0.983					0.985
f_P				0.999	1.000					1.000
Capacity Condition 1				10,425	10,855					9,456
Capacity Condition 2				9,606	11,465					6,757
Weave v/c ratio				1.14	0.88					1.22
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				2,733	691					204
Weave LC Rate				3,351	1,326					186
Non-Weave LC Rate 1				1,931	1,615					428
Non-Weave LC Rate 2				3,572	3,203					2,901
Non-Weave LC Rate 3				163	-360					-4,174
Segment LC Rate				5,282	2,941					614
Weave Intensity Factor				0.463	0.287					0.266
Weave Speed				49.2	53.9					54.5
Non-Weave Speed				34.6	50.7					55.5
Segment Speed				37.3	51.6					55.1
Weave Density				-	37.6					-
Weave LOS				F	E					F
Summarize Segment Operations										
Segment v/c ratio	0.98	0.87	0.71	1.14	0.88	0.75	0.78	0.67	0.53	1.22
Segment Density	42.9	28.8	27.1	-	37.6	27.7	32.2	24.4	21.5	-
Segment LOS	E	D	C	F	E	D	D	C	C	F
Over Capacity				Weave						Weave

Project: John Wayne Airport Expansion **Scenario:** 2021 Baseline
Freeway Corridor: 405S **Peak Hour:** AM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*8,890*	8,890	10,220	10,220	9,080	7,610	7,610	9,620	9,360		5,950	6,150
On Ramp Volume		*1,330*			*1,110*		*2,010*	*2,060*	*480*		*240*	*530*
Off Ramp Volume				*1,140*	*2,580*			*2,320*	*2,700*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	8,890	10,220	10,220	10,220	10,190	7,610	9,620	11,680	9,840		6,190	6,680
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	9,522	10,946	10,946	10,946	10,914	8,151	10,304	12,510	10,617		6,698	7,228
GP Flow (pcphpl)	1,904	2,189	2,189	2,189	1,819	2,038	2,061	2,085	1,517		1,340	1,446
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*35.7*	*35.7*	*35.7*	*35.7*	*44.8*	*44.8*	*44.8*	*50.1*	*50.1*		*54.0*	*54.0*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.81	0.93	0.93	0.93	0.77	0.87	0.88	0.89	0.65		0.57	0.62
Speed (mph)	61.4	56.2	56.2	56.2	62.5	59.2	58.8	58.3	64.8		65.0	65.0
Density (pcphpl)	31.0	39.0	39.0	39.0	29.1	34.4	35.0	35.7	23.4		20.6	22.3
LOS	D	E	E	E	D	D	E	E	C		C	C
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		9,532			9,734		8,151	10,304	10,107		6,443	6,665
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.81			0.83		0.87	0.88	0.86		0.55	0.57
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				9,734	8,151	8,151		10,043	7,746			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.83	0.69	0.87		0.85	0.66			

Location	1	2	3	4	5	6	7	8	9	10	11	12



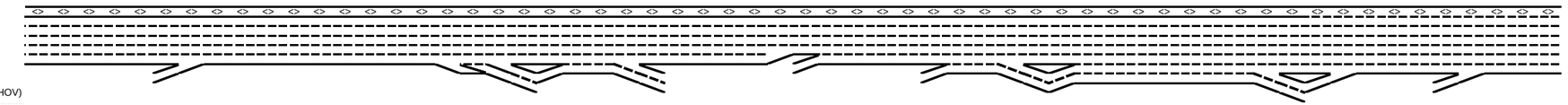
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,330			1,110		2,010	2,060	480		240	530
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,414			1,180		2,153	2,206	510		255	563
On Flow (pcphpl)		1,414			1,180		2,153	2,206	255		255	563
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.71			0.59		0.96	0.98	0.13		0.13	0.28

Location	1	2	3	4	5	6	7	8	9	10	11	12



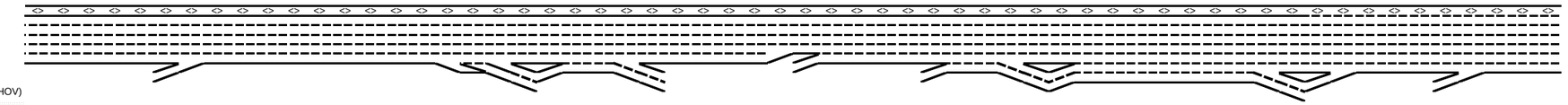
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,140	2,580			2,320	2,700			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,212	2,763			2,467	2,871			
Off Flow (pcphpl)				606	1,382			1,233	1,435			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.30	0.61			0.62	0.72			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		7,032									4,897	4,865
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.041									0.186	0.147
v_{12} (pcph)		289									910	717
v_3 (pcph)												
v_{34} (pcph)		6,743									3,986	4,148
v_{12a} (pcph)		2,813									1,959	1,946
v_{R12a} (pcph)		4,227									2,214	2,510
Merge Speed Index		0.55									0.32	0.29
Merge Area Speed		52.4									57.6	58.4
Outer Lanes Volume		2,110									1,469	1,460
Outer Lanes Speed		59.2									61.5	61.5
Segment Speed		55.6									59.8	60.1
Merge v/c ratio		0.92									0.48	0.55
Merge Density		34.3									19.3	17.4
Merge LOS		D									B	B

Location	1	2	3	4	5	6	7	8	9	10	11	12



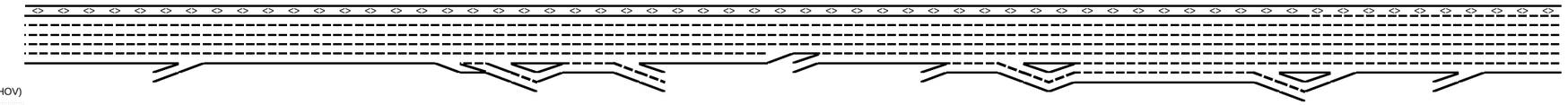
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				8,757								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.485								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				3,174								
v_3 (pcph)												
v_{34} (pcph)				5,583								
v_{12a} (pcph)				3,503								
Diverge Speed Index				0.54								
Diverge Area Speed				52.6								
Outer Lanes Volume				2,627								
Outer Lanes Speed				65.0								
Segment Speed				59.4								
Diverge v/c ratio				0.80								
Diverge Density				27.4								
Diverge LOS				C								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					9,080 1,110 7,610 2,580 10,190			9,620 2,060 9,360 2,320 11,680	9,360 480 7,140 2,700 9,840			
On to Off Volume (vph)					*281*			*409*	*132*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					299			435	140			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					829			1,651	348			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					881			1,768	370			

Location	1	2	3	4	5	6	7	8	9	10	11	12



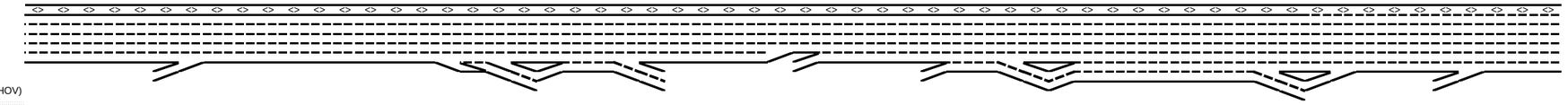
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					2,299			1,911	2,568			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					2,462			2,032	2,731			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					6,781			7,709	6,792			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					7,263			8,257	7,328			

Location	1	2	3	4	5	6	7	8	9	10	11	12



Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					3,344			3,800	3,101			
Non-Weave Flow					7,562			8,692	7,468			
Segment Flow					10,905			12,492	10,569			
Max Weave Length					5,655			5,629	3,947			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,038			1,958	2,086			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	1.000			
Capacity Condition 1					10,014			9,611	10,220			
Capacity Condition 2					7,693			7,747	11,687			
Weave v/c ratio					1.39			1.58	1.01			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					881			1,768	2,731			
Weave LC Rate					1,283			1,751	2,713			
Non-Weave LC Rate 1					1,448			1,099	846			
Non-Weave LC Rate 2					3,375			3,627	3,354			
Non-Weave LC Rate 3					-1,229			-3,395	-3,689			
Segment LC Rate					2,731			2,849	3,559			
Weave Intensity Factor					0.349			0.892	1.063			
Weave Speed					52.1			41.4	39.2			
Non-Weave Speed					48.2			40.3	35.2			
Segment Speed					49.3			40.6	36.3			
Weave Density					-			-	-			
Weave LOS					F			F	F			
Summarize Segment Operations												
Segment v/c ratio	0.81	0.92	0.93	0.80	1.39	0.87	0.88	1.58	1.01		0.48	0.55
Segment Density	31.0	34.3	39.0	27.4	-	34.4	35.0	-	-		19.3	17.4
Segment LOS	D	D	E	C	F	D	E	F	F		B	B
Over Capacity					Weave			Weave	Weave			

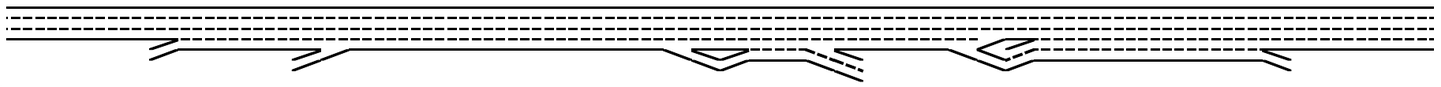
Project: John Wayne Airport Expansion **Scenario:** 2021 Baseline
Freeway Corridor: 73N **Peak Hour:** PM

Location	1	2	3	4	5	6	7	8	9	10

Key
<> Express Lane (HOV)
No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*4,940*	4,940	6,770	7,660	7,660	7,100	8,070	6,840		7,500
On Ramp Volume		*1,830*	*890*			*2,380*		*1,220*		
Off Ramp Volume					*560*	*1,410*	*1,230*	*560*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	4,940	6,770	7,660	7,660	7,660	9,480	8,070	8,060		7,500
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,261	7,210	8,158	8,158	8,158	10,096	8,595	8,584		7,988
GP Flow (pcphpl)	1,754	1,803	2,039	2,039	2,039	2,019	2,149	1,717		1,997
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*57.9*	*57.9*	*57.9*	*65.1*	*65.1*	*64.5*	*64.5*	*60.4*		*60.4*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.75	0.77	0.87	0.87	0.87	0.86	0.91	0.73		0.85
Speed (mph)	63.2	62.7	59.2	59.2	59.2	59.6	57.1	63.6		59.9
Density (pcphpl)	27.7	28.7	34.4	34.4	34.4	33.9	37.7	27.0		33.3
LOS	D	D	D	D	D	D	E	D		D
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		5,264	7,212			7,566		7,285		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.75	0.77			0.80		1.03		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					7,563	8,595	7,285	7,989		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.80	0.91	1.03	1.13		

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,830	890			2,380		1,220		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,946	946			2,530		1,299		
On Flow (pcphpl)		1,946	946			2,530		650		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.97	0.47			1.27		0.29		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					560	1,410	1,230	560		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					595	1,502	1,310	595		
Off Flow (pcphpl)					595	751	1,310	595		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.30	0.33	0.60	0.26		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			7,212							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.100							
v_{12} (pcph)			718							
v_3 (pcph)										
v_{34} (pcph)			6,494							
v_{12a} (pcph)			2,885							
v_{R12a} (pcph)			3,831							
Merge Speed Index			0.47							
Merge Area Speed			54.1							
Outer Lanes Volume			2,164							
Outer Lanes Speed			59.0							
Segment Speed			56.6							
Merge v/c ratio			0.83							
Merge Density			32.4							
Merge LOS			D							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					8,158		8,595			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.529		0.485			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					3,893		4,486			
v_3 (pcph)										
v_{34} (pcph)					4,265		4,109			
v_{12a} (pcph)					3,893		4,486			
Diverge Speed Index					0.48		-			
Diverge Area Speed					53.9		-			
Outer Lanes Volume					2,133					
Outer Lanes Speed					66.9					
Segment Speed					60.0					
Diverge v/c ratio					0.88		1.02			
Diverge Density					35.9		-			
Diverge LOS					E		F			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,100 2,380 8,070 1,410 9,480		6,840 1,220 7,500 560 8,060		
On to Off Volume (vph)						*354*		*85*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						376		90		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						2,026		1,135		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						2,154		1,209		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,056		475		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,125		506		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						6,044		6,365		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,437		6,778		

Location	1	2	3	4	5	6	7	8	9	10

Key

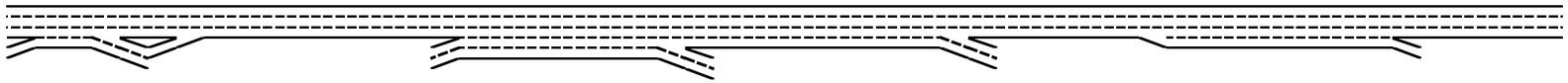
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						3,279		1,715		
Non-Weave Flow						6,813		6,869		
Segment Flow						10,092		8,584		
Max Weave Length						5,852		2,968		
Length Check						OK		OK		
Ideal Weave Capacity						2,030		2,238		
f_{HV}						0.989		0.988		
f_P						0.998		0.998		
Capacity Condition 1						8,014		6,624		
Capacity Condition 2						7,289		17,285		
Weave v/c ratio						1.37		1.28		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						2,154		1,012		
Weave LC Rate						2,671		1,521		
Non-Weave LC Rate 1						1,541		1,650		
Non-Weave LC Rate 2						3,208		3,221		
Non-Weave LC Rate 3						-818		-661		
Segment LC Rate						4,212		3,171		
Weave Intensity Factor						0.468		0.408		
Weave Speed						49.1		50.5		
Non-Weave Speed						37.4		44.0		
Segment Speed						40.5		45.1		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.75	0.77	0.83	0.87	0.88	1.37	1.02	1.28		0.85
Segment Density	27.7	28.7	32.4	34.4	35.9	-	-	-		33.3
Segment LOS	D	D	D	D	E	F	F	F		D
Over Capacity						On Ramp Roadway Weave	Out GP Lanes Diverge	In GP Lanes Out GP Lanes Weave		

Project: John Wayne Airport Expansion **Scenario:** 2021 Baseline
Freeway Corridor: 73S **Peak Hour:** PM

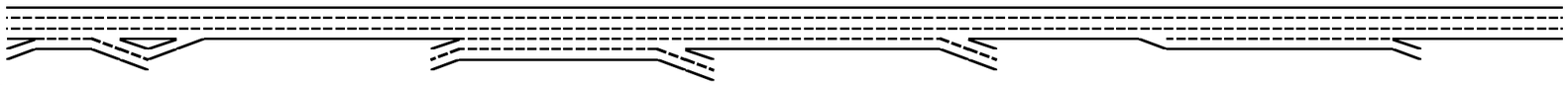
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,230	3,680	4,910	4,910		6,020	6,020	5,090	5,090		4,520
On Ramp Volume	*660*	*1,230*		*2,090*							
Off Ramp Volume	*1,210*			*980*			*930*		*570*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	4,890	4,910	4,910	7,000		6,020	6,020	5,090	5,090		4,520
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,208	5,229	5,229	7,455		6,411	6,411	5,421	5,421		4,814
GP Flow (pcphpl)	1,302	1,743	1,743	1,491		1,603	1,603	1,807	1,084		1,605
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*63.8*	*63.8*	*63.9*	*63.9*		*72.7*	*72.7*	*72.7*	*72.7*		*72.7*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.55	0.74	0.74	0.63		0.68	0.68	0.77	0.46		0.68
Speed (mph)	65.0	63.3	63.3	64.9		64.4	64.4	62.7	65.0		64.4
Density (pcphpl)	20.0	27.5	27.5	23.0		24.9	24.9	28.8	16.7		24.9
LOS	C	D	D	C		C	C	D	B		C
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	4,506	3,919		5,229					5,421		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.64	0.56		0.74					0.77		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	3,919			6,413			5,423		4,815		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.56			0.91			0.77		0.51		

Location	2	3	4	5	6	7	8	9	10	11	12



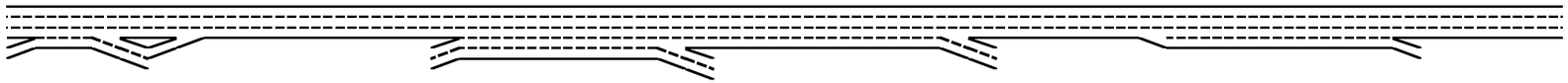
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	660	1,230		2,090							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	702	1,310		2,226							
On Flow (pcphpl)	702	1,310		1,113							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.35	0.60		0.49							

Location	2	3	4	5	6	7	8	9	10	11	12



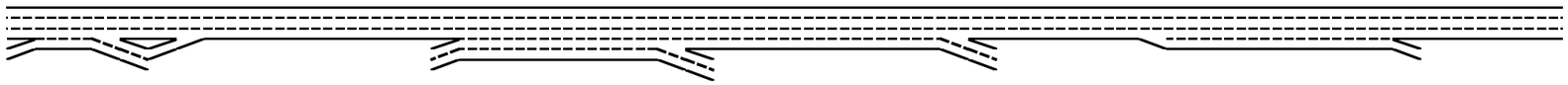
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	1,210			980			930		570		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	1,289			1,042			989		606		
Off Flow (pcphpl)	644			521			494		606		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.29			0.26			0.25		0.30		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		3,919									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,331									
v_3 (pcph)		1,588									
v_{34} (pcph)											
v_{12a} (pcph)		2,331									
v_{R12a} (pcph)		3,641									
Merge Speed Index		0.40									
Merge Area Speed		55.8									
Outer Lanes Volume		1,588									
Outer Lanes Speed		61.1									
Segment Speed		57.3									
Merge v/c ratio		0.79									
Merge Density		29.4									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



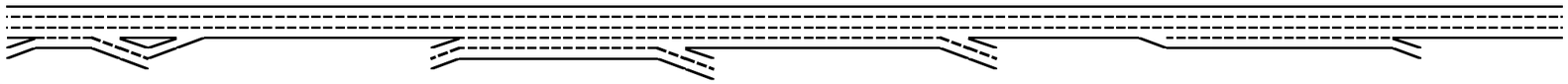
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							6,411				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.554				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,399				
v_3 (pcph)											
v_{34} (pcph)							4,013				
v_{12a} (pcph)							2,565				
Diverge Speed Index							0.52				
Diverge Area Speed							53.1				
Outer Lanes Volume							1,923				
Outer Lanes Speed							67.7				
Segment Speed							61.0				
Diverge v/c ratio							0.58				
Diverge Density							25.0				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,230 660 3,680 1,210 4,890			4,910 2,090 6,020 980 7,000							
On to Off Volume (vph)	*163*			*293*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	174			311							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	497			1,797							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	528			1,914							

Location	2	3	4	5	6	7	8	9	10	11	12



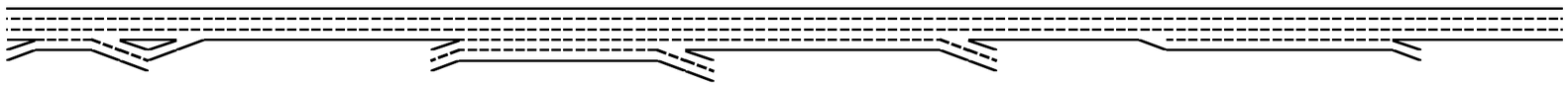
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	1,047			687							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	1,115			731							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	3,183			4,223							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	3,390			4,497							

Location	2	3	4	5	6	7	8	9	10	11	12



Key

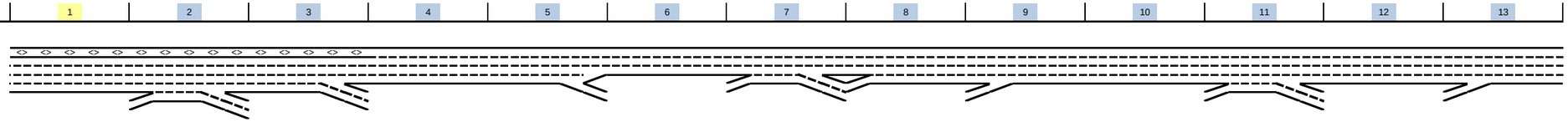
<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,643			2,645							
Non-Weave Flow	3,564			4,808							
Segment Flow	5,207			7,453							
Max Weave Length	5,751			4,614							
Length Check	OK			OK							
Ideal Weave Capacity	2,040			2,086							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,045			6,168							
Capacity Condition 2	7,512			9,721							
Weave v/c ratio	0.85			1.19							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	528			731							
Weave LC Rate	1,115			1,107							
Non-Weave LC Rate 1	1,078			1,041							
Non-Weave LC Rate 2	2,484			2,761							
Non-Weave LC Rate 3	-1,297			-1,906							
Segment LC Rate	2,192			2,148							
Weave Intensity Factor	0.276			0.367							
Weave Speed	54.2			51.6							
Non-Weave Speed	52.9			47.8							
Segment Speed	53.3			49.1							
Weave Density	32.6			-							
Weave LOS	D			F							
Summarize Segment Operations											
Segment v/c ratio	0.85	0.79	0.74	1.19		0.68	0.58	0.77	0.46		0.68
Segment Density	32.6	29.4	27.5	-		24.9	25.0	28.8	16.7		24.9
Segment LOS	D	D	D	F		C	C	D	B		C
Over Capacity				Weave							

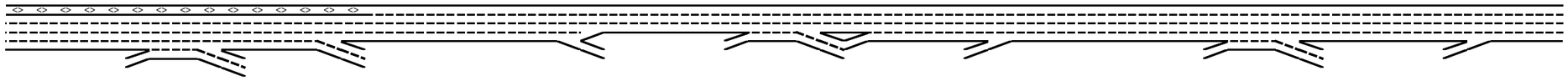
Project: John Wayne Airport Expansion **Scenario:** 2021 Baseline

Freeway Corridor: 55S **Peak Hour:** PM



Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*7,950*	7,950	7,240	6,170	6,170	5,540	5,540	5,120	5,740	6,970	6,970	6,430	6,430
On Ramp Volume		*900*					*1,670*	*620*	*1,230*		*1,210*		*250*
Off Ramp Volume		*1,610*	*1,070*		*630*		*2,090*				*1,750*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	7,950	8,850	7,240	6,170	6,170	5,540	7,210	5,740	6,970	6,970	8,180	6,430	6,680
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,456	9,414	7,701	6,608	6,608	5,934	7,722	6,148	7,465	7,465	8,761	6,887	7,155
GP Flow (pcphpl)	2,114	1,883	1,925	1,652	1,652	1,978	1,931	1,537	1,866	1,866	1,752	1,722	1,789
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*55.7*	*55.7*	*63.9*	*63.9*	*63.9*	*63.9*	*58.0*	*51.0*	*51.0*	*51.0*	*51.0*	*65.1*	*65.1*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.90	0.80	0.82	0.70	0.70	0.84	0.82	0.65	0.79	0.79	0.75	0.73	0.76
Speed (mph)	57.8	61.7	61.1	64.1	64.1	60.3	61.0	64.7	61.9	61.9	63.2	63.5	62.9
Density (pcphpl)	36.6	30.5	31.5	25.8	25.8	32.8	31.6	23.7	30.1	30.1	27.7	27.1	28.5
LOS	E	D	D	C	C	D	D	C	D	D	D	D	D
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,457					5,934	5,489	6,148		7,465		6,889
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.90					0.84	0.78	0.65		0.79		0.73
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		7,701	6,563		5,939		5,484				6,901		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.82	0.93		0.84		0.78				0.73		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



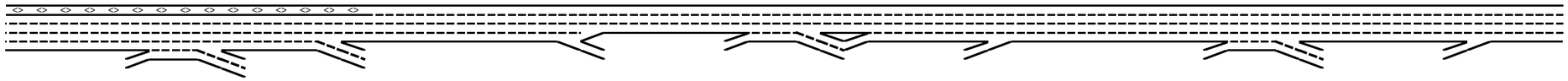
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		900					1,670	620	1,230		1,210		250
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		957					1,789	659	1,317		1,296		266
On Flow (pcphpl)		957					1,789	659	1,317		1,296		266
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.48					0.79	0.33	0.60		0.58		0.13

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



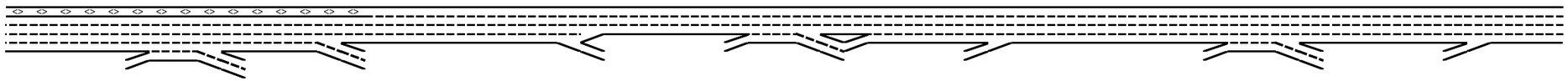
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		1,610	1,070		630		2,090				1,750		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		1,713	1,138		670		2,239				1,861		
Off Flow (pcphpl)		856	569		670		1,119				930		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.38	0.25		0.33		0.50				0.47		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									6,148				6,889
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.053				0.185
v_{12} (pcph)									327				1,272
v_3 (pcph)													
v_{34} (pcph)									5,821				5,617
v_{12a} (pcph)									2,459				2,756
v_{R12a} (pcph)									3,777				3,021
Merge Speed Index									0.42				0.36
Merge Area Speed									55.3				56.7
Outer Lanes Volume									1,844				2,067
Outer Lanes Speed									60.2				59.4
Segment Speed									57.6				58.2
Merge v/c ratio									0.82				0.66
Merge Density									30.3				25.5
Merge LOS									D				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



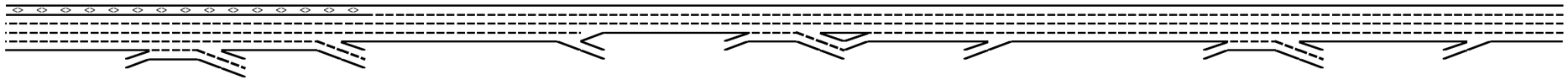
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			7,701		6,608								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.515		0.564								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,845		3,259								
v_3 (pcph)													
v_{34} (pcph)			4,857		3,349								
v_{12a} (pcph)			3,080		3,259								
Diverge Speed Index			0.27		0.49								
Diverge Area Speed			58.8		53.8								
Outer Lanes Volume			2,310		1,675								
Outer Lanes Speed			66.2		68.7								
Segment Speed			63.0		60.4								
Diverge v/c ratio			0.70		0.74								
Diverge Density			33.7		30.6								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		7,950 900 7,240 1,610 8,850					5,540 1,670 5,120 2,090 7,210				6,970 1,210 6,430 1,750 8,180		
On to Off Volume (vph)		*164*					*484*				*259*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		174					515				275		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		736					1,186				951		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		783					1,270				1,019		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



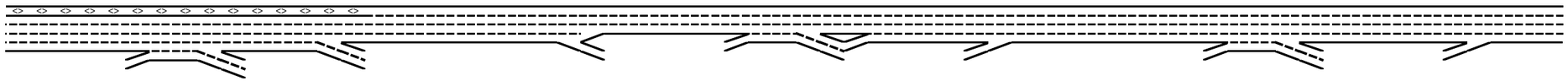
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		1,446					1,606				1,491		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		1,538					1,720				1,585		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		6,504					3,934				5,479		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		6,918					4,214				5,868		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



Key

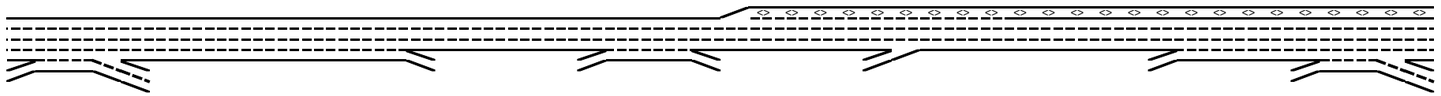
<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,321					2,990				2,604		
Non-Weave Flow		7,092					4,728				6,143		
Segment Flow		9,413					7,718				8,747		
Max Weave Length		5,018					6,540				5,559		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,114					2,023				2,004		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.997				0.998		
Capacity Condition 1		8,362					5,950				7,876		
Capacity Condition 2		9,624					6,074				7,920		
Weave v/c ratio		1.11					1.27				1.09		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		783					1,270				1,019		
Weave LC Rate		1,401					2,077				1,288		
Non-Weave LC Rate 1		1,739					1,624				1,059		
Non-Weave LC Rate 2		3,271					2,743				3,059		
Non-Weave LC Rate 3		-246					0				-2,286		
Segment LC Rate		3,141					3,701				2,347		
Weave Intensity Factor		0.331					0.333				0.430		
Weave Speed		52.6					52.5				50.0		
Non-Weave Speed		48.1					43.5				47.2		
Segment Speed		49.1					46.6				48.0		
Weave Density		-					-				-		
Weave LOS		F					F				F		
Summarize Segment Operations													
Segment v/c ratio	0.90	1.11	0.70	0.70	0.74	0.84	1.27	0.65	0.82	0.79	1.09	0.73	0.66
Segment Density	36.6	-	33.7	25.8	30.6	32.8	-	23.7	30.3	30.1	-	27.1	25.5
Segment LOS	E	F	D	C	D	D	F	C	D	D	F	D	C
Over Capacity		Weave					Weave				Weave		

Project: John Wayne Airport Expansion **Scenario:** 2021 Baseline
Freeway Corridor: 55N **Peak Hour:** PM

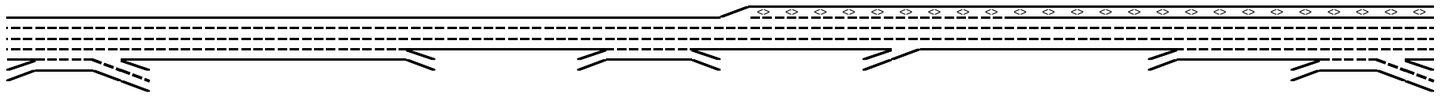
Location	2	3	4	5	6	7	8	9	10	12



Key
<> Express Lane (HOV)
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Define Freeway Segment										
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	4,080	2,610	2,610	2,180	2,180	2,470	2,470	3,040	3,040	3,950
On Ramp Volume	*970*				*1,410*		*570*		*910*	*1,100*
Off Ramp Volume	*2,440*		*430*		*1,120*					*1,050*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	5,050	2,610	2,610	2,180	3,590	2,470	3,040	3,040	3,950	5,050
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	5,409	2,795	2,795	2,335	3,845	2,646	3,256	3,256	4,202	5,372
GP Flow (pcphpl)	1,082	699	699	778	961	882	1,085	1,085	1,050	1,074
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*63.2*	*63.2*	*63.2*	*62.3*	*60.5*	*60.5*	*13.5*	*13.5*	*13.5*	*14.0*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

Location	2	3	4	5	6	7	8	9	10	12

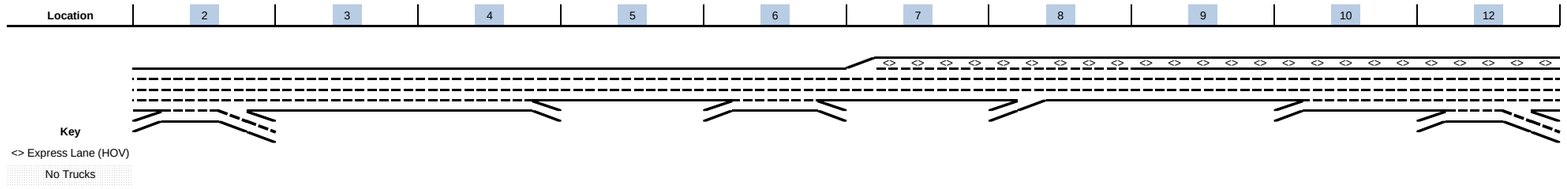


Key

<> Express Lane (HOV)

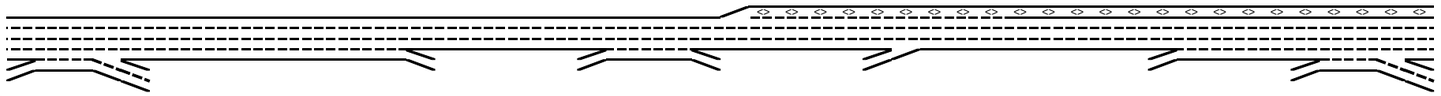
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	970				1,410		570		910	1,100
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,031				1,510		606		968	1,170
On Flow (pcphpl)	1,031				1,510		606		968	1,170
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.52				0.67		0.30		0.48	0.52



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	2,440		430		1,120					1,100
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	2,613		457		1,200					1,170
Off Flow (pcphpl)	1,307		457		1,200					585
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.58		0.23		0.53					0.29
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							2,650			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							1,611			
v_3 (pcph)							1,039			
v_{34} (pcph)										
v_{12a} (pcph)							1,611			
v_{R12a} (pcph)							2,217			
Merge Speed Index							0.28			
Merge Area Speed							58.5			
Outer Lanes Volume							1,039			
Outer Lanes Speed							63.1			
Segment Speed							59.9			
Merge v/c ratio							0.48			
Merge Density							15.7			
Merge LOS							B			

Location	2	3	4	5	6	7	8	9	10	12



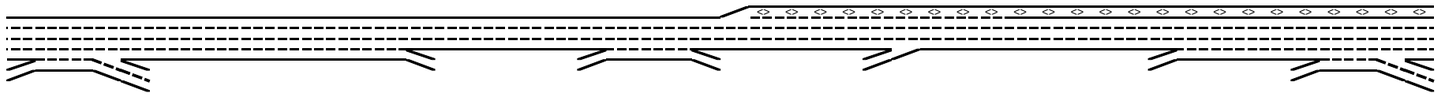
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			2,795							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.669							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			1,477							
v_3 (pcph)										
v_{34} (pcph)			1,319							
v_{12a} (pcph)			1,477							
Diverge Speed Index			0.47							
Diverge Area Speed			54.2							
Outer Lanes Volume			659							
Outer Lanes Speed			71.3							
Segment Speed			61.1							
Diverge v/c ratio			0.34							
Diverge Density			3.5							
Diverge LOS			A							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	4,080 970 2,610 2,440 5,050				2,180 1,410 2,470 1,120 3,590					3,950 1,100 4,000 1,050 5,050
On to Off Volume (vph)	*469*				*440*					*229*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	498				468					243
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	501				970					871
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	533				1,039					927

Location	2	3	4	5	6	7	8	9	10	12



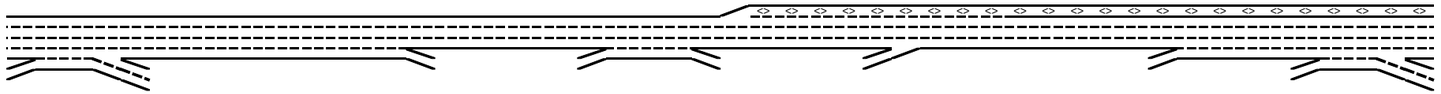
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,971				680					871
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	2,111				728					927
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	2,109				1,500					3,079
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	2,259				1,606					3,275

Location	2	3	4	5	6	7	8	9	10	12



Key

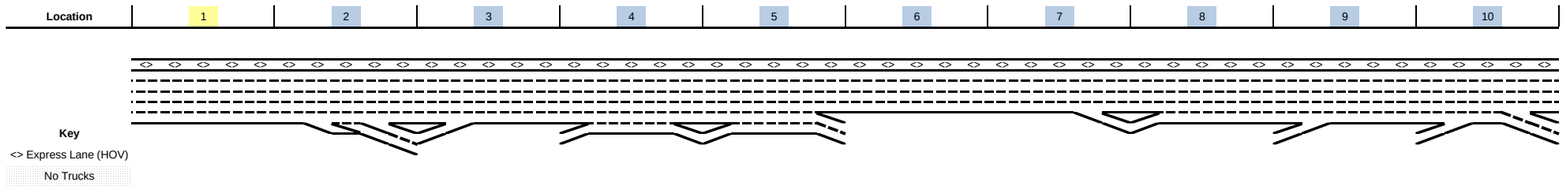
<> Express Lane (HOV)

No Trucks

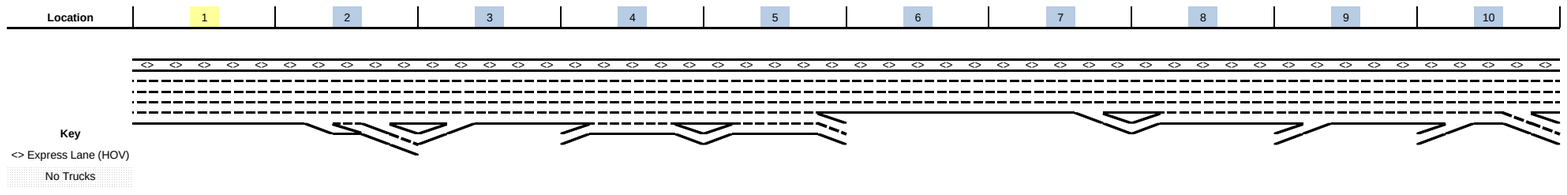
Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,644				1,767					1,854
Non-Weave Flow	2,757				2,074					3,518
Segment Flow	5,401				3,842					5,371
Max Weave Length	7,705				7,364					6,072
Length Check	OK				OK					OK
Ideal Weave Capacity	1,821				1,817					2,036
f_{HV}	0.984				0.984					0.990
f_P	0.999				0.995					0.998
Capacity Condition 1	7,160				5,338					8,044
Capacity Condition 2	4,820				5,107					6,871
Weave v/c ratio	1.10				0.74					0.77
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	533				1,767					927
Weave LC Rate	703				1,847					1,557
Non-Weave LC Rate 1	223				66					1,019
Non-Weave LC Rate 2	2,304				2,152					2,473
Non-Weave LC Rate 3	-3,708				-4,016					-1,374
Segment LC Rate	926				1,913					2,576
Weave Intensity Factor	0.257				0.777					0.280
Weave Speed	54.8				43.1					54.1
Non-Weave Speed	54.7				46.1					51.9
Segment Speed	54.7				44.7					52.6
Weave Density	-				28.6					25.5
Weave LOS	F				D					C
Summarize Segment Operations										
Segment v/c ratio	1.10	0.30	0.34	0.33	0.74	0.38	0.48	0.46	0.45	0.77
Segment Density	-	10.8	3.5	12.0	28.6	13.6	15.7	16.7	16.2	25.5
Segment LOS	F	A	A	B	D	B	B	B	B	C
Over Capacity	Weave									

Project: John Wayne Airport Expansion **Scenario:** 2021 Baseline

Freeway Corridor: 405N **Peak Hour:** PM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*7,600*	7,600	6,560	7,300	7,710	6,300	6,300	5,710	6,820	7,110
On Ramp Volume			*740*	*1,120*	*1,350*			*1,110*	*290*	*540*
Off Ramp Volume		*1,040*		*710*	*2,760*		*590*			*2,750*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	7,600	7,600	7,300	8,420	9,060	6,300	6,300	6,820	7,110	7,650
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,224	8,224	7,876	9,085	9,704	6,748	6,748	7,305	7,615	8,194
GP Flow (pcphpl)	1,645	1,645	1,575	1,514	1,617	1,687	1,687	1,461	1,523	1,366
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*23.5*	*23.5*	*22.3*	*20.6*	*26.8*	*26.8*	*26.8*	*26.8*	*11.4*	*11.3*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.70	0.70	0.67	0.64	0.69	0.72	0.72	0.62	0.65	0.58
Speed (mph)	64.2	64.2	64.6	64.8	64.3	63.8	63.8	64.9	64.8	65.0
Density (pcphpl)	25.6	25.6	24.4	23.4	25.1	26.4	26.4	22.5	23.5	21.0
LOS	C	C	C	C	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			7,090	7,894	8,268			6,116	7,307	7,619
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.60	0.67	0.70			0.65	0.62	0.65
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		7,118		8,330	6,748		6,120			5,270
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.61		0.71	0.72		0.65			0.56


Location
1
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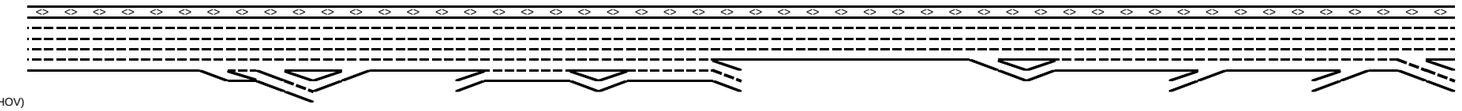
Key
<> Express Lane (HOV)
No Trucks
Name
Culver On to Jamboree Off
Jamboree Off Ramp
Jamboree N On Ramp
Jamboree S On to McArthur Off
McArthur On to 55 N&S Off
55 Off to Bristol Off
Bristol/Ave Arts Off Ramp
On Ramp from 55 S
Bristol N On Ramp
Bristol S On Ramp to S Coast Off

Location	1	2	3	4	5	6	7	8	9	10



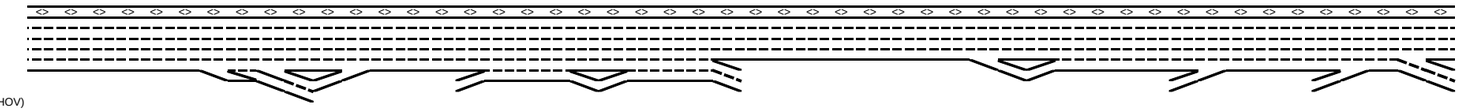
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			740	1,120	1,350			1,110	290	540
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			787	1,191	1,435			1,189	308	574
On Flow (pcphpl)			787	1,191	1,435			1,189	308	574
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.39	0.60	0.72			0.53	0.15	0.29

Location	1	2	3	4	5	6	7	8	9	10



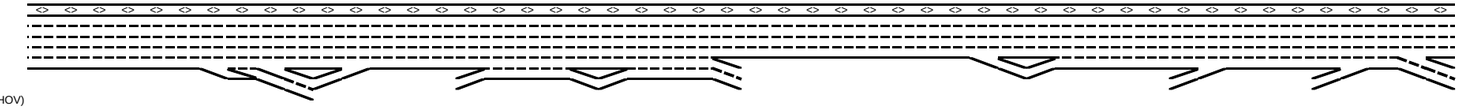
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,040		710	2,760		590			2,750
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,106		755	2,956		627			2,924
Off Flow (pcphpl)		553		755	1,478		627			1,462
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.28		0.38	0.66		0.31			0.73
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			5,175						5,334	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.119						0.179	
v_{12} (pcph)			618						956	
v_3 (pcph)										
v_{34} (pcph)			4,557						4,378	
v_{12a} (pcph)			2,070						2,134	
v_{R12a} (pcph)			2,857						2,442	
Merge Speed Index			0.35						0.33	
Merge Area Speed			57.0						57.4	
Outer Lanes Volume			1,553						1,600	
Outer Lanes Speed			61.2						61.0	
Segment Speed			59.1						59.4	
Merge v/c ratio			0.62						0.53	
Merge Density			23.9						21.4	
Merge LOS			C						C	

Location	1	2	3	4	5	6	7	8	9	10



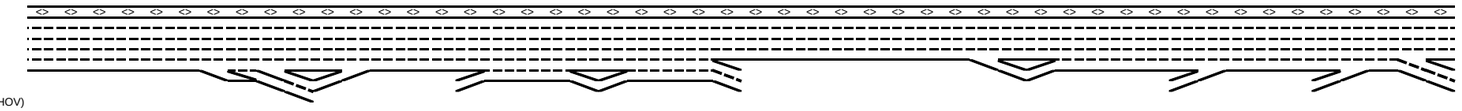
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		6,579					6,748			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.545					0.562			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		2,529					3,296			
v_3 (pcph)										
v_{34} (pcph)		4,050					3,452			
v_{12a} (pcph)		2,632					3,296			
Diverge Speed Index		0.53					0.48			
Diverge Area Speed		52.9					53.9			
Outer Lanes Volume		1,974					1,726			
Outer Lanes Speed		67.5					68.5			
Segment Speed		60.8					60.5			
Diverge v/c ratio		0.60					0.75			
Diverge Density		18.4					31.1			
Diverge LOS		B					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				7,300 1,120 7,710 710 8,420	7,710 1,350 6,300 2,760 9,060					7,110 540 4,900 2,750 7,650
On to Off Volume (vph)				*94*	*411*					*194*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				100	437					206
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				1,026	939					346
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,090	998					368

Location	1	2	3	4	5	6	7	8	9	10



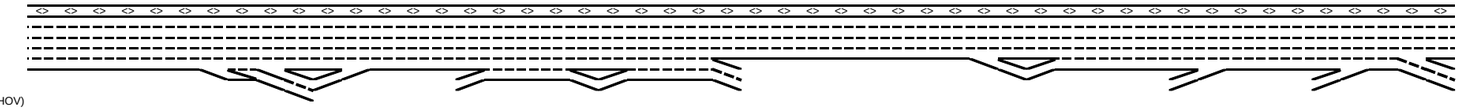
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				616	2,349					2,556
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				654	2,516					2,717
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				6,684	5,361					4,554
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				7,212	5,742					4,878

Location	1	2	3	4	5	6	7	8	9	10



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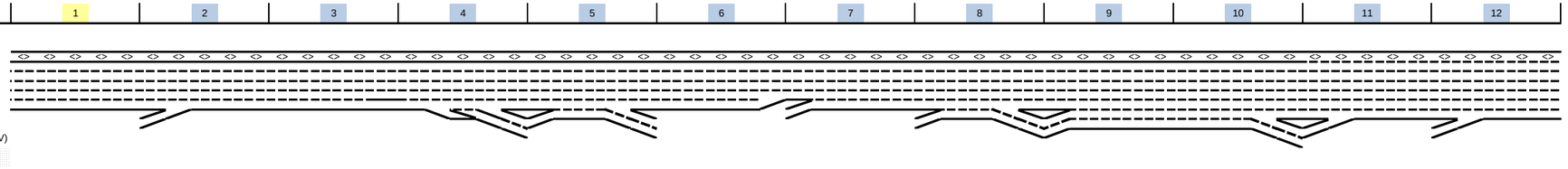
<> Express Lane (HOV)

No Trucks

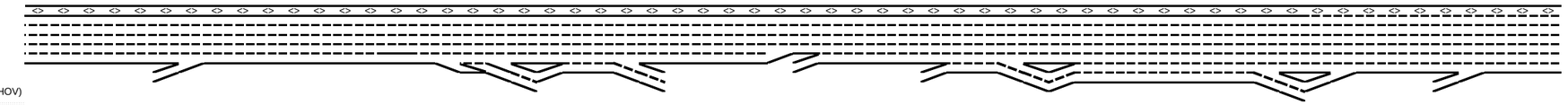
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				1,745	3,514					3,085
Non-Weave Flow				7,313	6,179					5,084
Segment Flow				9,057	9,693					8,169
Max Weave Length				4,461	4,698					6,432
Length Check				OK	OK					OK
Ideal Weave Capacity				2,172	2,157					1,896
f_{HV}				0.979	0.984					0.986
f_P				0.999	0.999					1.000
Capacity Condition 1				10,613	10,600					9,342
Capacity Condition 2				12,177	9,490					6,262
Weave v/c ratio				0.83	1.00					1.29
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				1,745	1,996					368
Weave LC Rate				2,363	2,632					350
Non-Weave LC Rate 1				1,698	1,489					355
Non-Weave LC Rate 2				3,320	3,067					2,823
Non-Weave LC Rate 3				-250	-580					-4,258
Segment LC Rate				4,061	4,121					705
Weave Intensity Factor				0.376	0.374					0.297
Weave Speed				51.3	51.4					53.6
Non-Weave Speed				43.7	41.3					54.5
Segment Speed				45.0	44.5					54.1
Weave Density				40.2	-					-
Weave LOS				E	F					F
Summarize Segment Operations										
Segment v/c ratio	0.70	0.60	0.62	0.83	1.00	0.72	0.75	0.62	0.53	1.29
Segment Density	25.6	18.4	23.9	40.2	-	26.4	31.1	22.5	21.4	-
Segment LOS	C	B	C	E	F	D	D	C	C	F
Over Capacity					Weave					Weave

Project: John Wayne Airport Expansion **Scenario:** 2021 Baseline
Freeway Corridor: 405S **Peak Hour:** PM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*5,980*	5,980	7,060	7,060	6,030	6,280	6,280	7,890	8,030		5,967	6,492
On Ramp Volume		*1,080*			*1,160*		*1,610*	*1,420*	*910*		*630*	*1,100*
Off Ramp Volume				*1,030*	*910*			*1,280*	*1,780*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	5,980	7,060	7,060	7,060	7,190	6,280	7,890	9,310	8,940		6,597	7,592
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	6,405	7,562	7,562	7,562	7,701	6,726	8,451	9,972	9,646		7,138	8,215
GP Flow (pcphpl)	1,281	1,512	1,512	1,512	1,283	1,682	1,690	1,662	1,378		1,428	1,643
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*67.6*	*67.6*	*67.6*	*67.6*	*70.8*	*70.8*	*70.8*	*50.3*	*50.3*		*23.7*	*23.7*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.55	0.64	0.64	0.64	0.55	0.72	0.72	0.71	0.59		0.61	0.70
Speed (mph)	65.0	64.8	64.8	64.8	65.0	63.9	63.8	64.0	65.0		65.0	64.2
Density (pcphpl)	19.7	23.3	23.3	23.3	19.7	26.3	26.5	26.0	21.2		22.0	25.6
LOS	C	C	C	C	C	D	D	C	C		C	C
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		6,413			6,468		6,726	8,451	8,678		6,468	7,046
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.55			0.55		0.72	0.72	0.74		0.55	0.60
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				6,467	6,726	6,726		8,611	7,753			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.55	0.57	0.72		0.73	0.66			

Location	1	2	3	4	5	6	7	8	9	10	11	12



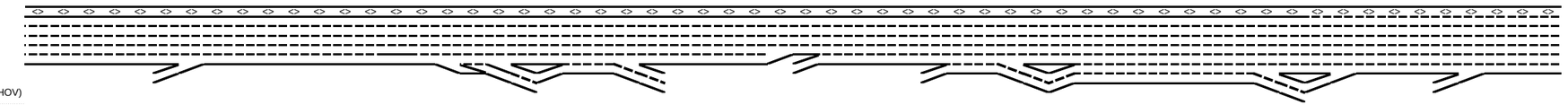
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,080			1,160		1,610	1,420	910		630	1,100
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,148			1,233		1,724	1,521	967		670	1,169
On Flow (pcphpl)		1,148			1,233		1,724	1,521	484		670	1,169
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.57			0.62		0.77	0.68	0.24		0.33	0.58

Location	1	2	3	4	5	6	7	8	9	10	11	12



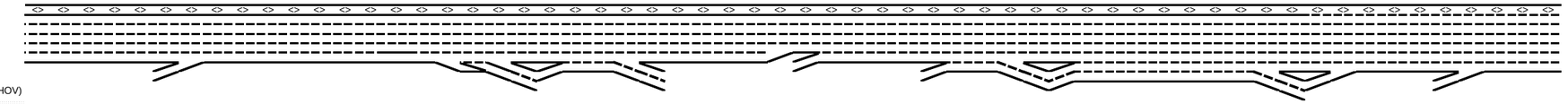
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,030	910			1,280	1,780			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,095	975			1,361	1,892			
Off Flow (pcphpl)				548	487			680	946			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.27	0.22			0.34	0.47			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		4,874									4,916	5,143
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.074									0.134	0.072
v_{12} (pcph)		362									659	368
v_3 (pcph)												
v_{34} (pcph)		4,512									4,257	4,775
v_{12a} (pcph)		1,950									1,966	2,057
v_{R12a} (pcph)		3,098									2,636	3,227
Merge Speed Index		0.37									0.34	0.34
Merge Area Speed		56.5									57.2	57.2
Outer Lanes Volume		1,462									1,475	1,543
Outer Lanes Speed		61.5									61.5	61.2
Segment Speed		58.8									59.4	59.1
Merge v/c ratio		0.67									0.57	0.70
Merge Density		25.7									22.4	22.7
Merge LOS		C									C	C

Location	1	2	3	4	5	6	7	8	9	10	11	12



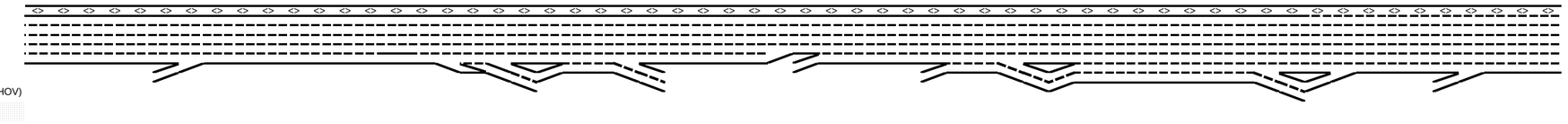
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				6,049								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.558								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				2,383								
v_3 (pcph)												
v_{34} (pcph)				3,666								
v_{12a} (pcph)				2,420								
Diverge Speed Index				0.53								
Diverge Area Speed				52.9								
Outer Lanes Volume				1,815								
Outer Lanes Speed				68.1								
Segment Speed				61.1								
Diverge v/c ratio				0.55								
Diverge Density				18.1								
Diverge LOS				B								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					6,030 1,160 6,280 910 7,190			7,890 1,420 8,030 1,280 9,310	8,030 910 7,160 1,780 8,940			
On to Off Volume (vph)					*147*			*195*	*181*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					156			208	193			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					1,013			1,225	729			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					1,077			1,312	775			

Location	1	2	3	4	5	6	7	8	9	10	11	12



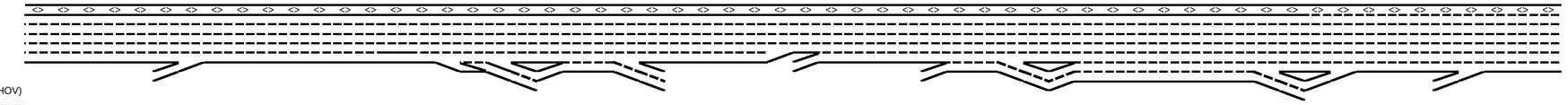
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					763			1,085	1,599			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					817			1,153	1,700			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					5,267			6,805	6,431			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					5,641			7,289	6,939			

Location	1	2	3	4	5	6	7	8	9	10	11	12



Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					1,895			2,465	2,475			
Non-Weave Flow					5,797			7,496	7,132			
Segment Flow					7,692			9,961	9,606			
Max Weave Length					5,015			5,027	3,568			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,087			2,004	2,115			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	0.999			
Capacity Condition 1					10,253			9,834	10,353			
Capacity Condition 2					9,574			9,520	13,299			
Weave v/c ratio					0.79			1.03	0.91			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					1,077			1,312	1,700			
Weave LC Rate					1,479			1,294	1,682			
Non-Weave LC Rate 1					1,085			852	777			
Non-Weave LC Rate 2					2,982			3,361	3,279			
Non-Weave LC Rate 3					-1,821			-3,682	-3,770			
Segment LC Rate					2,564			2,146	2,459			
Weave Intensity Factor					0.332			0.713	0.794			
Weave Speed					52.5			44.2	42.9			
Non-Weave Speed					49.9			46.0	43.5			
Segment Speed					50.5			45.5	43.4			
Weave Density					30.5			-	44.3			
Weave LOS					D			F	E			
Summarize Segment Operations												
Segment v/c ratio	0.55	0.67	0.64	0.55	0.79	0.72	0.72	1.03	0.91		0.57	0.70
Segment Density	19.7	25.7	23.3	18.1	30.5	26.3	26.5	-	44.3		22.4	22.7
Segment LOS	C	C	C	B	D	D	D	F	E		C	C
Over Capacity								Weave				

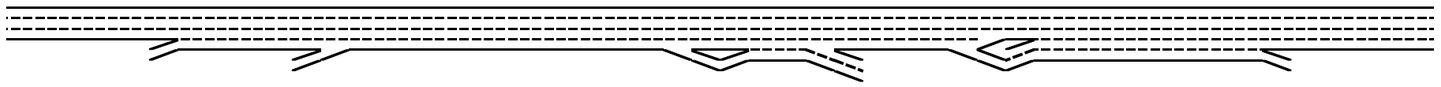
Project: John Wayne Airport Expansion **Scenario:** 2026 Baseline
Freeway Corridor: 73N **Peak Hour:** AM

Location	1	2	3	4	5	6	7	8	9	10

Key
<> Express Lane (HOV)
No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*6,290*	6,290	7,960	8,670	8,670	7,690	6,380	5,650		5,300
On Ramp Volume		*1,670*	*710*			*680*		*630*		
Off Ramp Volume					*980*	*1,990*	*730*	*980*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	6,290	7,960	8,670	8,670	8,670	8,370	6,380	6,280		5,300
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	6,699	8,477	9,234	9,234	9,234	8,914	6,795	6,688		5,645
GP Flow (pcphpl)	2,233	2,119	2,308	2,308	2,308	1,783	1,699	1,338		1,411
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*62.3*	*62.3*	*62.3*	*66.1*	*66.1*	*66.1*	*66.1*	*65.5*		*65.5*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.95	0.90	0.98	0.98	0.98	0.76	0.72	0.57		0.60
Speed (mph)	55.2	57.7	53.3	53.3	53.3	62.9	63.7	65.0		65.0
Density (pcphpl)	40.5	36.8	43.3	43.3	43.3	28.3	26.7	20.6		21.7
LOS	E	E	E	E	E	D	D	C		C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		6,702	8,479			8,191		6,017		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.95	0.90			0.87		0.85		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					8,192	6,795	6,017	5,646		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.87	0.72	0.85	0.80		

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,670	710			680		630		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,775	755			723		671		
On Flow (pcphpl)		1,775	755			723		335		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.89	0.38			0.36		0.15		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					980	1,990	730	980		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					1,042	2,119	777	1,042		
Off Flow (pcphpl)					1,042	1,060	777	1,042		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.52	0.47	0.35	0.46		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			8,479							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.123							
v_{12} (pcph)			1,047							
v_3 (pcph)										
v_{34} (pcph)			7,432							
v_{12a} (pcph)			3,391							
v_{R12a} (pcph)			4,146							
Merge Speed Index			0.54							
Merge Area Speed			52.6							
Outer Lanes Volume			2,544							
Outer Lanes Speed			57.0							
Segment Speed			54.9							
Merge v/c ratio			0.90							
Merge Density			35.0							
Merge LOS			D							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					9,234		6,795			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.481		0.554			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					4,613		3,401			
v_3 (pcph)										
v_{34} (pcph)					4,620		3,394			
v_{12a} (pcph)					4,613		3,401			
Diverge Speed Index					0.52		0.24			
Diverge Area Speed					53.0		59.5			
Outer Lanes Volume					2,310		1,697			
Outer Lanes Speed					66.2		68.6			
Segment Speed					58.9		63.7			
Diverge v/c ratio					1.05		0.77			
Diverge Density					42.1		31.7			
Diverge LOS					F		D			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,690 680 6,380 1,990 8,370		5,650 630 5,300 980 6,280		
On to Off Volume (vph)						*162*		*98*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						172		105		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						518		532		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						551		566		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,828		882		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,947		939		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						5,862		4,768		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,243		5,078		

Location	1	2	3	4	5	6	7	8	9	10

Key

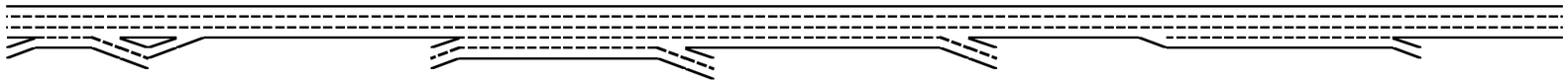
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						2,498		1,505		
Non-Weave Flow						6,415		5,183		
Segment Flow						8,913		6,688		
Max Weave Length						5,374		3,228		
Length Check						OK		OK		
Ideal Weave Capacity						2,067		2,218		
f_{HV}						0.989		0.988		
f_P						0.999		0.999		
Capacity Condition 1						8,168		6,570		
Capacity Condition 2						8,459		15,356		
Weave v/c ratio						1.08		1.01		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						551		1,878		
Weave LC Rate						1,068		2,386		
Non-Weave LC Rate 1						1,459		1,303		
Non-Weave LC Rate 2						3,119		2,845		
Non-Weave LC Rate 3						-947		-1,166		
Segment LC Rate						2,527		3,689		
Weave Intensity Factor						0.313		0.460		
Weave Speed						53.1		49.3		
Non-Weave Speed						50.3		40.8		
Segment Speed						51.1		42.4		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.95	0.90	0.90	0.98	1.05	1.08	0.77	1.01		0.60
Segment Density	40.5	36.8	35.0	43.3	-	-	31.7	-		21.7
Segment LOS	E	E	D	E	F	F	D	F		C
Over Capacity					Diverge	Weave		Weave		

Project: John Wayne Airport Expansion **Scenario:** 2026 Baseline
Freeway Corridor: 73S **Peak Hour:** AM

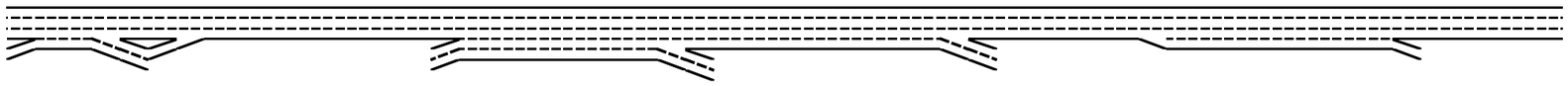
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,820	4,680	5,410	5,410		5,510	5,510	3,760	3,760		2,790
On Ramp Volume	*790*	*730*		*2,420*							
Off Ramp Volume	*930*			*2,320*			*1,750*		*970*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	5,610	5,410	5,410	7,830		5,510	5,510	3,760	3,760		2,790
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,975	5,762	5,762	8,339		5,868	5,868	4,004	4,004		2,971
GP Flow (pcphpl)	1,494	1,921	1,921	1,668		1,467	1,467	1,335	801		990
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*62.8*	*62.8*	*52.5*	*52.5*		*63.4*	*63.4*	*63.4*	*63.4*		*63.4*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.64	0.82	0.82	0.71		0.62	0.62	0.57	0.34		0.42
Speed (mph)	64.9	61.2	61.2	64.0		64.9	64.9	65.0	65.0		65.0
Density (pcphpl)	23.0	31.4	31.4	26.1		22.6	22.6	20.5	12.3		15.2
LOS	C	D	D	D		C	C	C	B		B
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	5,135	4,984		5,762					4,004		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.73	0.71		0.82					0.57		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	4,984			5,872			4,008		2,973		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.71			0.83			0.57		0.32		

Location	2	3	4	5	6	7	8	9	10	11	12



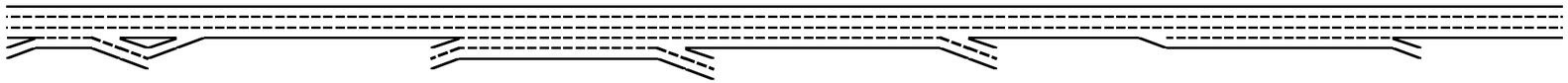
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	790	730		2,420							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	840	777		2,577							
On Flow (pcphpl)	840	777		1,289							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.42	0.35		0.57							

Location	2	3	4	5	6	7	8	9	10	11	12



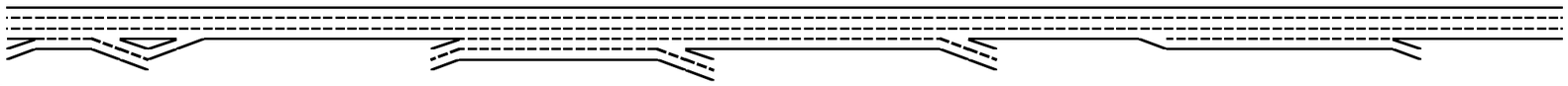
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	930			2,320			1,750		970		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	990			2,467			1,861		1,031		
Off Flow (pcphpl)	495			1,233			930		1,031		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.22			0.62			0.47		0.52		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		4,984									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,964									
v_3 (pcph)		2,020									
v_{34} (pcph)											
v_{12a} (pcph)		2,964									
v_{R12a} (pcph)		3,742									
Merge Speed Index		0.42									
Merge Area Speed		55.4									
Outer Lanes Volume		2,020									
Outer Lanes Speed		59.5									
Segment Speed		56.8									
Merge v/c ratio		0.81									
Merge Density		30.4									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



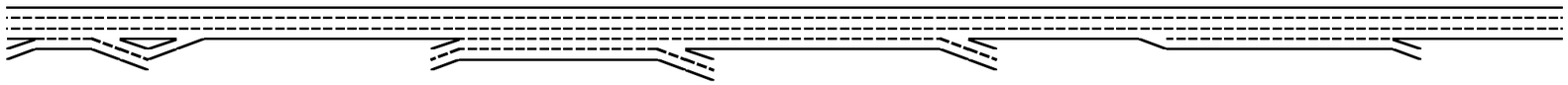
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							5,868				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.528				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,903				
v_3 (pcph)											
v_{34} (pcph)							2,966				
v_{12a} (pcph)							2,903				
Diverge Speed Index							0.60				
Diverge Area Speed							51.3				
Outer Lanes Volume							1,483				
Outer Lanes Speed							69.4				
Segment Speed							59.1				
Diverge v/c ratio							0.66				
Diverge Density							27.9				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,820 790 4,680 930 5,610			5,410 2,420 5,510 2,320 7,830							
On to Off Volume (vph)	*131*			*717*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	139			762							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	659			1,703							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	701			1,814							

Location	2	3	4	5	6	7	8	9	10	11	12



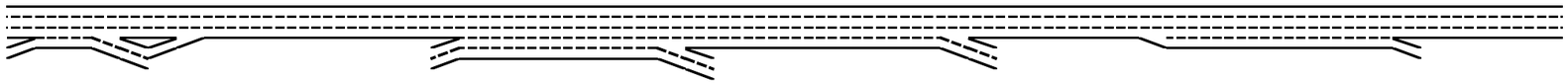
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	799			1,603							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	851			1,704							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	4,021			3,807							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	4,282			4,054							

Location	2	3	4	5	6	7	8	9	10	11	12



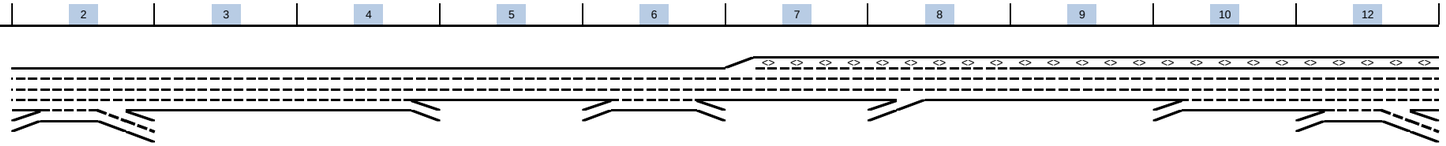
Key

<> Express Lane (HOV)

No Trucks

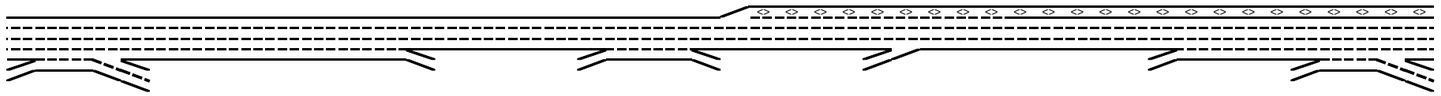
Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,552			3,518							
Non-Weave Flow	4,422			4,817							
Segment Flow	5,973			8,335							
Max Weave Length	5,156			5,364							
Length Check	OK			OK							
Ideal Weave Capacity	2,086			2,028							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,178			6,002							
Capacity Condition 2	9,123			8,180							
Weave v/c ratio	0.95			1.37							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	701			1,704							
Weave LC Rate	1,287			2,080							
Non-Weave LC Rate 1	1,254			1,043							
Non-Weave LC Rate 2	2,675			2,763							
Non-Weave LC Rate 3	-1,039			-1,904							
Segment LC Rate	2,542			3,123							
Weave Intensity Factor	0.310			0.494							
Weave Speed	53.2			48.5							
Non-Weave Speed	50.4			39.4							
Segment Speed	51.1			42.8							
Weave Density	39.0			-							
Weave LOS	E			F							
Summarize Segment Operations											
Segment v/c ratio	0.95	0.81	0.82	1.37		0.62	0.66	0.57	0.34		0.42
Segment Density	39.0	30.4	31.4	-		22.6	27.9	20.5	12.3		15.2
Segment LOS	E	D	D	F		C	C	C	B		B
Over Capacity				Weave							

Project: John Wayne Airport Expansion **Scenario:** 2026 Baseline
Freeway Corridor: 55N **Peak Hour:** AM



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	6,280	6,780	6,780	6,050	6,050	6,580	6,580	7,300	7,300	9,880
On Ramp Volume	*1,850*				*1,990*		*720*		*2,580*	*1,260*
Off Ramp Volume	*1,350*		*730*		*1,460*					*1,770*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	8,130	6,780	6,780	6,050	8,040	6,580	7,300	7,300	9,880	11,140
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,708	7,262	7,262	6,480	8,611	7,048	7,819	7,819	10,509	11,849
GP Flow (pcphpl)	1,742	1,815	1,815	2,160	2,153	2,349	2,606	2,606	2,627	2,370
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*53.0*	*53.0*	*53.0*	*29.2*	*32.9*	*32.9*	*43.6*	*43.6*	*43.6*	*64.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

Location	2	3	4	5	6	7	8	9	10	12



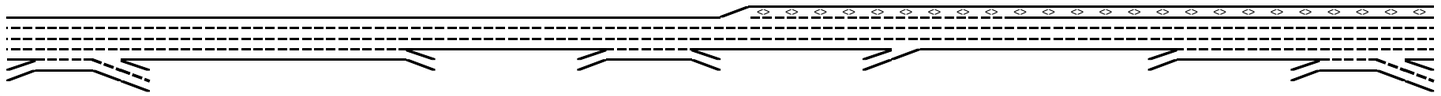
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	1,850				1,990		720		2,580	1,260
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,967				2,131		765		2,744	1,340
On Flow (pcphpl)	1,967				2,131		765		2,744	1,340
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.98				0.95		0.38		1.37	0.60

Location	2	3	4	5	6	7	8	9	10	12



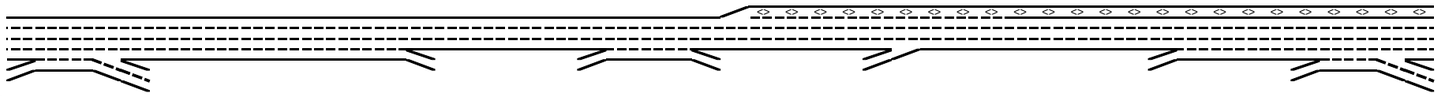
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	1,350		730		1,460					1,260
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	1,446		776		1,564					1,340
Off Flow (pcphpl)	723		776		1,564					670
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.32		0.39		0.69					0.34
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							7,053			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							4,287			
v_3 (pcph)							2,767			
v_{34} (pcph)										
v_{12a} (pcph)							4,353			
v_{R12a} (pcph)							5,119			
Merge Speed Index							-			
Merge Area Speed							-			
Outer Lanes Volume										
Outer Lanes Speed										
Segment Speed										
Merge v/c ratio							1.11			
Merge Density							-			
Merge LOS							F			

Location	2	3	4	5	6	7	8	9	10	12



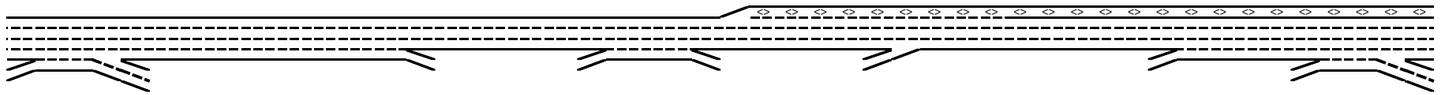
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			7,262							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.543							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			3,604							
v_3 (pcph)										
v_{34} (pcph)			3,658							
v_{12a} (pcph)			3,604							
Diverge Speed Index			0.50							
Diverge Area Speed			53.5							
Outer Lanes Volume			1,829							
Outer Lanes Speed			68.1							
Segment Speed			60.0							
Diverge v/c ratio			0.82							
Diverge Density			21.7							
Diverge LOS			C							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	6,280 1,850 6,780 1,350 8,130				6,050 1,990 6,580 1,460 8,040					9,880 1,260 9,370 1,770 11,140
On to Off Volume (vph)	*307*				*361*					*200*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	327				384					213
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	1,543				1,629					1,060
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	1,640				1,744					1,127

Location	2	3	4	5	6	7	8	9	10	12



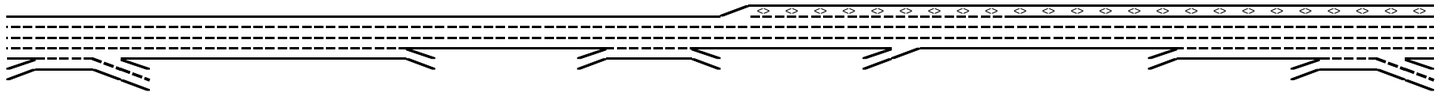
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,043				1,099					1,060
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	1,117				1,177					1,127
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	5,237				4,951					8,820
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	5,609				5,303					9,382

Location	2	3	4	5	6	7	8	9	10	12



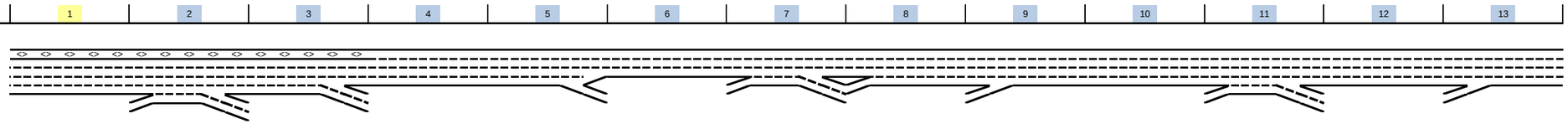
Key

<> Express Lane (HOV)

No Trucks

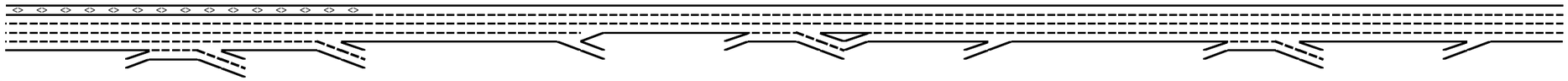
Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,757				2,921					2,255
Non-Weave Flow	5,936				5,687					9,595
Segment Flow	8,693				8,608					11,849
Max Weave Length	5,769				6,010					4,437
Length Check	OK				OK					OK
Ideal Weave Capacity	1,969				1,921					2,161
f_{HV}	0.984				0.983					0.990
f_P	0.998				0.997					0.999
Capacity Condition 1	7,738				5,646					8,545
Capacity Condition 2	7,435				6,929					12,470
Weave v/c ratio	1.15				1.49					1.37
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	1,640				2,921					1,127
Weave LC Rate	1,810				3,001					1,758
Non-Weave LC Rate 1	878				811					2,271
Non-Weave LC Rate 2	3,013				2,957					3,829
Non-Weave LC Rate 3	-2,882				-3,232					662
Segment LC Rate	2,688				3,811					4,029
Weave Intensity Factor	0.597				1.338					0.398
Weave Speed	46.3				36.4					50.8
Non-Weave Speed	42.8				30.2					42.7
Segment Speed	43.8				32.0					44.0
Weave Density	-				-					-
Weave LOS	F				F					F
Summarize Segment Operations										
Segment v/c ratio	1.15	0.77	0.82	0.92	1.49	1.00	1.11	1.11	1.12	1.37
Segment Density	-	29.0	21.7	38.0	-	45.0	-	-	-	-
Segment LOS	F	D	C	E	F	E	F	F	F	F
Over Capacity	Weave				Weave		Segment GP Lanes In GP Lanes Merge	Segment GP Lanes	Segment GP Lanes In GP Lanes On Ramp Roadway	Segment GP Lanes In GP Lanes Out GP Lanes Weave

Project: John Wayne Airport Expansion **Scenario:** 2026 Baseline
Freeway Corridor: 55S **Peak Hour:** AM



Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*7,630*	7,630	6,190	5,540	5,540	4,910	4,910	3,750	4,060	4,790	4,790	4,960	4,960
On Ramp Volume		*870*					*1,260*	*310*	*730*		*930*		*290*
Off Ramp Volume		*2,310*	*650*		*630*		*2,420*				*760*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	7,630	8,500	6,190	5,540	5,540	4,910	6,170	4,060	4,790	4,790	5,720	4,960	5,250
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,116	9,041	6,584	5,934	5,934	5,259	6,608	4,348	5,130	5,130	6,126	5,312	5,623
GP Flow (pcphpl)	2,029	1,808	1,646	1,483	1,483	1,753	1,652	1,087	1,283	1,283	1,225	1,328	1,406
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*64.0*	*64.0*	*65.9*	*65.9*	*65.9*	*65.9*	*62.2*	*52.4*	*52.4*	*52.4*	*52.4*	*68.0*	*68.0*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.86	0.77	0.70	0.63	0.63	0.75	0.70	0.46	0.55	0.55	0.52	0.57	0.60
Speed (mph)	59.4	62.6	64.1	64.9	64.9	63.2	64.1	65.0	65.0	65.0	65.0	65.0	65.0
Density (pcphpl)	34.2	28.9	25.7	22.9	22.9	27.7	25.8	16.7	19.7	19.7	18.9	20.4	21.6
LOS	D	D	C	C	C	D	C	B	C	C	C	C	C
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,116					5,259	4,019	4,348		5,130		5,315
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.86					0.75	0.57	0.46		0.55		0.57
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		6,584	5,893		5,264		4,016				5,318		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.70	0.84		0.75		0.57				0.57		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



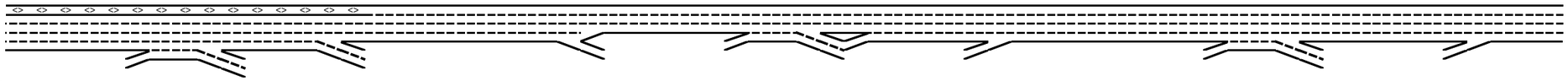
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		870					1,260	310	730		930		290
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		925					1,350	330	782		996		308
On Flow (pcphpl)		925					1,350	330	782		996		308
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.46					0.60	0.16	0.36		0.44		0.15

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



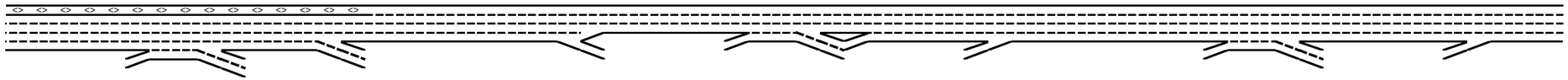
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		2,310	650		630		2,420				760		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		2,457	691		670		2,592				808		
Off Flow (pcphpl)		1,229	346		670		1,296				404		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.55	0.15		0.33		0.58				0.20		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									4,348				5,315
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.120				0.179
v_{12} (pcph)									522				953
v_3 (pcph)													
v_{34} (pcph)									3,826				4,362
v_{12a} (pcph)									1,739				2,126
v_{R12a} (pcph)									2,521				2,434
Merge Speed Index									0.30				0.33
Merge Area Speed									58.1				57.5
Outer Lanes Volume									1,305				1,594
Outer Lanes Speed									62.1				61.1
Segment Speed									60.1				59.5
Merge v/c ratio									0.55				0.53
Merge Density									20.7				20.9
Merge LOS									C				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



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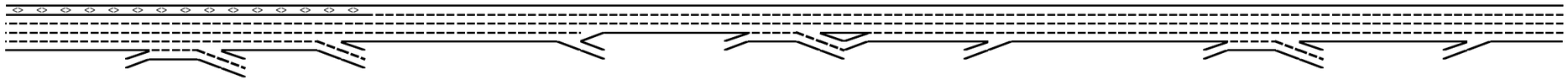
No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			6,584		5,934								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.564		0.581								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,224		2,965								
v_3 (pcph)													
v_{34} (pcph)			4,361		2,969								
v_{12a} (pcph)			2,634		2,965								
Diverge Speed Index			0.23		0.49								
Diverge Area Speed			59.7		53.8								
Outer Lanes Volume			1,975		1,484								
Outer Lanes Speed			67.5		69.4								
Segment Speed			64.2		60.6								
Diverge v/c ratio			0.60		0.67								
Diverge Density			28.8		28.1								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		7,630 870 6,190 2,310 8,500					4,910 1,260 3,750 2,420 6,170				4,790 930 4,960 760 5,720		
On to Off Volume (vph)		*236*					*494*				*124*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		251					525				131		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		634					766				806		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		674					820				864		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



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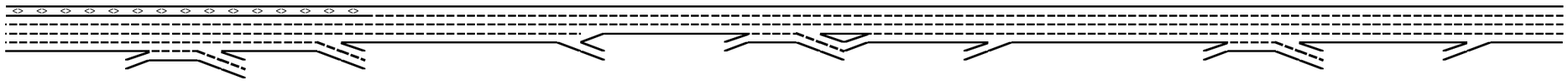
No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		2,074					1,926				636		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		2,206					2,063				677		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		5,556					2,984				4,154		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		5,910					3,196				4,449		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



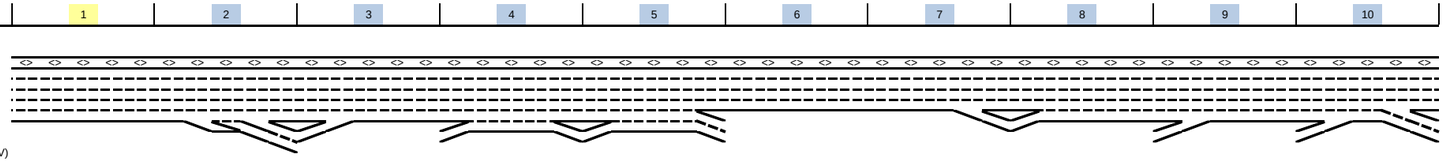
Key

<> Express Lane (HOV)

No Trucks

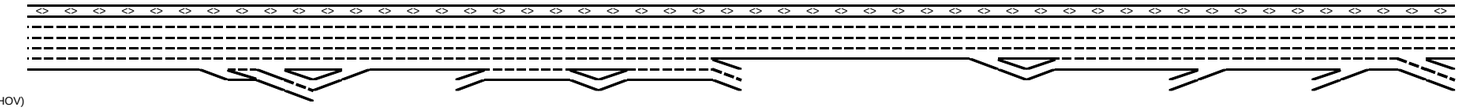
Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,879					2,883				1,540		
Non-Weave Flow		6,162					3,722				4,580		
Segment Flow		9,041					6,604				6,120		
Max Weave Length		5,783					7,094				5,071		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,056					1,981				2,042		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.998				0.998		
Capacity Condition 1		8,131					5,831				8,014		
Capacity Condition 2		7,453					5,395				9,358		
Weave v/c ratio		1.20					1.20				0.75		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		674					820				864		
Weave LC Rate		1,292					1,627				1,133		
Non-Weave LC Rate 1		1,548					1,416				737		
Non-Weave LC Rate 2		3,063					2,519				2,710		
Non-Weave LC Rate 3		-557					-312				-2,728		
Segment LC Rate		2,840					3,044				1,870		
Weave Intensity Factor		0.306					0.285				0.359		
Weave Speed		53.3					53.9				51.8		
Non-Weave Speed		49.3					48.5				51.4		
Segment Speed		50.5					50.7				51.5		
Weave Density		-					-				29.7		
Weave LOS		F					F				D		
Summarize Segment Operations													
Segment v/c ratio	0.86	1.20	0.60	0.63	0.67	0.75	1.20	0.46	0.55	0.55	0.75	0.57	0.53
Segment Density	34.2	-	28.8	22.9	28.1	27.7	-	16.7	20.7	19.7	29.7	20.4	20.9
Segment LOS	D	F	D	C	D	D	F	B	C	C	D	C	C
Over Capacity		Weave					Weave						

Project: John Wayne Airport Expansion **Scenario:** 2026 Baseline
Freeway Corridor: 405N **Peak Hour:** AM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*10,630*	10,630	8,780	9,220	8,620	6,550	6,550	5,930	7,370	7,550
On Ramp Volume			*440*	*1,190*	*450*			*1,440*	*180*	*290*
Off Ramp Volume		*1,850*		*1,790*	*2,520*		*620*			*2,660*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	10,630	10,630	9,220	10,410	9,070	6,550	6,550	7,370	7,550	7,840
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	11,503	11,503	9,948	11,232	9,714	7,015	7,015	7,894	8,086	8,397
GP Flow (pcphpl)	2,301	2,301	1,990	1,872	1,619	1,754	1,754	1,579	1,617	1,400
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*47.1*	*47.1*	*65.4*	*61.3*	*66.2*	*66.2*	*66.2*	*66.2*	*64.9*	*66.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.98	0.98	0.85	0.80	0.69	0.75	0.75	0.67	0.69	0.60
Speed (mph)	53.5	53.5	60.1	61.8	64.3	63.2	63.2	64.5	64.3	65.0
Density (pcphpl)	43.0	43.0	33.1	30.3	25.2	27.7	27.7	24.5	25.1	21.5
LOS	E	E	D	D	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			9,480	9,967	9,236			6,351	7,895	8,089
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.81	0.85	0.79			0.68	0.67	0.69
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		9,536		9,329	7,015		6,356			5,569
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.81		0.79	0.75		0.68			0.59

Location	1	2	3	4	5	6	7	8	9	10



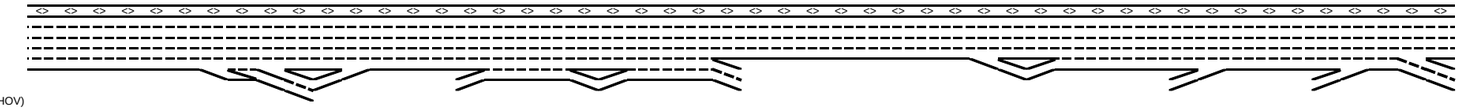
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			440	1,190	450			1,440	180	290
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			468	1,265	478			1,542	191	308
On Flow (pcphpl)			468	1,265	478			1,542	191	308
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.23	0.63	0.24			0.69	0.10	0.15

Location	1	2	3	4	5	6	7	8	9	10



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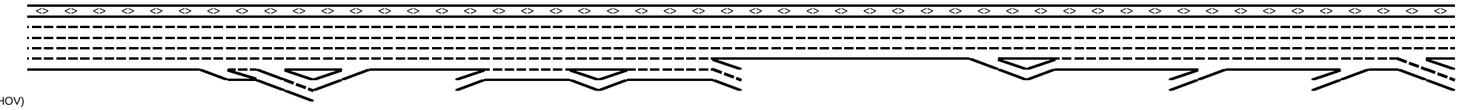
<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,850		1,790	2,520		620			2,660
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,967		1,903	2,699		659			2,828
Off Flow (pcphpl)		983		1,903	1,350		659			1,414
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.49		0.95	0.60		0.33			0.71
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			6,980						5,645	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.159						0.194	
v_{12} (pcph)			1,112						1,094	
v_3 (pcph)										
v_{34} (pcph)			5,868						4,551	
v_{12a} (pcph)			2,792						2,258	
v_{R12a} (pcph)			3,260						2,449	
Merge Speed Index			0.38						0.33	
Merge Area Speed			56.2						57.3	
Outer Lanes Volume			2,094						1,693	
Outer Lanes Speed			59.3						60.7	
Segment Speed			57.9						59.2	
Merge v/c ratio			0.71						0.53	
Merge Density			27.2						21.5	
Merge LOS			C						C	

Location	1	2	3	4	5	6	7	8	9	10



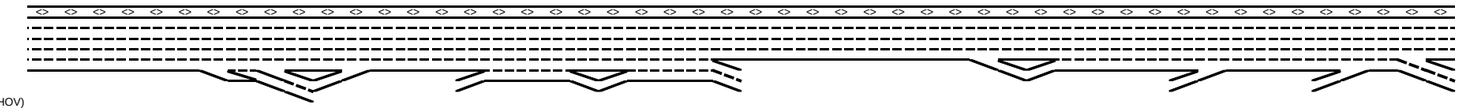
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		9,202					7,015			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.439					0.554			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		3,848					3,430			
v_3 (pcph)										
v_{34} (pcph)		5,354					3,585			
v_{12a} (pcph)		3,848					3,430			
Diverge Speed Index		0.61					0.49			
Diverge Area Speed		51.1					53.8			
Outer Lanes Volume		2,677					1,792			
Outer Lanes Speed		64.8					68.2			
Segment Speed		58.2					60.3			
Diverge v/c ratio		0.87					0.78			
Diverge Density		28.8					32.2			
Diverge LOS		D					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				9,220 1,190 8,620 1,790 10,410	8,620 450 6,550 2,520 9,070					7,550 290 5,180 2,660 7,840
On to Off Volume (vph)				*205*	*125*					*98*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				218	133					105
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				985	325					192
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,048	345					204

Location	1	2	3	4	5	6	7	8	9	10



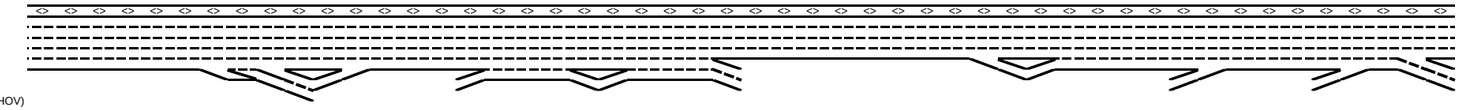
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				1,585	2,395					2,562
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				1,686	2,565					2,723
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				7,635	6,225					4,988
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				8,237	6,667					5,343

Location	1	2	3	4	5	6	7	8	9	10



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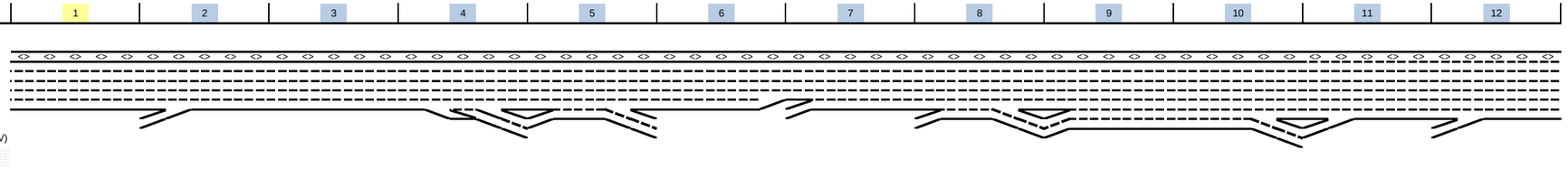
<> Express Lane (HOV)

No Trucks

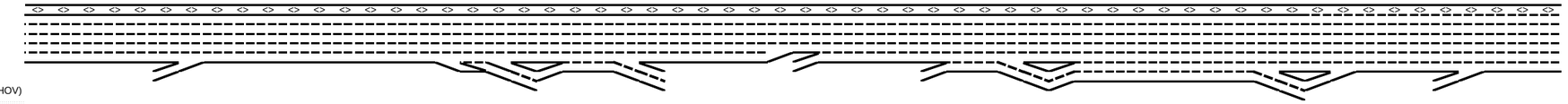
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				2,733	2,911					2,927
Non-Weave Flow				8,455	6,800					5,447
Segment Flow				11,188	9,711					8,375
Max Weave Length				4,994	4,015					6,121
Length Check				OK	OK					OK
Ideal Weave Capacity				2,131	2,209					1,920
f_{HV}				0.979	0.983					0.985
f_{p}				0.999	1.000					1.000
Capacity Condition 1				10,426	10,856					9,458
Capacity Condition 2				9,613	11,477					6,765
Weave v/c ratio				1.14	0.88					1.22
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				2,733	691					204
Weave LC Rate				3,351	1,327					186
Non-Weave LC Rate 1				1,933	1,617					430
Non-Weave LC Rate 2				3,574	3,205					2,904
Non-Weave LC Rate 3				166	-356					-4,172
Segment LC Rate				5,284	2,943					616
Weave Intensity Factor				0.463	0.287					0.267
Weave Speed				49.2	53.9					54.5
Non-Weave Speed				34.6	50.7					55.5
Segment Speed				37.3	51.6					55.1
Weave Density				-	37.6					-
Weave LOS				F	E					F
Summarize Segment Operations										
Segment v/c ratio	0.98	0.87	0.71	1.14	0.88	0.75	0.78	0.67	0.53	1.22
Segment Density	43.0	28.8	27.2	-	37.6	27.7	32.2	24.5	21.5	-
Segment LOS	E	D	C	F	E	D	D	C	C	F
Over Capacity				Weave						Weave

Project: John Wayne Airport Expansion **Scenario:** 2026 Baseline
Freeway Corridor: 405S **Peak Hour:** AM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*8,900*	8,900	10,230	10,230	9,090	7,620	7,620	9,640	9,380		5,967	6,167
On Ramp Volume		*1,330*			*1,110*		*2,020*	*2,060*	*480*		*240*	*540*
Off Ramp Volume				*1,140*	*2,580*			*2,320*	*2,700*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	8,900	10,230	10,230	10,230	10,200	7,620	9,640	11,700	9,860		6,207	6,707
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	9,532	10,957	10,957	10,957	10,925	8,161	10,325	12,531	10,638		6,716	7,257
GP Flow (pcphpl)	1,906	2,191	2,191	2,191	1,821	2,040	2,065	2,089	1,520		1,343	1,451
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*35.7*	*35.7*	*35.7*	*35.7*	*44.8*	*44.8*	*44.8*	*50.1*	*50.1*		*54.0*	*54.0*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.81	0.93	0.93	0.93	0.77	0.87	0.88	0.89	0.65		0.57	0.62
Speed (mph)	61.4	56.1	56.1	56.1	62.5	59.2	58.7	58.3	64.8		65.0	65.0
Density (pcphpl)	31.1	39.0	39.0	39.0	29.1	34.5	35.2	35.8	23.5		20.7	22.3
LOS	D	E	E	E	D	D	E	E	C		C	C
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		9,543			9,745		8,161	10,325	10,128		6,461	6,683
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.81			0.83		0.87	0.88	0.86		0.55	0.57
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				9,745	8,161	8,161		10,065	7,768			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.83	0.69	0.87		0.86	0.66			

Location	1	2	3	4	5	6	7	8	9	10	11	12



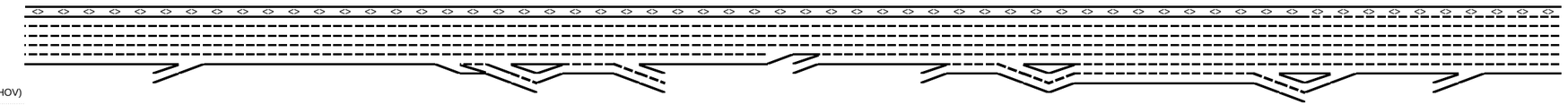
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,330			1,110		2,020	2,060	480		240	540
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,414			1,180		2,164	2,206	510		255	574
On Flow (pcphpl)		1,414			1,180		2,164	2,206	255		255	574
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.71			0.59		0.96	0.98	0.13		0.13	0.29

Location	1	2	3	4	5	6	7	8	9	10	11	12



Key

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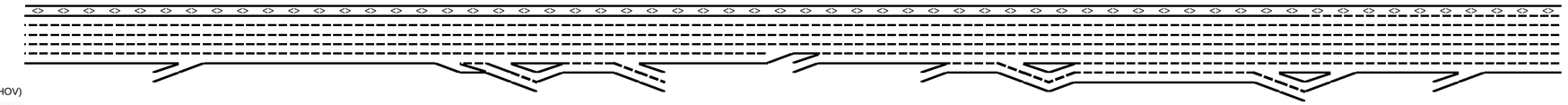
No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,140	2,580			2,320	2,700			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,212	2,763			2,467	2,871			
Off Flow (pcphpl)				606	1,382			1,233	1,435			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.30	0.61			0.62	0.72			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		7,043									4,910	4,879
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.041									0.186	0.146
v_{12} (pcph)		289									913	712
v_3 (pcph)												
v_{34} (pcph)		6,754									3,998	4,166
v_{12a} (pcph)		2,817									1,964	1,951
v_{R12a} (pcph)		4,231									2,219	2,526
Merge Speed Index		0.55									0.32	0.29
Merge Area Speed		52.3									57.6	58.4
Outer Lanes Volume		2,113									1,473	1,464
Outer Lanes Speed		59.2									61.5	61.5
Segment Speed		55.5									59.8	60.0
Merge v/c ratio		0.92									0.48	0.55
Merge Density		34.4									19.4	17.5
Merge LOS		D									B	B

Location	1	2	3	4	5	6	7	8	9	10	11	12



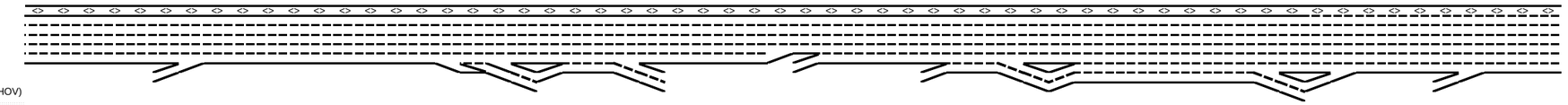
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				8,765								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.485								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				3,176								
v_3 (pcph)												
v_{34} (pcph)				5,590								
v_{12a} (pcph)				3,506								
Diverge Speed Index				0.54								
Diverge Area Speed				52.6								
Outer Lanes Volume				2,630								
Outer Lanes Speed				64.9								
Segment Speed				59.4								
Diverge v/c ratio				0.80								
Diverge Density				27.4								
Diverge LOS				C								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					9,090 1,110 7,620 2,580 10,200			9,640 2,060 9,380 2,320 11,700	9,380 480 7,160 2,700 9,860			
On to Off Volume (vph)					*281*			*408*	*131*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					298			434	140			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					829			1,652	349			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					882			1,769	371			

Location	1	2	3	4	5	6	7	8	9	10	11	12



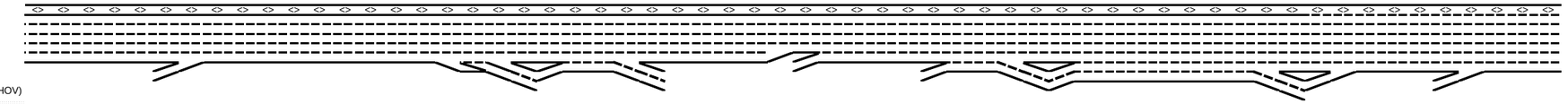
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					2,299			1,912	2,569			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					2,463			2,032	2,731			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					6,791			7,728	6,811			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					7,273			8,278	7,349			

Location	1	2	3	4	5	6	7	8	9	10	11	12



Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					3,344			3,801	3,101			
Non-Weave Flow					7,572			8,712	7,489			
Segment Flow					10,916			12,513	10,590			
Max Weave Length					5,652			5,624	3,941			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,038			1,958	2,087			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	1.000			
Capacity Condition 1					10,015			9,612	10,222			
Capacity Condition 2					7,699			7,757	11,709			
Weave v/c ratio					1.39			1.58	1.02			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					882			1,769	2,731			
Weave LC Rate					1,283			1,751	2,713			
Non-Weave LC Rate 1					1,450			1,103	851			
Non-Weave LC Rate 2					3,378			3,632	3,359			
Non-Weave LC Rate 3					-1,225			-3,391	-3,684			
Segment LC Rate					2,734			2,854	3,564			
Weave Intensity Factor					0.349			0.893	1.064			
Weave Speed					52.1			41.4	39.2			
Non-Weave Speed					48.2			40.3	35.2			
Segment Speed					49.3			40.6	36.3			
Weave Density					-			-	-			
Weave LOS					F			F	F			
Summarize Segment Operations												
Segment v/c ratio	0.81	0.92	0.93	0.80	1.39	0.87	0.88	1.58	1.02		0.48	0.55
Segment Density	31.1	34.4	39.0	27.4	-	34.5	35.2	-	-		19.4	17.5
Segment LOS	D	D	E	C	F	D	E	F	F		B	B
Over Capacity					Weave			Weave	Weave			

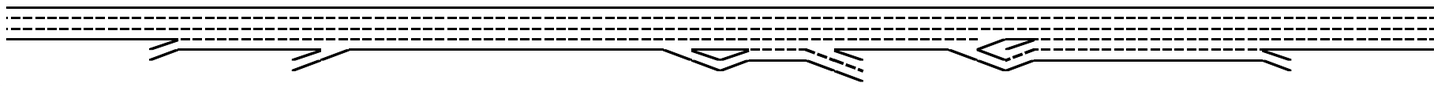
Project: John Wayne Airport Expansion **Scenario:** 2026 Baseline
Freeway Corridor: 73N **Peak Hour:** PM

Location	1	2	3	4	5	6	7	8	9	10

Key
<> Express Lane (HOV)
No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*4,950*	4,950	6,780	7,680	7,680	7,120	8,100	6,870		7,530
On Ramp Volume		*1,830*	*900*			*2,390*		*1,220*		
Off Ramp Volume					*560*	*1,410*	*1,230*	*560*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	4,950	6,780	7,680	7,680	7,680	9,510	8,100	8,090		7,530
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,272	7,221	8,179	8,179	8,179	10,128	8,627	8,616		8,019
GP Flow (pcphpl)	1,757	1,805	2,045	2,045	2,045	2,026	2,157	1,723		2,005
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*57.9*	*57.9*	*57.9*	*65.1*	*65.1*	*64.5*	*64.5*	*60.4*		*60.4*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.75	0.77	0.87	0.87	0.87	0.86	0.92	0.73		0.85
Speed (mph)	63.2	62.7	59.1	59.1	59.1	59.4	56.9	63.5		59.8
Density (pcphpl)	27.8	28.8	34.6	34.6	34.6	34.1	37.9	27.1		33.5
LOS	D	D	D	D	D	D	E	D		D
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		5,275	7,222			7,587		7,317		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.75	0.77			0.81		1.04		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					7,584	8,627	7,317	8,020		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.81	0.92	1.04	1.14		

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,830	900			2,390		1,220		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,946	957			2,541		1,299		
On Flow (pcphpl)		1,946	957			2,541		650		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.97	0.48			1.27		0.29		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					560	1,410	1,230	560		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					595	1,502	1,310	595		
Off Flow (pcphpl)					595	751	1,310	595		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.30	0.33	0.60	0.26		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			7,222							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.098							
v_{12} (pcph)			709							
v_3 (pcph)										
v_{34} (pcph)			6,513							
v_{12a} (pcph)			2,889							
v_{R12a} (pcph)			3,846							
Merge Speed Index			0.48							
Merge Area Speed			54.1							
Outer Lanes Volume			2,167							
Outer Lanes Speed			59.0							
Segment Speed			56.6							
Merge v/c ratio			0.84							
Merge Density			32.5							
Merge LOS			D							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					8,179		8,627			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.528		0.484			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					3,902		4,500			
v_3 (pcph)										
v_{34} (pcph)					4,277		4,127			
v_{12a} (pcph)					3,902		4,500			
Diverge Speed Index					0.48		-			
Diverge Area Speed					53.9		-			
Outer Lanes Volume					2,139					
Outer Lanes Speed					66.9					
Segment Speed					60.0					
Diverge v/c ratio					0.89		1.02			
Diverge Density					36.0		-			
Diverge LOS					E		F			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,120 2,390 8,100 1,410 9,510		6,870 1,220 7,530 560 8,090		
On to Off Volume (vph)						*354*		*84*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						377		90		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						2,036		1,136		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						2,164		1,209		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,056		476		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,124		506		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						6,064		6,394		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,459		6,810		

Location	1	2	3	4	5	6	7	8	9	10

Key

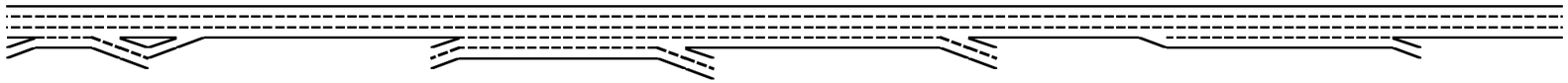
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						3,288		1,716		
Non-Weave Flow						6,835		6,900		
Segment Flow						10,124		8,616		
Max Weave Length						5,852		2,962		
Length Check						OK		OK		
Ideal Weave Capacity						2,030		2,238		
f_{HV}						0.989		0.988		
f_P						0.998		0.998		
Capacity Condition 1						8,014		6,626		
Capacity Condition 2						7,290		17,343		
Weave v/c ratio						1.37		1.28		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						2,164		1,013		
Weave LC Rate						2,681		1,521		
Non-Weave LC Rate 1						1,546		1,657		
Non-Weave LC Rate 2						3,213		3,228		
Non-Weave LC Rate 3						-811		-652		
Segment LC Rate						4,227		3,178		
Weave Intensity Factor						0.469		0.409		
Weave Speed						49.0		50.5		
Non-Weave Speed						37.3		43.9		
Segment Speed						40.4		45.1		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.75	0.77	0.84	0.87	0.89	1.37	1.02	1.28		0.85
Segment Density	27.8	28.8	32.5	34.6	36.0	-	-	-		33.5
Segment LOS	D	D	D	D	E	F	F	F		D
Over Capacity						On Ramp Roadway Weave	Out GP Lanes Diverge	In GP Lanes Out GP Lanes Weave		

Project: John Wayne Airport Expansion **Scenario:** 2026 Baseline
Freeway Corridor: 73S **Peak Hour:** PM

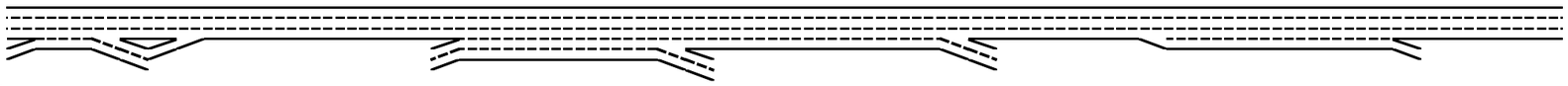
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,230	3,680	4,910	4,910		6,030	6,030	5,100	5,100		4,530
On Ramp Volume	*660*	*1,230*		*2,100*							
Off Ramp Volume	*1,210*			*980*			*930*		*570*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	4,890	4,910	4,910	7,010		6,030	6,030	5,100	5,100		4,530
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,208	5,229	5,229	7,466		6,422	6,422	5,432	5,432		4,824
GP Flow (pcphpl)	1,302	1,743	1,743	1,493		1,605	1,605	1,811	1,086		1,608
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*63.8*	*63.8*	*63.9*	*63.9*		*72.7*	*72.7*	*72.7*	*72.7*		*72.7*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.55	0.74	0.74	0.64		0.68	0.68	0.77	0.46		0.68
Speed (mph)	65.0	63.3	63.3	64.9		64.4	64.4	62.6	65.0		64.4
Density (pcphpl)	20.0	27.5	27.5	23.0		24.9	24.9	28.9	16.7		25.0
LOS	C	D	D	C		C	C	D	B		C
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	4,506	3,919		5,229					5,432		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.64	0.56		0.74					0.77		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	3,919			6,424			5,433		4,826		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.56			0.91			0.77		0.51		

Location	2	3	4	5	6	7	8	9	10	11	12



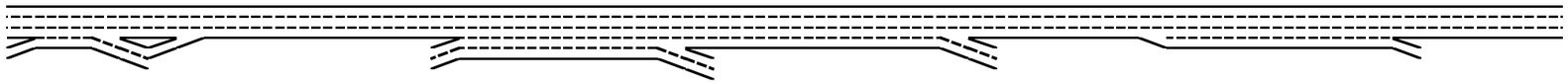
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	660	1,230		2,100							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	702	1,310		2,237							
On Flow (pcphpl)	702	1,310		1,118							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.35	0.60		0.50							

Location	2	3	4	5	6	7	8	9	10	11	12



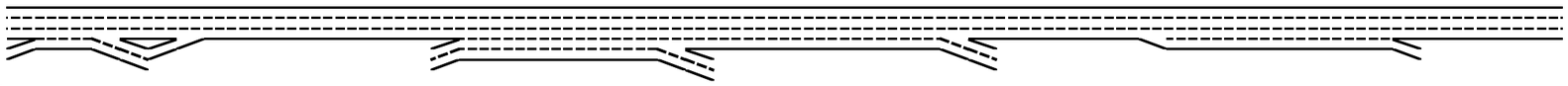
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	1,210			980			930		570		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	1,289			1,042			989		606		
Off Flow (pcphpl)	644			521			494		606		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.29			0.26			0.25		0.30		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		3,919									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,331									
v_3 (pcph)		1,588									
v_{34} (pcph)											
v_{12a} (pcph)		2,331									
v_{R12a} (pcph)		3,641									
Merge Speed Index		0.40									
Merge Area Speed		55.8									
Outer Lanes Volume		1,588									
Outer Lanes Speed		61.1									
Segment Speed		57.3									
Merge v/c ratio		0.79									
Merge Density		29.4									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



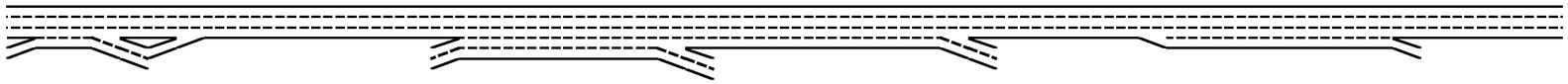
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							6,422				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.554				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,401				
v_3 (pcph)											
v_{34} (pcph)							4,021				
v_{12a} (pcph)							2,569				
Diverge Speed Index							0.52				
Diverge Area Speed							53.1				
Outer Lanes Volume							1,927				
Outer Lanes Speed							67.7				
Segment Speed							61.0				
Diverge v/c ratio							0.58				
Diverge Density							25.0				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,230 660 3,680 1,210 4,890			4,910 2,100 6,030 980 7,010							
On to Off Volume (vph)	*163*			*294*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	174			312							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	497			1,806							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	528			1,924							

Location	2	3	4	5	6	7	8	9	10	11	12



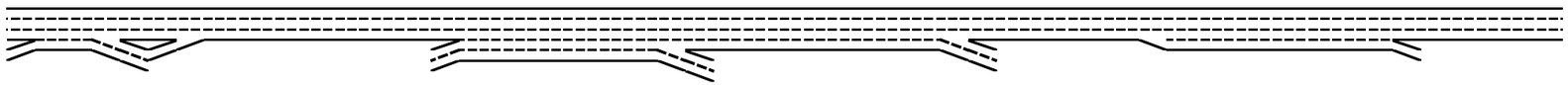
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	1,047			686							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	1,115			730							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	3,183			4,224							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	3,390			4,498							

Location	2	3	4	5	6	7	8	9	10	11	12



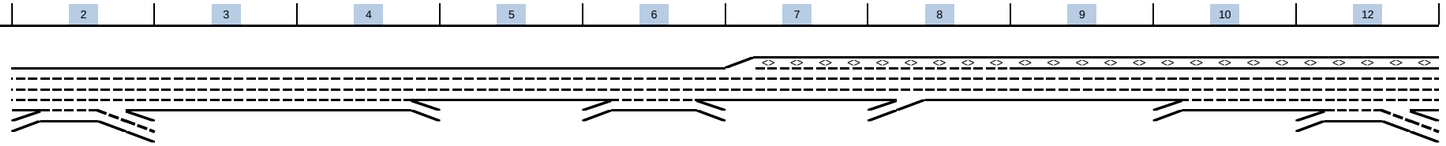
Key

<> Express Lane (HOV)

No Trucks

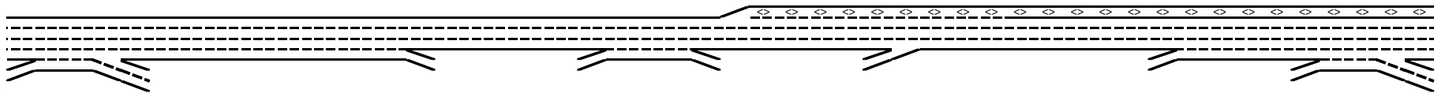
Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,643			2,654							
Non-Weave Flow	3,564			4,810							
Segment Flow	5,207			7,464							
Max Weave Length	5,751			4,621							
Length Check	OK			OK							
Ideal Weave Capacity	2,040			2,085							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,045			6,166							
Capacity Condition 2	7,512			9,703							
Weave v/c ratio	0.85			1.19							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	528			730							
Weave LC Rate	1,115			1,106							
Non-Weave LC Rate 1	1,078			1,042							
Non-Weave LC Rate 2	2,484			2,762							
Non-Weave LC Rate 3	-1,297			-1,906							
Segment LC Rate	2,192			2,147							
Weave Intensity Factor	0.276			0.367							
Weave Speed	54.2			51.6							
Non-Weave Speed	52.9			47.8							
Segment Speed	53.3			49.1							
Weave Density	32.6			-							
Weave LOS	D			F							
Summarize Segment Operations											
Segment v/c ratio	0.85	0.79	0.74	1.19		0.68	0.58	0.77	0.46		0.68
Segment Density	32.6	29.4	27.5	-		24.9	25.0	28.9	16.7		25.0
Segment LOS	D	D	D	F		C	C	D	B		C
Over Capacity				Weave							

Project: John Wayne Airport Expansion **Scenario:** 2026 Baseline
Freeway Corridor: 55N **Peak Hour:** PM



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Define Freeway Segment										
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	4,080	2,610	2,610	2,180	2,180	2,470	2,470	3,040	3,040	3,950
On Ramp Volume	*970*				*1,410*		*570*		*910*	*1,100*
Off Ramp Volume	*2,440*		*430*		*1,120*					*1,050*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	5,050	2,610	2,610	2,180	3,590	2,470	3,040	3,040	3,950	5,050
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	5,409	2,795	2,795	2,335	3,845	2,646	3,256	3,256	4,202	5,372
GP Flow (pcphpl)	1,082	699	699	778	961	882	1,085	1,085	1,050	1,074
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*63.2*	*63.2*	*63.2*	*62.3*	*60.5*	*60.5*	*13.5*	*13.5*	*13.5*	*14.0*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

Location	2	3	4	5	6	7	8	9	10	12

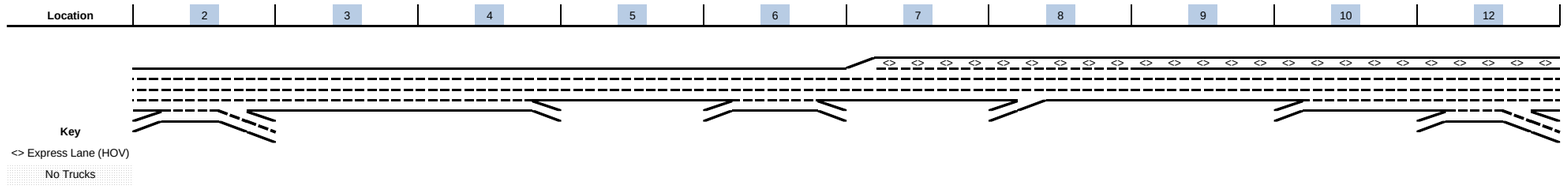


Key

<> Express Lane (HOV)

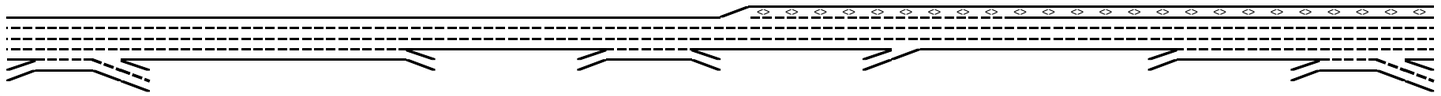
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	970				1,410		570		910	1,100
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,031				1,510		606		968	1,170
On Flow (pcphpl)	1,031				1,510		606		968	1,170
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.52				0.67		0.30		0.48	0.52



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	2,440		430		1,120					1,100
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	2,613		457		1,200					1,170
Off Flow (pcphpl)	1,307		457		1,200					585
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.58		0.23		0.53					0.29
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							2,650			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							1,611			
v_3 (pcph)							1,039			
v_{34} (pcph)										
v_{12a} (pcph)							1,611			
v_{R12a} (pcph)							2,217			
Merge Speed Index							0.28			
Merge Area Speed							58.5			
Outer Lanes Volume							1,039			
Outer Lanes Speed							63.1			
Segment Speed							59.9			
Merge v/c ratio							0.48			
Merge Density							15.7			
Merge LOS							B			

Location	2	3	4	5	6	7	8	9	10	12



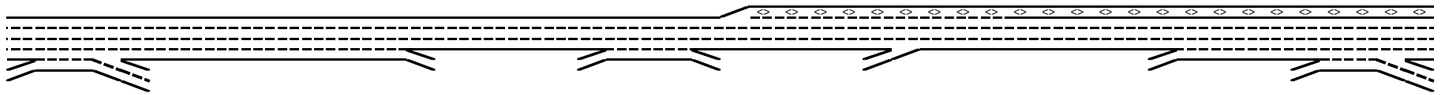
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			2,795							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.669							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			1,477							
v_3 (pcph)										
v_{34} (pcph)			1,319							
v_{12a} (pcph)			1,477							
Diverge Speed Index			0.47							
Diverge Area Speed			54.2							
Outer Lanes Volume			659							
Outer Lanes Speed			71.3							
Segment Speed			61.1							
Diverge v/c ratio			0.34							
Diverge Density			3.5							
Diverge LOS			A							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	4,080 970 2,610 2,440 5,050				2,180 1,410 2,470 1,120 3,590					3,950 1,100 4,000 1,050 5,050
On to Off Volume (vph)	*469*				*440*					*229*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	498				468					243
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	501				970					871
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	533				1,039					927

Location	2	3	4	5	6	7	8	9	10	12



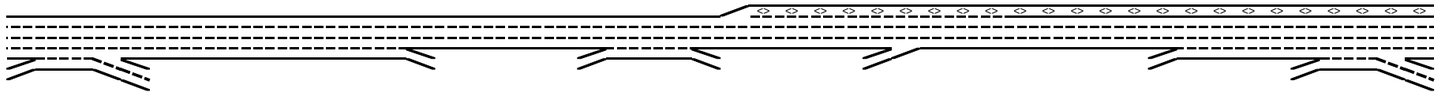
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,971				680					871
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	2,111				728					927
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	2,109				1,500					3,079
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	2,259				1,606					3,275

Location	2	3	4	5	6	7	8	9	10	12



Key

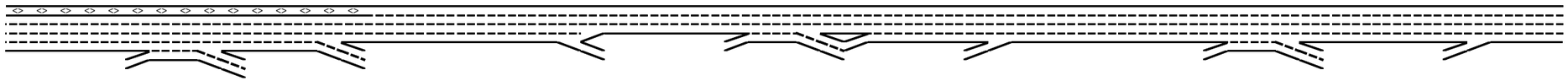
<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,644				1,767					1,854
Non-Weave Flow	2,757				2,074					3,518
Segment Flow	5,401				3,842					5,371
Max Weave Length	7,705				7,364					6,072
Length Check	OK				OK					OK
Ideal Weave Capacity	1,821				1,817					2,036
f_{HV}	0.984				0.984					0.990
f_P	0.999				0.995					0.998
Capacity Condition 1	7,160				5,338					8,044
Capacity Condition 2	4,820				5,107					6,871
Weave v/c ratio	1.10				0.74					0.77
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	533				1,767					927
Weave LC Rate	703				1,847					1,557
Non-Weave LC Rate 1	223				66					1,019
Non-Weave LC Rate 2	2,304				2,152					2,473
Non-Weave LC Rate 3	-3,708				-4,016					-1,374
Segment LC Rate	926				1,913					2,576
Weave Intensity Factor	0.257				0.777					0.280
Weave Speed	54.8				43.1					54.1
Non-Weave Speed	54.7				46.1					51.9
Segment Speed	54.7				44.7					52.6
Weave Density	-				28.6					25.5
Weave LOS	F				D					C
Summarize Segment Operations										
Segment v/c ratio	1.10	0.30	0.34	0.33	0.74	0.38	0.48	0.46	0.45	0.77
Segment Density	-	10.8	3.5	12.0	28.6	13.6	15.7	16.7	16.2	25.5
Segment LOS	F	A	A	B	D	B	B	B	B	C
Over Capacity	Weave									

Project: John Wayne Airport Expansion **Scenario:** 2026 Baseline
Freeway Corridor: 55S **Peak Hour:** PM

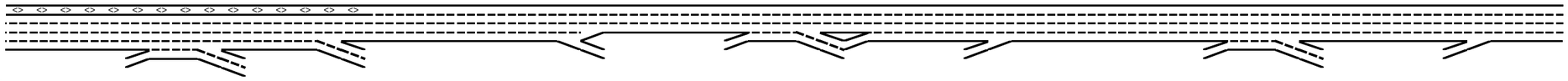
Location	1	2	3	4	5	6	7	8	9	10	11	12	13



Key
<> Express Lane (HOV)
No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*7,960*	7,960	7,250	6,180	6,180	5,550	5,550	5,120	5,740	6,970	6,970	6,430	6,430
On Ramp Volume		*900*					*1,670*	*620*	*1,230*		*1,210*		*250*
Off Ramp Volume		*1,610*	*1,070*		*630*		*2,100*				*1,750*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	7,960	8,860	7,250	6,180	6,180	5,550	7,220	5,740	6,970	6,970	8,180	6,430	6,680
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,467	9,424	7,712	6,619	6,619	5,944	7,733	6,148	7,465	7,465	8,761	6,887	7,155
GP Flow (pcphpl)	2,117	1,885	1,928	1,655	1,655	1,981	1,933	1,537	1,866	1,866	1,752	1,722	1,789
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*55.7*	*55.7*	*63.9*	*63.9*	*63.9*	*63.9*	*58.0*	*51.0*	*51.0*	*51.0*	*51.0*	*65.1*	*65.1*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.90	0.80	0.82	0.70	0.70	0.84	0.82	0.65	0.79	0.79	0.75	0.73	0.76
Speed (mph)	57.7	61.7	61.0	64.1	64.1	60.2	61.0	64.7	61.9	61.9	63.2	63.5	62.9
Density (pcphpl)	36.7	30.6	31.6	25.8	25.8	32.9	31.7	23.7	30.1	30.1	27.7	27.1	28.5
LOS	E	D	D	C	C	D	D	C	D	D	D	D	D
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,467					5,944	5,489	6,148		7,465		6,889
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.90					0.84	0.78	0.65		0.79		0.73
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		7,712	6,574		5,949		5,484				6,901		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.82	0.93		0.84		0.78				0.73		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



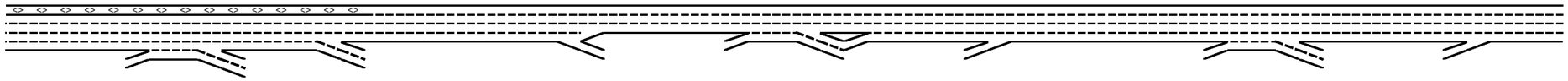
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		900					1,670	620	1,230		1,210		250
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		957					1,789	659	1,317		1,296		266
On Flow (pcphpl)		957					1,789	659	1,317		1,296		266
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.48					0.79	0.33	0.60		0.58		0.13

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



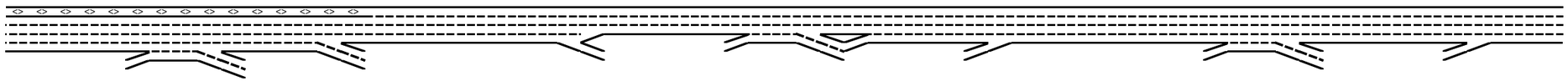
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		1,610	1,070		630		2,100				1,750		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		1,713	1,138		670		2,249				1,861		
Off Flow (pcphpl)		856	569		670		1,125				930		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.38	0.25		0.33		0.50				0.47		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									6,148				6,889
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.053				0.185
v_{12} (pcph)									327				1,272
v_3 (pcph)													
v_{34} (pcph)									5,821				5,617
v_{12a} (pcph)									2,459				2,756
v_{R12a} (pcph)									3,777				3,021
Merge Speed Index									0.42				0.36
Merge Area Speed									55.3				56.7
Outer Lanes Volume									1,844				2,067
Outer Lanes Speed									60.2				59.4
Segment Speed									57.6				58.2
Merge v/c ratio									0.82				0.66
Merge Density									30.3				25.5
Merge LOS									D				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



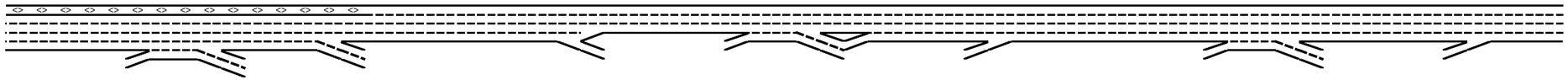
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			7,712		6,619								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.515		0.564								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,847		3,264								
v_3 (pcph)													
v_{34} (pcph)			4,864		3,355								
v_{12a} (pcph)			3,085		3,264								
Diverge Speed Index			0.27		0.49								
Diverge Area Speed			58.8		53.8								
Outer Lanes Volume			2,314		1,678								
Outer Lanes Speed			66.2		68.7								
Segment Speed			63.0		60.4								
Diverge v/c ratio			0.70		0.74								
Diverge Density			33.7		30.7								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		7,960 900 7,250 1,610 8,860					5,550 1,670 5,120 2,100 7,220				6,970 1,210 6,430 1,750 8,180		
On to Off Volume (vph)		*164*					*486*				*259*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		174					516				275		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		736					1,184				951		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		783					1,268				1,019		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



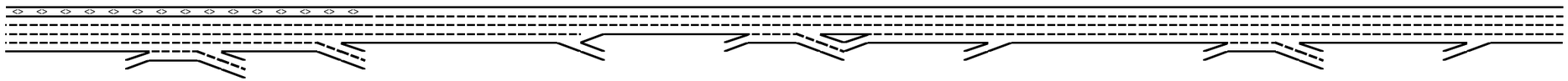
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		1,446					1,614				1,491		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		1,539					1,729				1,585		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		6,514					3,936				5,479		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		6,928					4,215				5,868		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



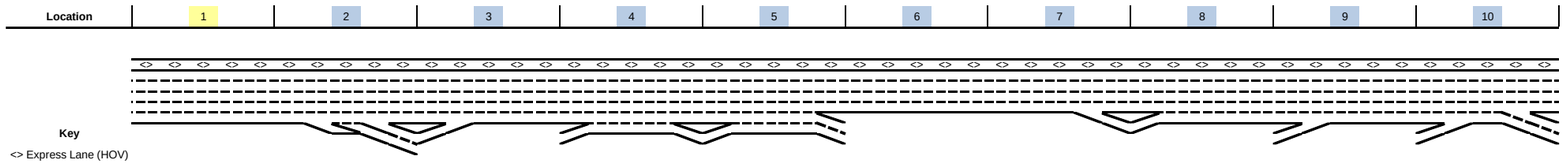
Key

<> Express Lane (HOV)

No Trucks

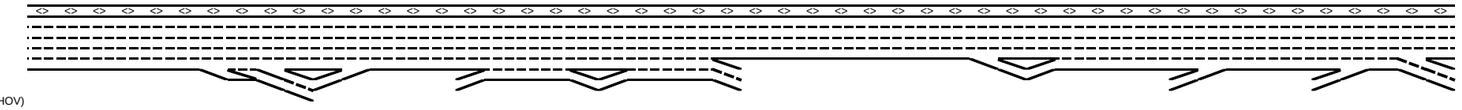
Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,322					2,997				2,604		
Non-Weave Flow		7,102					4,732				6,143		
Segment Flow		9,424					7,729				8,747		
Max Weave Length		5,016					6,545				5,559		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,114					2,023				2,004		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.997				0.998		
Capacity Condition 1		8,363					5,950				7,876		
Capacity Condition 2		9,634					6,068				7,920		
Weave v/c ratio		1.11					1.27				1.09		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		783					1,268				1,019		
Weave LC Rate		1,402					2,075				1,288		
Non-Weave LC Rate 1		1,741					1,625				1,059		
Non-Weave LC Rate 2		3,273					2,744				3,059		
Non-Weave LC Rate 3		-242					1				-2,286		
Segment LC Rate		3,143					3,700				2,347		
Weave Intensity Factor		0.331					0.333				0.430		
Weave Speed		52.6					52.5				50.0		
Non-Weave Speed		48.1					43.5				47.2		
Segment Speed		49.1					46.6				48.0		
Weave Density		-					-				-		
Weave LOS		F					F				F		
Summarize Segment Operations													
Segment v/c ratio	0.90	1.11	0.70	0.70	0.74	0.84	1.27	0.65	0.82	0.79	1.09	0.73	0.66
Segment Density	36.7	-	33.7	25.8	30.7	32.9	-	23.7	30.3	30.1	-	27.1	25.5
Segment LOS	E	F	D	C	D	D	F	C	D	D	F	D	C
Over Capacity		Weave					Weave				Weave		

Project: John Wayne Airport Expansion **Scenario:** 2026 Baseline
Freeway Corridor: 405N **Peak Hour:** PM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*7,630*	7,630	6,590	7,340	7,740	6,320	6,320	5,730	6,840	7,130
On Ramp Volume			*750*	*1,120*	*1,350*			*1,110*	*290*	*540*
Off Ramp Volume		*1,040*		*720*	*2,770*		*590*			*2,750*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	7,630	7,630	7,340	8,460	9,090	6,320	6,320	6,840	7,130	7,670
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,256	8,256	7,919	9,128	9,736	6,769	6,769	7,326	7,637	8,215
GP Flow (pcphpl)	1,651	1,651	1,584	1,521	1,623	1,692	1,692	1,465	1,527	1,369
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*23.5*	*23.5*	*22.3*	*20.6*	*26.8*	*26.8*	*26.8*	*26.8*	*11.4*	*11.3*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.70	0.70	0.67	0.65	0.69	0.72	0.72	0.62	0.65	0.58
Speed (mph)	64.1	64.1	64.5	64.8	64.3	63.8	63.8	64.9	64.8	65.0
Density (pcphpl)	25.8	25.8	24.5	23.5	25.2	26.5	26.5	22.6	23.6	21.1
LOS	C	C	C	C	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			7,122	7,937	8,301			6,137	7,328	7,641
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.61	0.68	0.71			0.65	0.62	0.65
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		7,151		8,362	6,769		6,142			5,291
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.61		0.71	0.72		0.65			0.56

Location	1	2	3	4	5	6	7	8	9	10



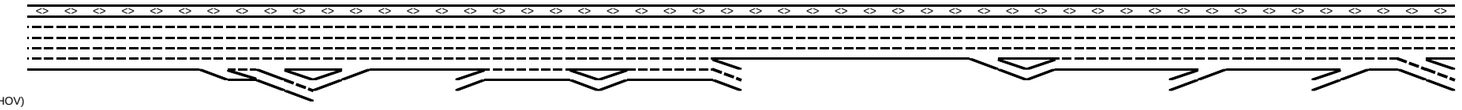
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			750	1,120	1,350			1,110	290	540
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			797	1,191	1,435			1,189	308	574
On Flow (pcphpl)			797	1,191	1,435			1,189	308	574
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.40	0.60	0.72			0.53	0.15	0.29

Location	1	2	3	4	5	6	7	8	9	10



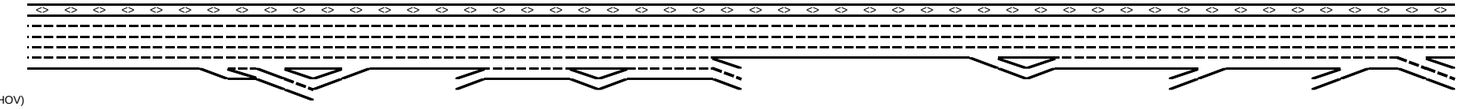
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,040		720	2,770		590			2,750
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,106		765	2,967		627			2,924
Off Flow (pcphpl)		553		765	1,483		627			1,462
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.28		0.38	0.66		0.31			0.73
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			5,199						5,350	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.118						0.179	
v_{12} (pcph)			614						959	
v_3 (pcph)										
v_{34} (pcph)			4,585						4,391	
v_{12a} (pcph)			2,080						2,140	
v_{R12a} (pcph)			2,877						2,448	
Merge Speed Index			0.35						0.33	
Merge Area Speed			56.9						57.3	
Outer Lanes Volume			1,560						1,605	
Outer Lanes Speed			61.2						61.0	
Segment Speed			59.1						59.4	
Merge v/c ratio			0.63						0.53	
Merge Density			24.0						21.5	
Merge LOS			C						C	

Location	1	2	3	4	5	6	7	8	9	10



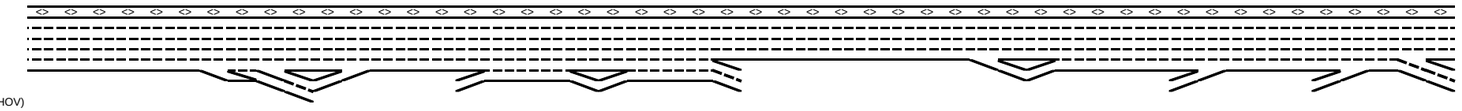
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		6,605					6,769			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.544					0.562			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		2,536					3,305			
v_3 (pcph)										
v_{34} (pcph)		4,070					3,464			
v_{12a} (pcph)		2,642					3,305			
Diverge Speed Index		0.53					0.48			
Diverge Area Speed		52.9					53.9			
Outer Lanes Volume		1,982					1,732			
Outer Lanes Speed		67.5					68.5			
Segment Speed		60.8					60.5			
Diverge v/c ratio		0.60					0.75			
Diverge Density		18.5					31.1			
Diverge LOS		B					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				7,340 1,120 7,740 720 8,460	7,740 1,350 6,320 2,770 9,090					7,130 540 4,920 2,750 7,670
On to Off Volume (vph)				*95*	*411*					*194*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				101	437					206
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				1,025	939					346
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,089	998					368

Location	1	2	3	4	5	6	7	8	9	10



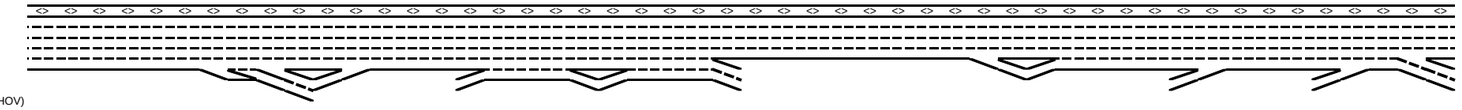
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				625	2,359					2,556
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				664	2,526					2,718
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				6,715	5,381					4,574
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				7,245	5,764					4,899

Location	1	2	3	4	5	6	7	8	9	10



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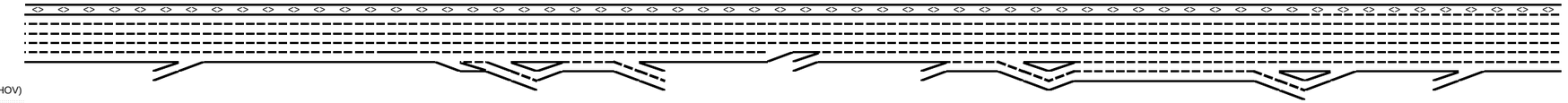
<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				1,754	3,524					3,086
Non-Weave Flow				7,347	6,201					5,104
Segment Flow				9,100	9,725					8,191
Max Weave Length				4,462	4,696					6,422
Length Check				OK	OK					OK
Ideal Weave Capacity				2,172	2,157					1,897
f_{HV}				0.979	0.984					0.986
f_P				0.999	0.999					1.000
Capacity Condition 1				10,613	10,601					9,345
Capacity Condition 2				12,174	9,493					6,276
Weave v/c ratio				0.84	1.01					1.29
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				1,754	1,996					368
Weave LC Rate				2,372	2,631					351
Non-Weave LC Rate 1				1,705	1,493					360
Non-Weave LC Rate 2				3,327	3,072					2,827
Non-Weave LC Rate 3				-238	-572					-4,253
Segment LC Rate				4,077	4,125					710
Weave Intensity Factor				0.377	0.374					0.298
Weave Speed				51.3	51.4					53.5
Non-Weave Speed				43.6	41.3					54.5
Segment Speed				44.9	44.5					54.1
Weave Density				40.5	-					-
Weave LOS				E	F					F
Summarize Segment Operations										
Segment v/c ratio	0.70	0.60	0.63	0.84	1.01	0.72	0.75	0.62	0.53	1.29
Segment Density	25.8	18.5	24.0	40.5	-	26.5	31.1	22.6	21.5	-
Segment LOS	C	B	C	E	F	D	D	C	C	F
Over Capacity					Weave					Weave

Project: John Wayne Airport Expansion **Scenario:** 2026 Baseline
Freeway Corridor: 405S **Peak Hour:** PM

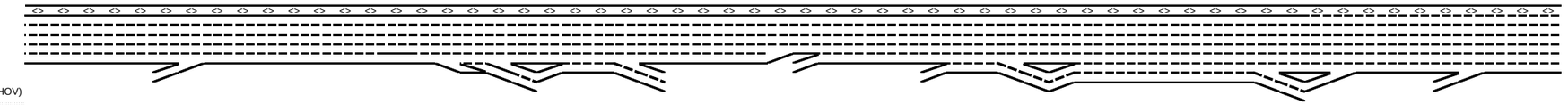
Location	1	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*5,990*	5,990	7,070	7,070	6,040	6,290	6,290	7,900	8,040		5,975	6,500
On Ramp Volume		*1,080*			*1,160*		*1,610*	*1,420*	*910*		*630*	*1,110*
Off Ramp Volume				*1,030*	*910*			*1,280*	*1,780*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	5,990	7,070	7,070	7,070	7,200	6,290	7,900	9,320	8,950		6,605	7,610
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	6,416	7,572	7,572	7,572	7,712	6,737	8,461	9,982	9,657		7,147	8,235
GP Flow (pcphpl)	1,283	1,514	1,514	1,514	1,285	1,684	1,692	1,664	1,380		1,429	1,647
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*67.6*	*67.6*	*67.6*	*67.6*	*70.8*	*70.8*	*70.8*	*50.3*	*50.3*		*23.7*	*23.7*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.55	0.64	0.64	0.64	0.55	0.72	0.72	0.71	0.59		0.61	0.70
Speed (mph)	65.0	64.8	64.8	64.8	65.0	63.9	63.8	64.0	65.0		65.0	64.1
Density (pcphpl)	19.7	23.4	23.4	23.4	19.8	26.4	26.5	26.0	21.2		22.0	25.7
LOS	C	C	C	C	C	D	D	C	C		C	C
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		6,424			6,478		6,737	8,461	8,689		6,478	7,055
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.55			0.55		0.72	0.72	0.74		0.55	0.60
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				6,477	6,737	6,737		8,621	7,764			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.55	0.57	0.72		0.73	0.66			

Location	1	2	3	4	5	6	7	8	9	10	11	12



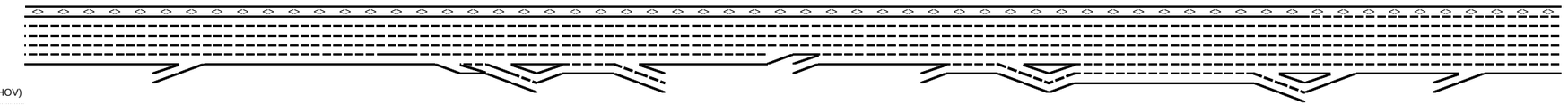
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,080			1,160		1,610	1,420	910		630	1,110
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,148			1,233		1,724	1,521	967		670	1,180
On Flow (pcphpl)		1,148			1,233		1,724	1,521	484		670	1,180
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.57			0.62		0.77	0.68	0.24		0.33	0.59

Location	1	2	3	4	5	6	7	8	9	10	11	12



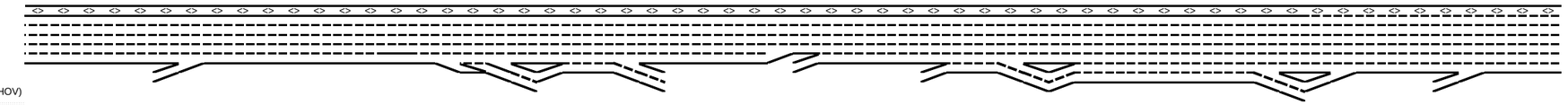
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,030	910			1,280	1,780			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,095	975			1,361	1,892			
Off Flow (pcphpl)				548	487			680	946			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.27	0.22			0.34	0.47			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		4,882									4,923	5,150
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.074									0.134	0.070
v_{12} (pcph)		363									660	362
v_3 (pcph)												
v_{34} (pcph)		4,520									4,263	4,788
v_{12a} (pcph)		1,953									1,969	2,060
v_{R12a} (pcph)		3,101									2,639	3,240
Merge Speed Index		0.37									0.34	0.34
Merge Area Speed		56.5									57.2	57.2
Outer Lanes Volume		1,465									1,477	1,545
Outer Lanes Speed		61.5									61.5	61.2
Segment Speed		58.8									59.4	59.1
Merge v/c ratio		0.67									0.57	0.70
Merge Density		25.7									22.5	22.8
Merge LOS		C									C	C

Location	1	2	3	4	5	6	7	8	9	10	11	12



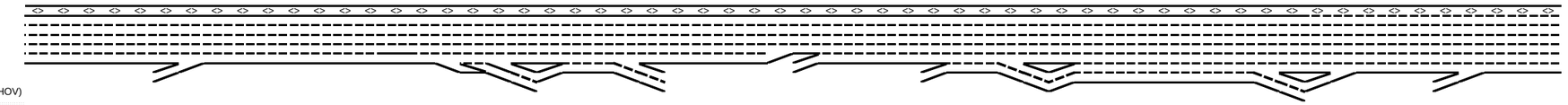
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				6,058								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.558								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				2,385								
v_3 (pcph)												
v_{34} (pcph)				3,672								
v_{12a} (pcph)				2,423								
Diverge Speed Index				0.53								
Diverge Area Speed				52.9								
Outer Lanes Volume				1,817								
Outer Lanes Speed				68.1								
Segment Speed				61.1								
Diverge v/c ratio				0.55								
Diverge Density				18.1								
Diverge LOS				B								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					6,040 1,160 6,290 910 7,200			7,900 1,420 8,040 1,280 9,320	8,040 910 7,170 1,780 8,950			
On to Off Volume (vph)					*147*			*195*	*181*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					156			207	192			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					1,013			1,225	729			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					1,077			1,312	775			

Location	1	2	3	4	5	6	7	8	9	10	11	12



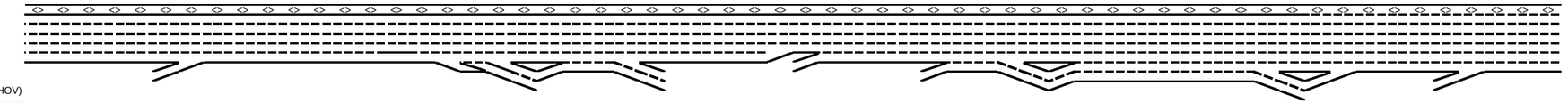
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					763			1,085	1,599			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					818			1,154	1,700			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					5,277			6,815	6,441			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					5,652			7,299	6,949			

Location	1	2	3	4	5	6	7	8	9	10	11	12



Key

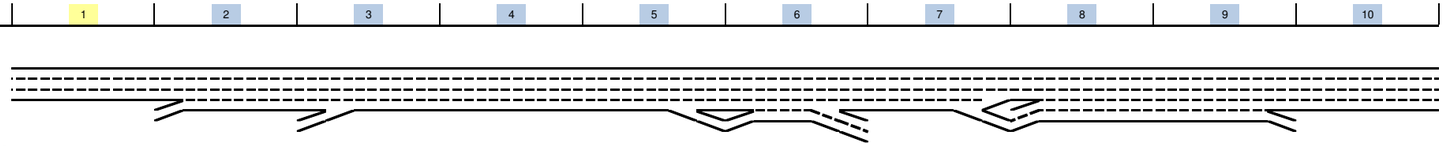
<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					1,895			2,466	2,475			
Non-Weave Flow					5,807			7,507	7,142			
Segment Flow					7,702			9,972	9,617			
Max Weave Length					5,012			5,025	3,565			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,087			2,004	2,116			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	0.999			
Capacity Condition 1					10,254			9,835	10,354			
Capacity Condition 2					9,585			9,528	13,312			
Weave v/c ratio					0.79			1.03	0.91			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					1,077			1,312	1,700			
Weave LC Rate					1,479			1,294	1,682			
Non-Weave LC Rate 1					1,087			854	779			
Non-Weave LC Rate 2					2,984			3,363	3,282			
Non-Weave LC Rate 3					-1,817			-3,680	-3,767			
Segment LC Rate					2,566			2,149	2,462			
Weave Intensity Factor					0.332			0.714	0.795			
Weave Speed					52.5			44.2	42.9			
Non-Weave Speed					49.8			46.0	43.5			
Segment Speed					50.5			45.5	43.4			
Weave Density					30.5			-	44.4			
Weave LOS					D			F	E			
Summarize Segment Operations												
Segment v/c ratio	0.55	0.67	0.64	0.55	0.79	0.72	0.72	1.03	0.91		0.57	0.70
Segment Density	19.7	25.7	23.4	18.1	30.5	26.4	26.5	-	44.4		22.5	22.8
Segment LOS	C	C	C	B	D	D	D	F	E		C	C
Over Capacity								Weave				

APPENDIX J: WITH PROJECT FREEWAY ANALYSIS RESULTS

Project: John Wayne Airport Expansion **Scenario:** Existing Plus Proposed Project
Freeway Corridor: 73N **Peak Hour:** AM



Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*6,290*	6,290	7,970	8,680	8,680	7,680	6,480	5,730		5,380
On Ramp Volume		*1,680*	*710*			*780*		*630*		
Off Ramp Volume					*1,000*	*1,980*	*750*	*980*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	6,290	7,970	8,680	8,680	8,680	8,460	6,480	6,360		5,380
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	6,699	8,488	9,244	9,244	9,244	9,010	6,901	6,773		5,730
GP Flow (pcphpl)	2,233	2,122	2,311	2,311	2,311	1,802	1,725	1,355		1,432
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*62.3*	*62.3*	*62.3*	*66.1*	*66.1*	*66.1*	*66.1*	*65.5*		*65.5*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.95	0.90	0.98	0.98	0.98	0.77	0.73	0.58		0.61
Speed (mph)	55.2	57.6	53.2	53.2	53.2	62.7	63.5	65.0		65.0
Density (pcphpl)	40.5	36.8	43.4	43.4	43.4	28.7	27.2	20.8		22.0
LOS	E	E	E	E	E	D	D	C		C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		6,702	8,489			8,181		6,102		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.95	0.90			0.87		0.87		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					8,181	6,901	6,102	5,732		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.87	0.73	0.87	0.81		

Location	1	2	3	4	5	6	7	8	9	10

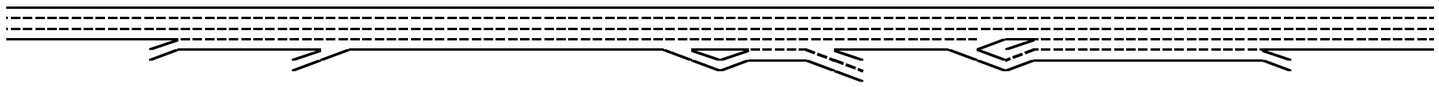
Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,680	710			780		630		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,786	755			829		671		
On Flow (pcphpl)		1,786	755			829		335		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.89	0.38			0.41		0.15		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					1,000	1,980	750	980		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					1,063	2,109	799	1,042		
Off Flow (pcphpl)					1,063	1,054	799	1,042		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.53	0.47	0.36	0.46		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			8,489							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.123							
v_{12} (pcph)			1,048							
v_3 (pcph)										
v_{34} (pcph)			7,441							
v_{12a} (pcph)			3,396							
v_{R12a} (pcph)			4,151							
Merge Speed Index			0.54							
Merge Area Speed			52.6							
Outer Lanes Volume			2,547							
Outer Lanes Speed			57.0							
Segment Speed			54.9							
Merge v/c ratio			0.90							
Merge Density			35.0							
Merge LOS			D							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					9,244		6,901			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.480		0.551			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					4,630		3,459			
v_3 (pcph)										
v_{34} (pcph)					4,614		3,442			
v_{12a} (pcph)					4,630		3,459			
Diverge Speed Index					0.52		0.24			
Diverge Area Speed					53.0		59.5			
Outer Lanes Volume					2,307		1,721			
Outer Lanes Speed					66.2		68.5			
Segment Speed					58.8		63.7			
Diverge v/c ratio					1.05		0.79			
Diverge Density					42.3		32.2			
Diverge LOS					F		D			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,680 780 6,480 1,980 8,460		5,730 630 5,380 980 6,360		
On to Off Volume (vph)						*183*		*97*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						194		103		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						597		533		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						635		568		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,797		883		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,914		940		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						5,883		4,847		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,265		5,162		

Location	1	2	3	4	5	6	7	8	9	10

Key

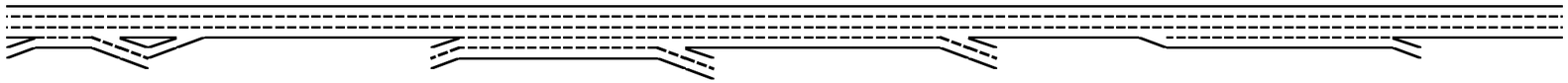
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						2,549		1,508		
Non-Weave Flow						6,459		5,265		
Segment Flow						9,008		6,773		
Max Weave Length						5,402		3,203		
Length Check						OK		OK		
Ideal Weave Capacity						2,065		2,220		
f_{HV}						0.989		0.988		
f_P						0.999		0.999		
Capacity Condition 1						8,159		6,576		
Capacity Condition 2						8,377		15,524		
Weave v/c ratio						1.09		1.02		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						635		1,881		
Weave LC Rate						1,152		2,389		
Non-Weave LC Rate 1						1,468		1,320		
Non-Weave LC Rate 2						3,129		2,863		
Non-Weave LC Rate 3						-933		-1,142		
Segment LC Rate						2,620		3,709		
Weave Intensity Factor						0.322		0.462		
Weave Speed						52.8		49.2		
Non-Weave Speed						49.6		40.6		
Segment Speed						50.5		42.3		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.95	0.90	0.90	0.98	1.05	1.09	0.79	1.02		0.61
Segment Density	40.5	36.8	35.0	43.4	-	-	32.2	-		22.0
Segment LOS	E	E	D	E	F	F	D	F		C
Over Capacity					Diverge	Weave		Weave		

Project: John Wayne Airport Expansion **Scenario:** Existing Plus Proposed Project
Freeway Corridor: 73S **Peak Hour:** AM

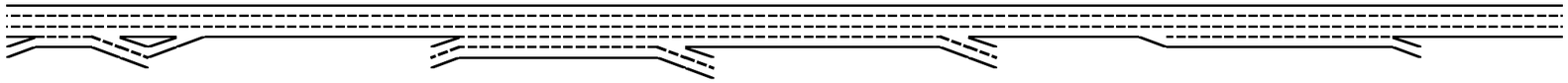
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,830	4,690	5,430	5,430		5,500	5,500	3,750	3,750		2,790
On Ramp Volume	*790*	*740*		*2,410*							
Off Ramp Volume	*930*			*2,340*			*1,750*		*960*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	5,620	5,430	5,430	7,840		5,500	5,500	3,750	3,750		2,790
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,985	5,783	5,783	8,350		5,858	5,858	3,994	3,994		2,971
GP Flow (pcphpl)	1,496	1,928	1,928	1,670		1,464	1,464	1,331	799		990
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*62.8*	*62.8*	*52.5*	*52.5*		*63.4*	*63.4*	*63.4*	*63.4*		*63.4*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.64	0.82	0.82	0.71		0.62	0.62	0.57	0.34		0.42
Speed (mph)	64.9	61.1	61.1	64.0		64.9	64.9	65.0	65.0		65.0
Density (pcphpl)	23.1	31.6	31.6	26.1		22.5	22.5	20.5	12.3		15.2
LOS	C	D	D	D		C	C	C	B		B
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	5,145	4,995		5,783					3,994		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.73	0.71		0.82					0.57		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	4,995			5,862			3,997		2,973		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.71			0.83			0.57		0.32		

Location	2	3	4	5	6	7	8	9	10	11	12



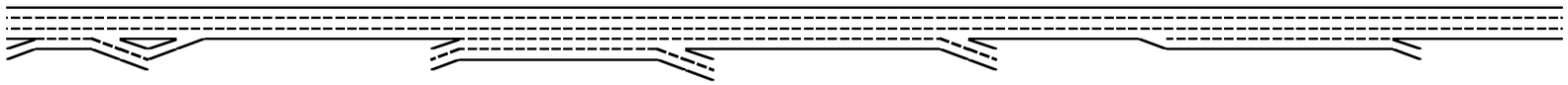
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On

Location	2	3	4	5	6	7	8	9	10	11	12



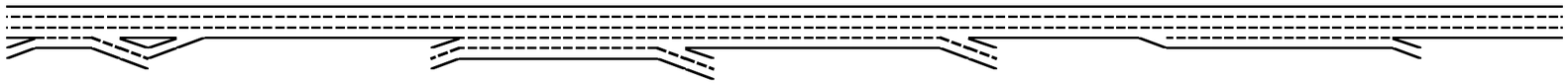
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	790	740		2,410							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	840	788		2,567							
On Flow (pcphpl)	840	788		1,283							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.42	0.36		0.57							

Location	2	3	4	5	6	7	8	9	10	11	12



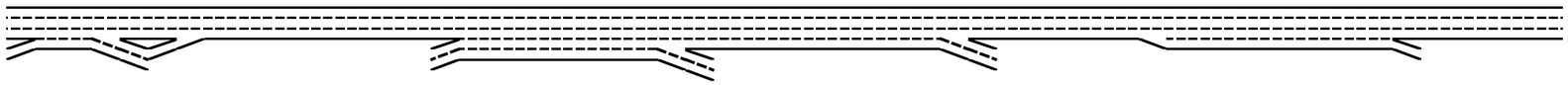
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	930			2,340			1,750		960		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	990			2,488			1,861		1,021		
Off Flow (pcphpl)	495			1,244			930		1,021		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.22			0.62			0.47		0.51		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		4,995									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,971									
v_3 (pcph)		2,024									
v_{34} (pcph)											
v_{12a} (pcph)		2,971									
v_{R12a} (pcph)		3,759									
Merge Speed Index		0.42									
Merge Area Speed		55.3									
Outer Lanes Volume		2,024									
Outer Lanes Speed		59.5									
Segment Speed		56.7									
Merge v/c ratio		0.82									
Merge Density		30.6									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



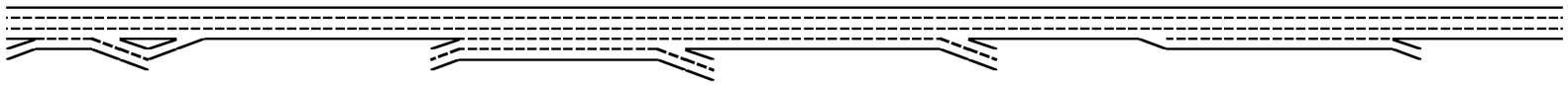
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							5,858				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.528				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,900				
v_3 (pcph)											
v_{34} (pcph)							2,958				
v_{12a} (pcph)							2,900				
Diverge Speed Index							0.60				
Diverge Area Speed							51.3				
Outer Lanes Volume							1,479				
Outer Lanes Speed							69.4				
Segment Speed							59.1				
Diverge v/c ratio							0.66				
Diverge Density							27.9				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,830 790 4,690 930 5,620			5,430 2,410 5,500 2,340 7,840							
On to Off Volume (vph)	*131*			*719*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	139			765							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	659			1,691							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	701			1,801							

Location	2	3	4	5	6	7	8	9	10	11	12



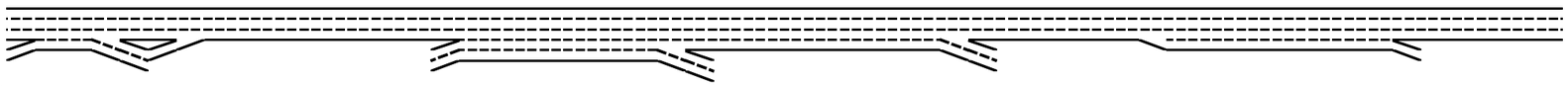
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	799			1,621							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	851			1,723							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	4,031			3,809							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	4,293			4,057							

Location	2	3	4	5	6	7	8	9	10	11	12



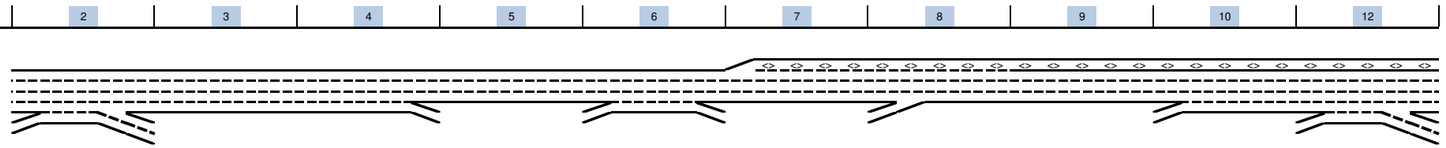
Key

<> Express Lane (HOV)

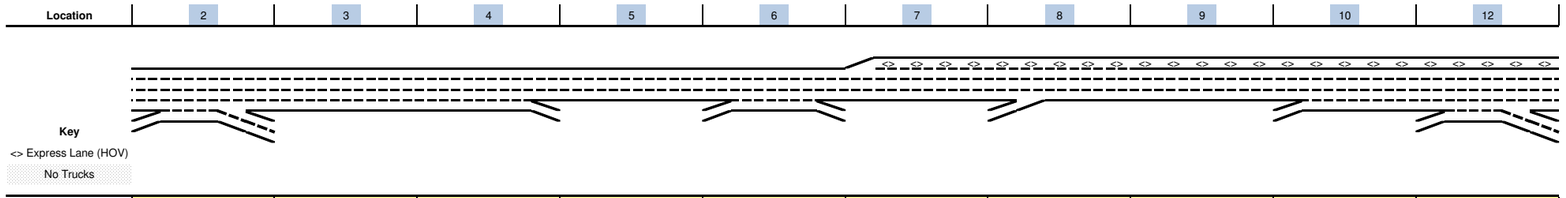
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,552			3,524							
Non-Weave Flow	4,432			4,822							
Segment Flow	5,984			8,345							
Max Weave Length	5,152			5,366							
Length Check	OK			OK							
Ideal Weave Capacity	2,086			2,028							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,179			6,002							
Capacity Condition 2	9,137			8,177							
Weave v/c ratio	0.96			1.37							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	701			1,723							
Weave LC Rate	1,287			2,099							
Non-Weave LC Rate 1	1,257			1,044							
Non-Weave LC Rate 2	2,677			2,764							
Non-Weave LC Rate 3	-1,036			-1,903							
Segment LC Rate	2,544			3,143							
Weave Intensity Factor	0.311			0.496							
Weave Speed	53.1			48.4							
Non-Weave Speed	50.4			39.2							
Segment Speed	51.1			42.7							
Weave Density	39.1			-							
Weave LOS	E			F							
Summarize Segment Operations											
Segment v/c ratio	0.96	0.82	0.82	1.37		0.62	0.66	0.57	0.34		0.42
Segment Density	39.1	30.6	31.6	-		22.5	27.9	20.5	12.3		15.2
Segment LOS	E	D	D	F		C	C	C	B		B
Over Capacity				Weave							

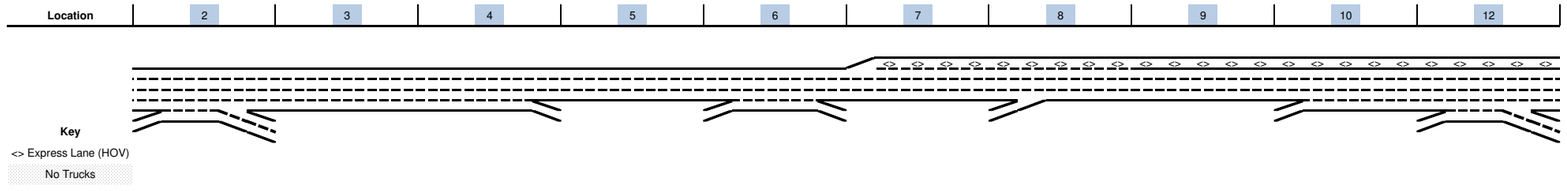
Project: John Wayne Airport Expansion **Scenario:** Existing Plus Proposed Project
Freeway Corridor: 55N **Peak Hour:** AM



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	6,250	6,750	6,750	6,020	6,020	6,550	6,550	7,260	7,260	9,840
On Ramp Volume	*1,850*				*1,980*		*710*		*2,580*	*1,340*
Off Ramp Volume	*1,350*		*730*		*1,450*					*1,740*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	8,100	6,750	6,750	6,020	8,000	6,550	7,260	7,260	9,840	11,180
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,676	7,230	7,230	6,448	8,568	7,015	7,776	7,776	10,467	11,892
GP Flow (pcphpl)	1,735	1,807	1,807	2,149	2,142	2,338	2,592	2,592	2,617	2,378
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*53.0*	*53.0*	*53.0*	*29.2*	*32.9*	*32.9*	*43.6*	*43.6*	*43.6*	*64.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

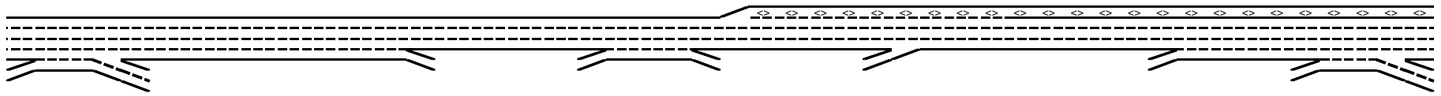


Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	1,850				1,980		710		2,580	1,340
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,967				2,121		755		2,744	1,425
On Flow (pcphpl)	1,967				2,121		755		2,744	1,425
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.98				0.94		0.38		1.37	0.63



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	1,350		730		1,450					1,340
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	1,446		776		1,553					1,425
Off Flow (pcphpl)	723		776		1,553					713
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.32		0.39		0.69					0.36
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							7,021			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							4,267			
v_3 (pcph)							2,754			
v_{34} (pcph)										
v_{12a} (pcph)							4,321			
v_{R12a} (pcph)							5,076			
Merge Speed Index							-			
Merge Area Speed							-			
Outer Lanes Volume										
Outer Lanes Speed										
Segment Speed										
Merge v/c ratio							1.10			
Merge Density							-			
Merge LOS							F			

Location	2	3	4	5	6	7	8	9	10	12



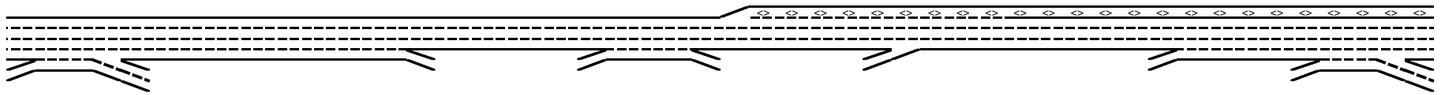
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			7,230							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.544							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			3,590							
v_3 (pcph)										
v_{34} (pcph)			3,640							
v_{12a} (pcph)			3,590							
Diverge Speed Index			0.50							
Diverge Area Speed			53.5							
Outer Lanes Volume			1,820							
Outer Lanes Speed			68.1							
Segment Speed			60.0							
Diverge v/c ratio			0.82							
Diverge Density			21.6							
Diverge LOS			C							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	6,250 1,850 6,750 1,350 8,100				6,020 1,980 6,550 1,450 8,000					9,840 1,340 9,440 1,740 11,180
On to Off Volume (vph)	*308*				*359*					*209*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	328				382					222
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	1,542				1,621					1,131
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	1,639				1,736					1,204

Location	2	3	4	5	6	7	8	9	10	12



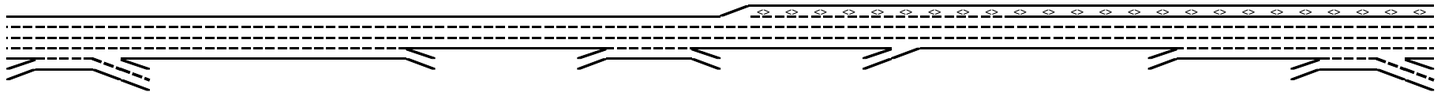
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,042				1,091					1,131
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	1,116				1,169					1,204
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	5,208				4,929					8,709
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	5,578				5,279					9,263

Location	2	3	4	5	6	7	8	9	10	12



Key

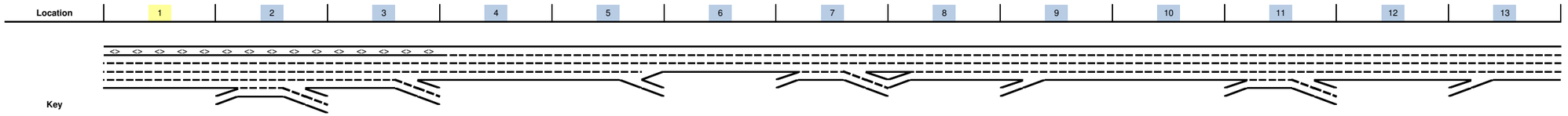
<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,755				2,905					2,407
Non-Weave Flow	5,906				5,661					9,485
Segment Flow	8,661				8,566					11,892
Max Weave Length	5,778				6,008					4,561
Length Check	OK				OK					OK
Ideal Weave Capacity	1,968				1,921					2,151
f_{HV}	0.984				0.983					0.990
f_P	0.998				0.997					0.999
Capacity Condition 1	7,735				5,646					8,507
Capacity Condition 2	7,414				6,933					11,722
Weave v/c ratio	1.15				1.49					1.38
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	1,639				2,905					1,204
Weave LC Rate	1,809				2,984					1,834
Non-Weave LC Rate 1	872				805					2,249
Non-Weave LC Rate 2	3,006				2,951					3,804
Non-Weave LC Rate 3	-2,889				-3,238					624
Segment LC Rate	2,681				3,790					4,082
Weave Intensity Factor	0.596				1.332					0.402
Weave Speed	46.3				36.4					50.7
Non-Weave Speed	42.8				30.4					42.1
Segment Speed	43.9				32.2					43.6
Weave Density	-				-					-
Weave LOS	F				F					F
Summarize Segment Operations										
Segment v/c ratio	1.15	0.77	0.82	0.91	1.49	1.00	1.10	1.10	1.11	1.38
Segment Density	-	28.9	21.6	37.7	-	44.5	-	-	-	-
Segment LOS	F	D	C	E	F	E	F	F	F	F
Over Capacity	Weave				Weave		Segment GP Lanes Merge	Segment GP Lanes	Segment GP Lanes In GP Lanes On Ramp Roadway	Segment GP Lanes In GP Lanes Out GP Lanes Weave

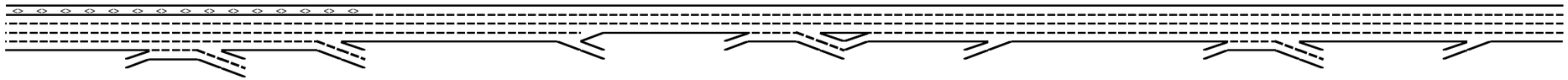
Project: John Wayne Airport Expansion **Scenario:** Existing Plus Proposed Project

Freeway Corridor: 55S **Peak Hour:** AM



Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*7,700*	7,700	6,170	5,520	5,520	4,890	4,890	3,730	4,040	4,790	4,790	4,960	4,960
On Ramp Volume		*870*					*1,250*	*310*	*750*		*930*		*290*
Off Ramp Volume		*2,400*	*650*		*630*		*2,410*				*760*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	7,700	8,570	6,170	5,520	5,520	4,890	6,140	4,040	4,790	4,790	5,720	4,960	5,250
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,190	9,116	6,563	5,912	5,912	5,237	6,576	4,327	5,130	5,130	6,126	5,312	5,623
GP Flow (pcphpl)	2,048	1,823	1,641	1,478	1,478	1,746	1,644	1,082	1,283	1,283	1,225	1,328	1,406
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*64.0*	*64.0*	*65.9*	*65.9*	*65.9*	*65.9*	*62.2*	*52.4*	*52.4*	*52.4*	*52.4*	*68.0*	*68.0*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.87	0.78	0.70	0.63	0.63	0.74	0.70	0.46	0.55	0.55	0.52	0.57	0.60
Speed (mph)	59.1	62.5	64.2	64.9	64.9	63.3	64.2	65.0	65.0	65.0	65.0	65.0	65.0
Density (pcphpl)	34.7	29.2	25.6	22.8	22.8	27.6	25.6	16.6	19.7	19.7	18.9	20.4	21.6
LOS	D	D	C	C	C	D	C	B	C	C	C	C	C
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,191					5,237	3,997	4,327		5,130		5,315
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.87					0.74	0.57	0.46		0.55		0.57
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		6,563	5,872		5,242		3,995				5,318		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.70	0.83		0.74		0.57				0.57		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



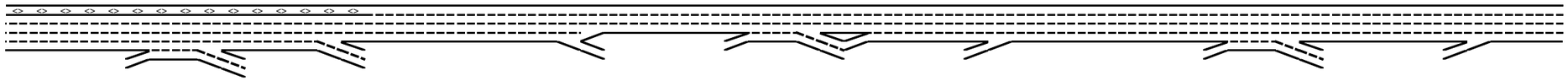
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



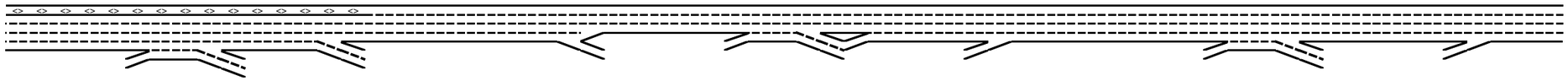
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		870					1,250	310	750		930		290
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		925					1,339	330	803		996		308
On Flow (pcphpl)		925					1,339	330	803		996		308
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.46					0.60	0.16	0.37		0.44		0.15

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



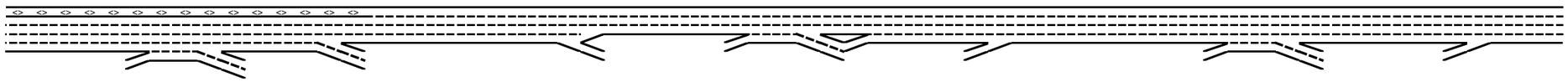
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		2,400	650		630		2,410				760		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		2,553	691		670		2,581				808		
Off Flow (pcphpl)		1,276	346		670		1,291				404		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.57	0.15		0.33		0.57				0.20		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									4,327				5,315
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.117				0.179
v_{12} (pcph)									508				953
v_3 (pcph)													
v_{34} (pcph)									3,819				4,362
v_{12a} (pcph)									1,731				2,126
v_{R12a} (pcph)									2,534				2,434
Merge Speed Index									0.30				0.33
Merge Area Speed									58.1				57.5
Outer Lanes Volume									1,298				1,594
Outer Lanes Speed									62.1				61.1
Segment Speed									60.1				59.5
Merge v/c ratio									0.55				0.53
Merge Density									20.8				20.9
Merge LOS									C				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



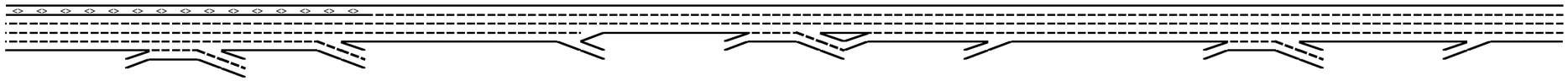
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			6,563		5,912								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.564		0.581								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,218		2,955								
v_3 (pcph)													
v_{34} (pcph)			4,345		2,957								
v_{12a} (pcph)			2,625		2,955								
Diverge Speed Index			0.23		0.49								
Diverge Area Speed			59.7		53.8								
Outer Lanes Volume			1,969		1,478								
Outer Lanes Speed			67.5		69.4								
Segment Speed			64.2		60.6								
Diverge v/c ratio			0.60		0.67								
Diverge Density			28.7		28.0								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		7,700 870 6,170 2,400 8,570					4,890 1,250 3,730 2,410 6,140				4,790 930 4,960 760 5,720		
On to Off Volume (vph)		*244*					*491*				*124*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		259					522				131		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		626					759				806		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		666					813				864		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



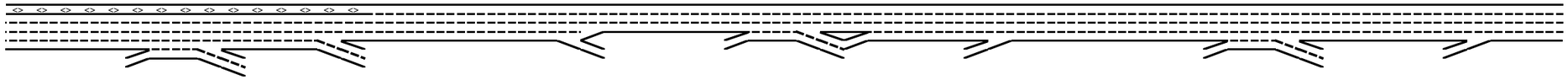
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		2,156					1,919				636		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		2,294					2,056				677		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		5,544					2,971				4,154		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		5,897					3,182				4,449		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



Key

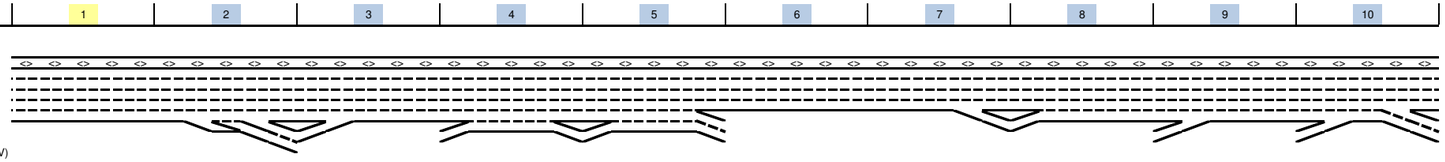
<> Express Lane (HOV)

No Trucks

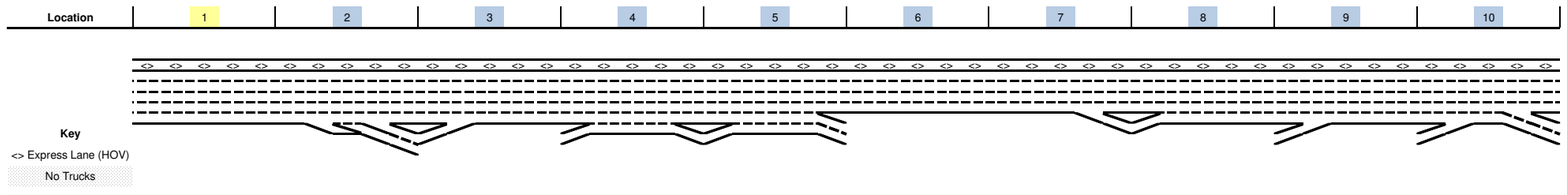
Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,960					2,869				1,540		
Non-Weave Flow		6,156					3,703				4,580		
Segment Flow		9,115					6,572				6,120		
Max Weave Length		5,850					7,094				5,071		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,050					1,981				2,042		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.998				0.998		
Capacity Condition 1		8,111					5,831				8,014		
Capacity Condition 2		7,310					5,395				9,358		
Weave v/c ratio		1.23					1.20				0.75		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		666					813				864		
Weave LC Rate		1,285					1,620				1,133		
Non-Weave LC Rate 1		1,546					1,413				737		
Non-Weave LC Rate 2		3,062					2,515				2,710		
Non-Weave LC Rate 3		-559					-317				-2,728		
Segment LC Rate		2,831					3,033				1,870		
Weave Intensity Factor		0.305					0.285				0.359		
Weave Speed		53.3					53.9				51.8		
Non-Weave Speed		49.3					48.6				51.4		
Segment Speed		50.5					50.8				51.5		
Weave Density		-					-				29.7		
Weave LOS		F					F				D		
Summarize Segment Operations													
Segment v/c ratio	0.87	1.23	0.60	0.63	0.67	0.74	1.20	0.46	0.55	0.55	0.75	0.57	0.53
Segment Density	34.7	-	28.7	22.8	28.0	27.6	-	16.6	20.8	19.7	29.7	20.4	20.9
Segment LOS	D	F	D	C	D	D	F	B	C	C	D	C	C
Over Capacity		Weave					Weave						

Project: John Wayne Airport Expansion **Scenario:** Existing Plus Proposed Project

Freeway Corridor: 405N **Peak Hour:** AM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*10,650*	10,650	8,790	9,230	8,590	6,540	6,540	5,920	7,360	7,540
On Ramp Volume			*440*	*1,190*	*460*			*1,440*	*180*	*290*
Off Ramp Volume		*1,860*		*1,830*	*2,510*		*620*			*2,660*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	10,650	10,650	9,230	10,420	9,050	6,540	6,540	7,360	7,540	7,830
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	11,524	11,524	9,959	11,243	9,693	7,005	7,005	7,883	8,076	8,386
GP Flow (pcphpl)	2,305	2,305	1,992	1,874	1,616	1,751	1,751	1,577	1,615	1,398
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*47.1*	*47.1*	*65.4*	*61.3*	*66.2*	*66.2*	*66.2*	*66.2*	*64.9*	*66.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.98	0.98	0.85	0.80	0.69	0.75	0.75	0.67	0.69	0.59
Speed (mph)	53.4	53.4	60.0	61.8	64.3	63.3	63.3	64.6	64.3	65.0
Density (pcphpl)	43.2	43.2	33.2	30.3	25.1	27.7	27.7	24.4	25.1	21.5
LOS	E	E	D	D	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			9,491	9,977	9,204			6,341	7,884	8,078
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.81	0.85	0.78			0.67	0.67	0.69
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		9,547		9,297	7,005		6,346			5,558
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.81		0.79	0.75		0.68			0.59


Location
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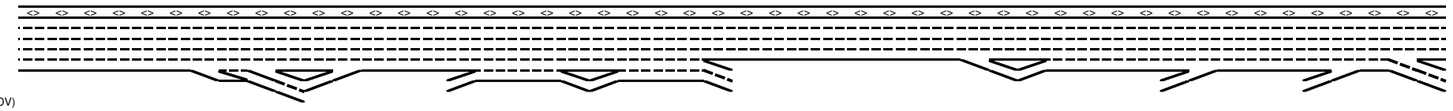
Key
<> Express Lane (HOV)
No Trucks
Name
Culver On to Jamboree Off
Jamboree Off Ramp
Jamboree N On Ramp
Jamboree S On to McArthur Off
McArthur On to 55 N&S Off
55 Off to Bristol Off
Bristol/Ave Arts Off Ramp
On Ramp from 55 S
Bristol N On Ramp
Bristol S On Ramp to S Coast Off

Location	1	2	3	4	5	6	7	8	9	10



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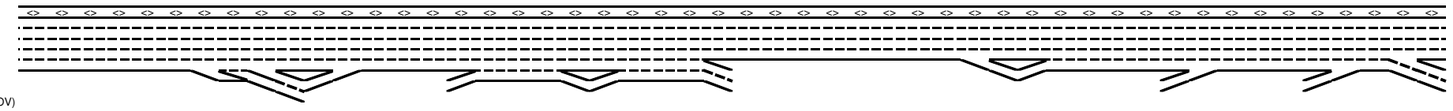
<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			440	1,190	460			1,440	180	290
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			468	1,265	489			1,542	191	308
On Flow (pcphpl)			468	1,265	489			1,542	191	308
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.23	0.63	0.24			0.69	0.10	0.15

Location	1	2	3	4	5	6	7	8	9	10



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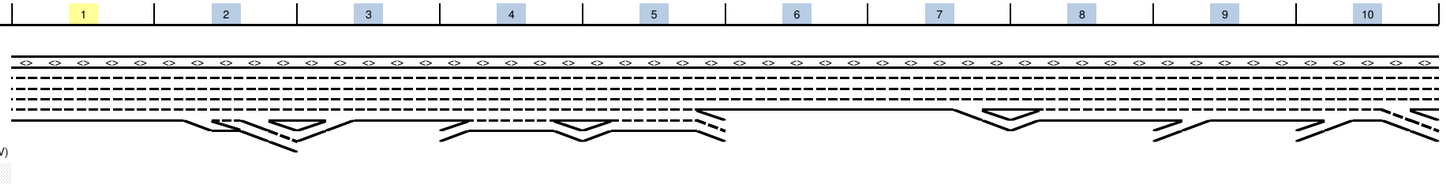
<> Express Lane (HOV)

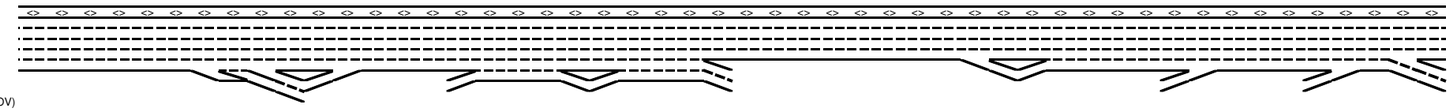
No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,860		1,830	2,510		620			2,660
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,977		1,946	2,688		659			2,828
Off Flow (pcphpl)		989		1,946	1,344		659			1,414
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.49		0.97	0.60		0.33			0.71
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			6,991						5,637	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.159						0.194	
v_{12} (pcph)			1,114						1,093	
v_3 (pcph)										
v_{34} (pcph)			5,877						4,544	
v_{12a} (pcph)			2,796						2,255	
v_{R12a} (pcph)			3,264						2,446	
Merge Speed Index			0.38						0.33	
Merge Area Speed			56.2						57.3	
Outer Lanes Volume			2,097						1,691	
Outer Lanes Speed			59.2						60.7	
Segment Speed			57.9						59.3	
Merge v/c ratio			0.71						0.53	
Merge Density			27.2						21.5	
Merge LOS			C						C	



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		9,220					7,005			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.439					0.555			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		3,860					3,426			
v_3 (pcph)										
v_{34} (pcph)		5,359					3,579			
v_{12a} (pcph)		3,860					3,426			
Diverge Speed Index		0.61					0.49			
Diverge Area Speed		51.1					53.8			
Outer Lanes Volume		2,680					1,789			
Outer Lanes Speed		64.8					68.2			
Segment Speed		58.2					60.3			
Diverge v/c ratio		0.88					0.78			
Diverge Density		28.9					32.2			
Diverge LOS		D					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				9,230 1,190 8,590 1,830 10,420	8,590 460 6,540 2,510 9,050					7,540 290 5,170 2,660 7,830
On to Off Volume (vph)				*209*	*128*					*99*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				222	136					105
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				981	332					191
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,043	353					204

Location	1	2	3	4	5	6	7	8	9	10



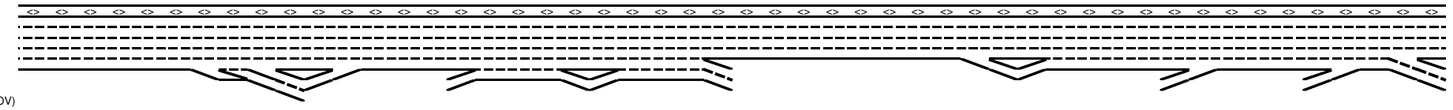
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				1,621	2,382					2,561
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				1,723	2,552					2,723
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				7,609	6,208					4,979
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				8,210	6,649					5,332

Location	1	2	3	4	5	6	7	8	9	10



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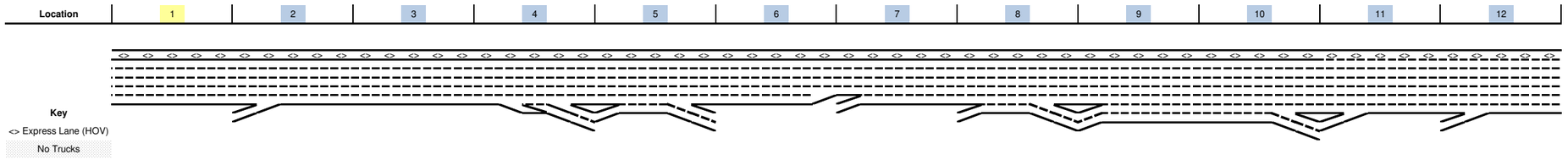
<> Express Lane (HOV)

No Trucks

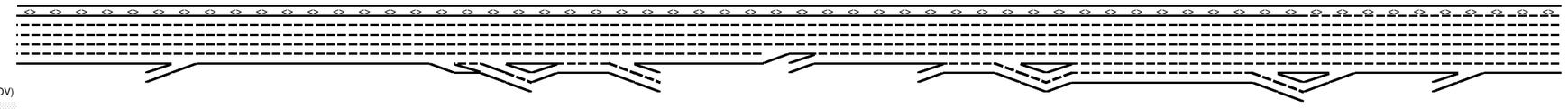
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				2,766	2,905					2,927
Non-Weave Flow				8,432	6,784					5,437
Segment Flow				11,198	9,689					8,364
Max Weave Length				5,023	4,016					6,126
Length Check				OK	OK					OK
Ideal Weave Capacity				2,129	2,209					1,920
f_{HV}				0.979	0.983					0.985
f_P				0.999	1.000					1.000
Capacity Condition 1				10,415	10,856					9,456
Capacity Condition 2				9,507	11,473					6,757
Weave v/c ratio				1.15	0.88					1.22
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				2,766	707					204
Weave LC Rate				3,384	1,343					186
Non-Weave LC Rate 1				1,928	1,613					428
Non-Weave LC Rate 2				3,569	3,202					2,901
Non-Weave LC Rate 3				158	-362					-4,174
Segment LC Rate				5,313	2,956					614
Weave Intensity Factor				0.465	0.288					0.266
Weave Speed				49.1	53.8					54.5
Non-Weave Speed				34.3	50.6					55.5
Segment Speed				37.1	51.5					55.1
Weave Density				-	37.6					-
Weave LOS				F	E					F
Summarize Segment Operations										
Segment v/c ratio	0.98	0.88	0.71	1.15	0.88	0.75	0.78	0.67	0.53	1.22
Segment Density	43.2	28.9	27.2	-	37.6	27.7	32.2	24.4	21.5	-
Segment LOS	E	D	C	F	E	D	D	C	C	F
Over Capacity				Weave						Weave

Project: John Wayne Airport Expansion **Scenario:** Existing Plus Proposed Project
Freeway Corridor: 405S **Peak Hour:** AM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*8,890*	8,890	10,210	10,210	9,070	7,600	7,600	9,600	9,290		5,933	6,133
On Ramp Volume		*1,320*			*1,110*		*2,000*	*2,060*	*520*		*240*	*520*
Off Ramp Volume				*1,140*	*2,580*			*2,370*	*2,690*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	8,890	10,210	10,210	10,210	10,180	7,600	9,600	11,660	9,810		6,173	6,653
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	9,522	10,935	10,935	10,935	10,903	8,140	10,282	12,488	10,584		6,680	7,200
GP Flow (pcphpl)	1,904	2,187	2,187	2,187	1,817	2,035	2,056	2,081	1,512		1,336	1,440
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*35.7*	*35.7*	*35.7*	*35.7*	*44.8*	*44.8*	*44.8*	*50.1*	*50.1*		*54.0*	*54.0*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.81	0.93	0.93	0.93	0.77	0.87	0.88	0.89	0.64		0.57	0.61
Speed (mph)	61.4	56.2	56.2	56.2	62.5	59.3	58.9	58.4	64.8		65.0	65.0
Density (pcphpl)	31.0	38.9	38.9	38.9	29.1	34.3	34.9	35.6	23.3		20.6	22.2
LOS	D	E	E	E	D	D	D	E	C		C	C
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		9,532			9,723		8,140	10,282	10,032		6,425	6,647
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.81			0.83		0.87	0.88	0.85		0.55	0.57
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				9,723	8,140	8,140		9,969	7,725			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.83	0.69	0.87		0.85	0.66			

Location	1	2	3	4	5	6	7	8	9	10	11	12



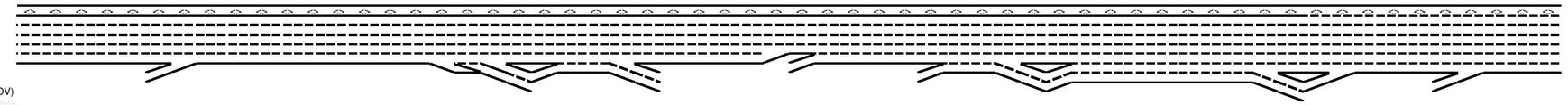
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12



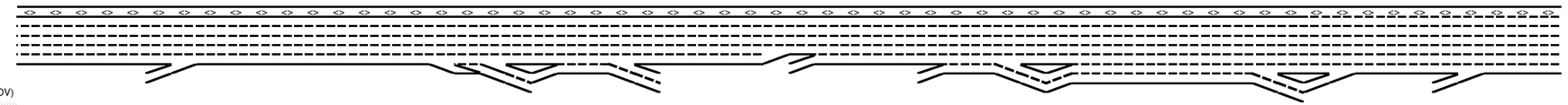
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,320			1,110		2,000	2,060	520		240	520
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,403			1,180		2,142	2,206	553		255	553
On Flow (pcphpl)		1,403			1,180		2,142	2,206	276		255	553
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.70			0.59		0.95	0.98	0.14		0.13	0.28

Location	1	2	3	4	5	6	7	8	9	10	11	12



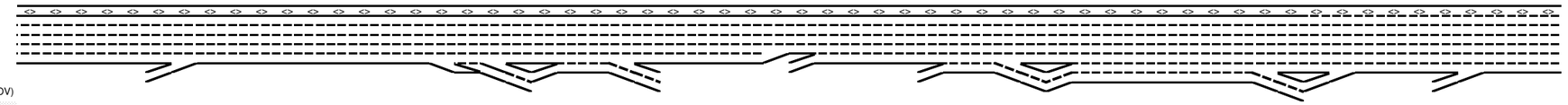
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,140	2,580			2,370	2,690			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,212	2,763			2,520	2,860			
Off Flow (pcphpl)				606	1,382			1,260	1,430			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.30	0.61			0.63	0.71			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		7,032									4,883	4,852
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.042									0.186	0.149
v_{12} (pcph)		298									908	721
v_3 (pcph)												
v_{34} (pcph)		6,734									3,975	4,131
v_{12a} (pcph)		2,813									1,953	1,941
v_{R12a} (pcph)		4,216									2,208	2,494
Merge Speed Index		0.55									0.32	0.29
Merge Area Speed		52.4									57.6	58.4
Outer Lanes Volume		2,110									1,465	1,456
Outer Lanes Speed		59.2									61.5	61.6
Segment Speed		55.6									59.8	60.1
Merge v/c ratio		0.92									0.48	0.54
Merge Density		34.3									19.3	17.3
Merge LOS		D									B	B

Location	1	2	3	4	5	6	7	8	9	10	11	12



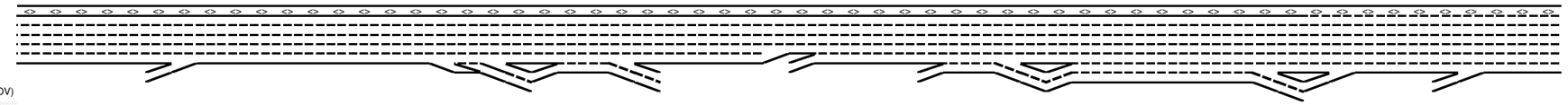
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				8,748								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.486								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				3,171								
v_3 (pcph)												
v_{34} (pcph)				5,577								
v_{12a} (pcph)				3,499								
Diverge Speed Index				0.54								
Diverge Area Speed				52.6								
Outer Lanes Volume				2,625								
Outer Lanes Speed				65.0								
Segment Speed				59.4								
Diverge v/c ratio				0.80								
Diverge Density				27.4								
Diverge LOS				C								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					9,070 1,110 7,600 2,580 10,180			9,600 2,060 9,290 2,370 11,660	9,290 520 7,120 2,690 9,810			
On to Off Volume (vph)					*281*			*419*	*143*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					299			445	152			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					829			1,641	377			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					881			1,758	401			

Location	1	2	3	4	5	6	7	8	9	10	11	12



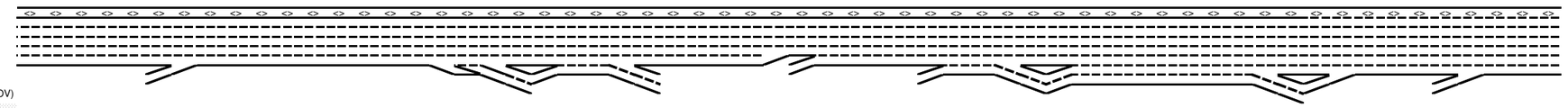
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					2,299			1,951	2,547			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					2,462			2,075	2,708			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					6,771			7,649	6,743			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					7,252			8,192	7,275			

Location	1	2	3	4	5	6	7	8	9	10	11	12



Key

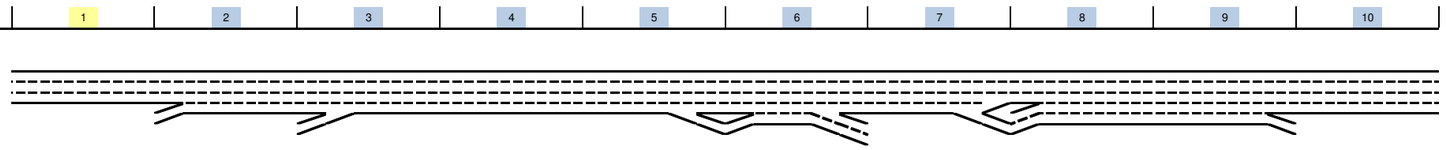
<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					3,343			3,832	3,110			
Non-Weave Flow					7,552			8,637	7,426			
Segment Flow					10,895			12,470	10,536			
Max Weave Length					5,658			5,663	3,966			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,038			1,955	2,085			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	1.000			
Capacity Condition 1					10,013			9,598	10,213			
Capacity Condition 2					7,687			7,668	11,619			
Weave v/c ratio					1.39			1.60	1.01			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					881			1,758	2,708			
Weave LC Rate					1,283			1,740	2,691			
Non-Weave LC Rate 1					1,446			1,087	838			
Non-Weave LC Rate 2					3,373			3,615	3,345			
Non-Weave LC Rate 3					-1,232			-3,409	-3,699			
Segment LC Rate					2,729			2,828	3,529			
Weave Intensity Factor					0.349			0.887	1.056			
Weave Speed					52.1			41.5	39.3			
Non-Weave Speed					48.2			40.4	35.4			
Segment Speed					49.3			40.7	36.5			
Weave Density					-			-	-			
Weave LOS					F			F	F			
Summarize Segment Operations												
Segment v/c ratio	0.81	0.92	0.93	0.80	1.39	0.87	0.88	1.60	1.01		0.48	0.54
Segment Density	31.0	34.3	38.9	27.4	-	34.3	34.9	-	-		19.3	17.3
Segment LOS	D	D	E	C	F	D	D	F	F		B	B
Over Capacity					Weave			Weave	Weave			

Project: John Wayne Airport Expansion **Scenario:** Existing Plus Proposed Project

Freeway Corridor: 73N **Peak Hour:** PM



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Define Freeway Segment	73N-1	73N-2	73N-3	73N-4	73N-5	73N-6 73N-6b 73N-6c	73N-7	73N-8 73N-8b 73N-8c	73N-9	73N-10
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave	Basic	Basic
Density	27.7	28.7	32.4	34.4	35.9	-	-	-	####	33.8
LOS	D	D	D	D	E	F	F	F	####	D
Speed	57.9	57.9	57.9	65.1	65.1	64.5	64.5	60.4	60.4	60.4
	####	####	####	####	####	OK ####	####	OK ####	####	####
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*4,940*	4,940	6,770	7,660	7,660	7,100	8,140	6,910		7,570
On Ramp Volume		*1,830*	*890*			*2,450*		*1,220*		
Off Ramp Volume					*560*	*1,410*	*1,230*	*560*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	4,940	6,770	7,660	7,660	7,660	9,550	8,140	8,130		7,570
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,261	7,210	8,158	8,158	8,158	10,171	8,669	8,658		8,062
GP Flow (pcphpl)	1,754	1,803	2,039	2,039	2,039	2,034	2,167	1,732		2,016
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*57.9*	*57.9*	*57.9*	*65.1*	*65.1*	*64.5*	*64.5*	*60.4*		*60.4*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.75	0.77	0.87	0.87	0.87	0.87	0.92	0.74		0.86
Speed (mph)	63.2	62.7	59.2	59.2	59.2	59.3	56.7	63.4		59.6
Density (pcphpl)	27.7	28.7	34.4	34.4	34.4	34.3	38.3	27.3		33.8
LOS	D	D	D	D	D	D	E	D		D
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		5,264	7,212			7,566		7,359		

Location	1	2	3	4	5	6	7	8	9	10

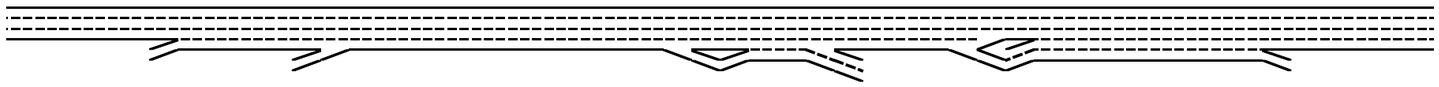
Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.75	0.77			0.80		1.04		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					7,563	8,669	7,359	8,063		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.80	0.92	1.04	1.14		

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,830	890			2,450		1,220		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,946	946			2,605		1,299		
On Flow (pcphpl)		1,946	946			2,605		650		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.97	0.47			1.30		0.29		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					560	1,410	1,230	560		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					595	1,502	1,310	595		
Off Flow (pcphpl)					595	751	1,310	595		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.30	0.33	0.60	0.26		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			7,212							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.100							
v_{12} (pcph)			718							
v_3 (pcph)										
v_{34} (pcph)			6,494							
v_{12a} (pcph)			2,885							
v_{R12a} (pcph)			3,831							
Merge Speed Index			0.47							
Merge Area Speed			54.1							
Outer Lanes Volume			2,164							
Outer Lanes Speed			59.0							
Segment Speed			56.6							
Merge v/c ratio			0.83							
Merge Density			32.4							
Merge LOS			D							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					8,158		8,669			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.529		0.483			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					3,893		4,519			
v_3 (pcph)										
v_{34} (pcph)					4,265		4,151			
v_{12a} (pcph)					3,893		4,519			
Diverge Speed Index					0.48		-			
Diverge Area Speed					53.9		-			
Outer Lanes Volume					2,133					
Outer Lanes Speed					66.9					
Segment Speed					60.0					
Diverge v/c ratio					0.88		1.03			
Diverge Density					35.9		-			
Diverge LOS					E		F			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,100 2,450 8,140 1,410 9,550		6,910 1,220 7,570 560 8,130		
On to Off Volume (vph)						*362*		*84*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						385		89		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						2,088		1,136		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						2,220		1,210		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,048		476		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,116		507		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						6,052		6,434		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,445		6,852		

Location	1	2	3	4	5	6	7	8	9	10

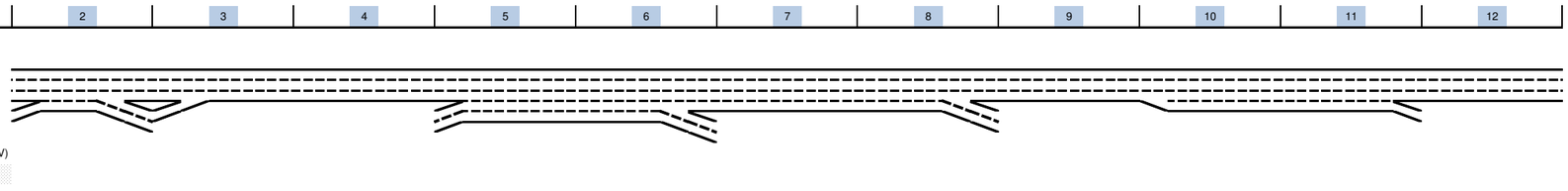
Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						3,337		1,717		
Non-Weave Flow						6,830		6,942		
Segment Flow						10,166		8,658		
Max Weave Length						5,888		2,953		
Length Check						OK		OK		
Ideal Weave Capacity						2,028		2,239		
f_{HV}						0.989		0.988		
f_P						0.998		0.998		
Capacity Condition 1						8,003		6,628		
Capacity Condition 2						7,215		17,419		
Weave v/c ratio						1.39		1.29		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						2,220		1,014		
Weave LC Rate						2,737		1,522		
Non-Weave LC Rate 1						1,544		1,665		
Non-Weave LC Rate 2						3,212		3,237		
Non-Weave LC Rate 3						-813		-639		
Segment LC Rate						4,282		3,187		
Weave Intensity Factor						0.474		0.410		
Weave Speed						48.9		50.5		
Non-Weave Speed						36.8		43.8		
Segment Speed						40.1		45.0		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.75	0.77	0.83	0.87	0.88	1.39	1.03	1.29		0.86
Segment Density	27.7	28.7	32.4	34.4	35.9	-	-	-		33.8
Segment LOS	D	D	D	D	E	F	F	F		D
Over Capacity						On Ramp Roadway Weave	Out GP Lanes Diverge	In GP Lanes Out GP Lanes Weave		

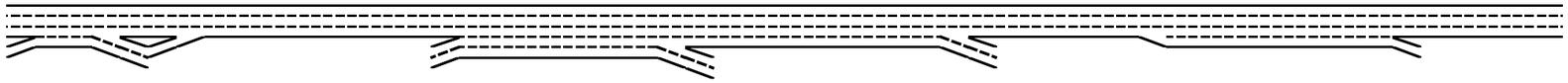
Project: John Wayne Airport Expansion **Scenario:** Existing Plus Proposed Project
Freeway Corridor: 73S **Peak Hour:** PM



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,240	3,690	4,940	4,940		6,030	6,030	5,100	5,100		4,530
On Ramp Volume	*660*	*1,250*		*2,090*							
Off Ramp Volume	*1,210*			*1,000*			*930*		*570*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	4,900	4,940	4,940	7,030		6,030	6,030	5,100	5,100		4,530
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,219	5,261	5,261	7,487		6,422	6,422	5,432	5,432		4,824
GP Flow (pcphpl)	1,305	1,754	1,754	1,497		1,605	1,605	1,811	1,086		1,608
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*63.8*	*63.8*	*63.9*	*63.9*		*72.7*	*72.7*	*72.7*	*72.7*		*72.7*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.56	0.75	0.75	0.64		0.68	0.68	0.77	0.46		0.68
Speed (mph)	65.0	63.2	63.2	64.9		64.4	64.4	62.6	65.0		64.4
Density (pcphpl)	20.1	27.7	27.7	23.1		24.9	24.9	28.9	16.7		25.0
LOS	C	D	D	C		C	C	D	B		C
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	4,517	3,930		5,261					5,432		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.64	0.56		0.75					0.77		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	3,930			6,424			5,433		4,826		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.56			0.91			0.77		0.51		

Location	2	3	4	5	6	7	8	9	10	11	12



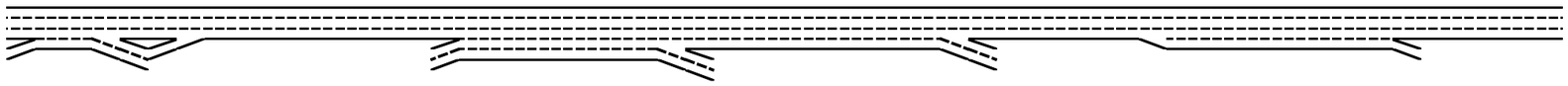
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On

Location	2	3	4	5	6	7	8	9	10	11	12



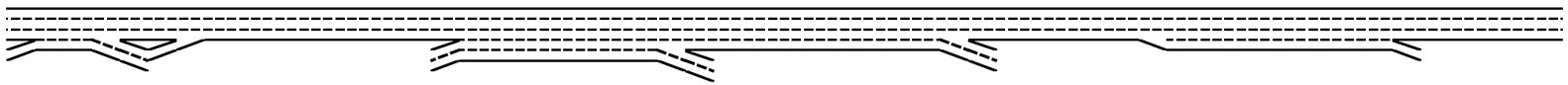
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	660	1,250		2,090							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	702	1,331		2,226							
On Flow (pcphpl)	702	1,331		1,113							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.35	0.61		0.49							

Location	2	3	4	5	6	7	8	9	10	11	12



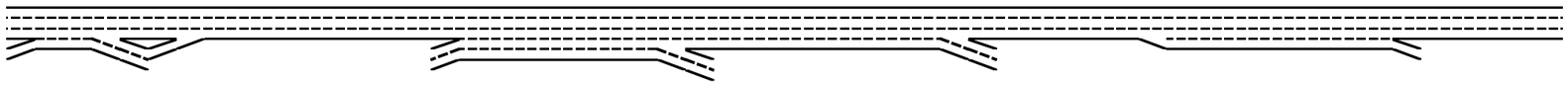
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	1,210			1,000			930		570		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	1,289			1,063			989		606		
Off Flow (pcphpl)	644			532			494		606		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.29			0.27			0.25		0.30		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		3,930									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,337									
v_3 (pcph)		1,593									
v_{34} (pcph)											
v_{12a} (pcph)		2,337									
v_{R12a} (pcph)		3,668									
Merge Speed Index		0.41									
Merge Area Speed		55.7									
Outer Lanes Volume		1,593									
Outer Lanes Speed		61.1									
Segment Speed		57.2									
Merge v/c ratio		0.80									
Merge Density		29.6									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



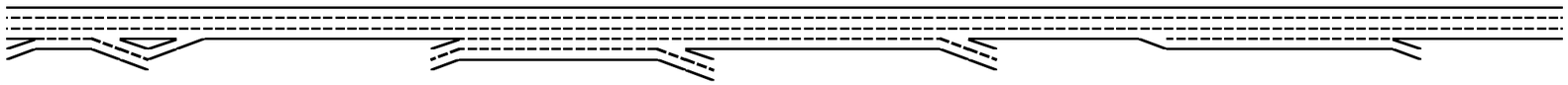
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							6,422				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.554				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,401				
v_3 (pcph)											
v_{34} (pcph)							4,021				
v_{12a} (pcph)							2,569				
Diverge Speed Index							0.52				
Diverge Area Speed							53.1				
Outer Lanes Volume							1,927				
Outer Lanes Speed							67.7				
Segment Speed							61.0				
Diverge v/c ratio							0.58				
Diverge Density							25.0				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,240 660 3,690 1,210 4,900			4,940 2,090 6,030 1,000 7,030							
On to Off Volume (vph)	*163*			*297*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	173			316							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	497			1,793							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	528			1,909							

Location	2	3	4	5	6	7	8	9	10	11	12



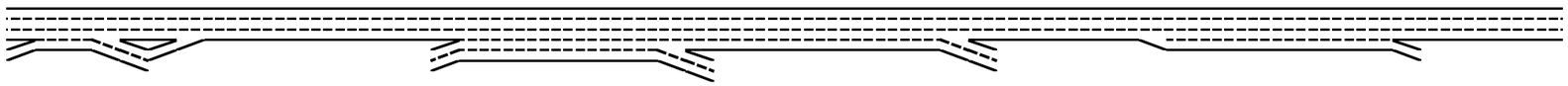
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	1,047			703							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	1,115			747							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	3,193			4,237							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	3,401			4,513							

Location	2	3	4	5	6	7	8	9	10	11	12



Key

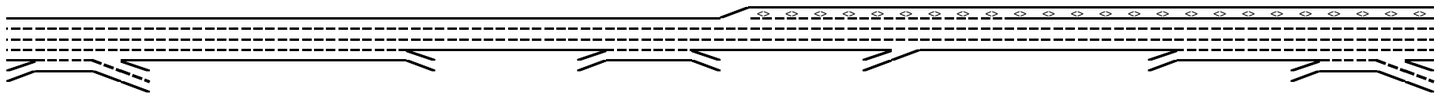
<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,643			2,656							
Non-Weave Flow	3,574			4,829							
Segment Flow	5,217			7,485							
Max Weave Length	5,745			4,614							
Length Check	OK			OK							
Ideal Weave Capacity	2,041			2,086							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,046			6,168							
Capacity Condition 2	7,525			9,721							
Weave v/c ratio	0.85			1.20							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	528			747							
Weave LC Rate	1,115			1,123							
Non-Weave LC Rate 1	1,080			1,046							
Non-Weave LC Rate 2	2,486			2,766							
Non-Weave LC Rate 3	-1,294			-1,901							
Segment LC Rate	2,195			2,169							
Weave Intensity Factor	0.276			0.370							
Weave Speed	54.2			51.5							
Non-Weave Speed	52.8			47.6							
Segment Speed	53.3			48.9							
Weave Density	32.7			-							
Weave LOS	D			F							
Summarize Segment Operations											
Segment v/c ratio	0.85	0.80	0.75	1.20		0.68	0.58	0.77	0.46		0.68
Segment Density	32.7	29.6	27.7	-		24.9	25.0	28.9	16.7		25.0
Segment LOS	D	D	D	F		C	C	D	B		C
Over Capacity				Weave							

Project: John Wayne Airport Expansion **Scenario:** Existing Plus Proposed Project
Freeway Corridor: 55N **Peak Hour:** PM

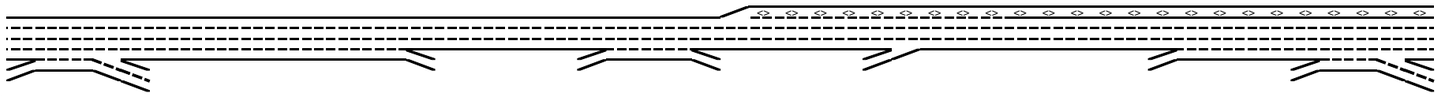
Location	2	3	4	5	6	7	8	9	10	12



Key
<> Express Lane (HOV)
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Define Freeway Segment										
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	4,100	2,630	2,630	2,200	2,200	2,490	2,490	3,060	3,060	3,970
On Ramp Volume	*970*				*1,410*		*570*		*910*	*1,200*
Off Ramp Volume	*2,440*		*430*		*1,120*					*1,050*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	5,070	2,630	2,630	2,200	3,610	2,490	3,060	3,060	3,970	5,170
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	5,430	2,817	2,817	2,356	3,867	2,667	3,277	3,277	4,223	5,499
GP Flow (pcphpl)	1,086	704	704	785	967	889	1,092	1,092	1,056	1,100
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*63.2*	*63.2*	*63.2*	*62.3*	*60.5*	*60.5*	*13.5*	*13.5*	*13.5*	*14.0*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

Location	2	3	4	5	6	7	8	9	10	12

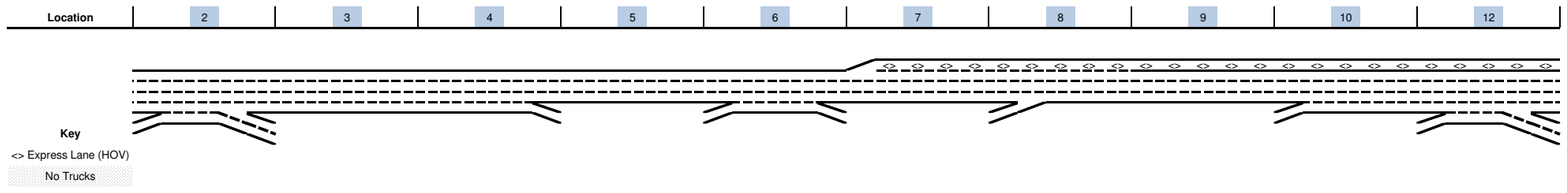


Key

<> Express Lane (HOV)

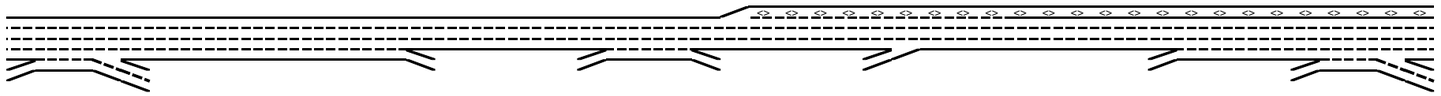
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	970				1,410		570		910	1,200
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,031				1,510		606		968	1,276
On Flow (pcphpl)	1,031				1,510		606		968	1,276
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.52				0.67		0.30		0.48	0.57



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	2,440		430		1,120					1,200
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	2,613		457		1,200					1,276
Off Flow (pcphpl)	1,307		457		1,200					638
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.58		0.23		0.53					0.32
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							2,671			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							1,624			
v_3 (pcph)							1,048			
v_{34} (pcph)										
v_{12a} (pcph)							1,624			
v_{R12a} (pcph)							2,230			
Merge Speed Index							0.28			
Merge Area Speed							58.5			
Outer Lanes Volume							1,048			
Outer Lanes Speed							63.0			
Segment Speed							59.9			
Merge v/c ratio							0.48			
Merge Density							15.8			
Merge LOS							B			

Location	2	3	4	5	6	7	8	9	10	12



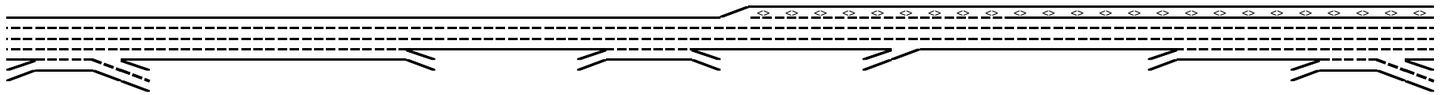
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			2,817							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.669							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			1,486							
v_3 (pcph)										
v_{34} (pcph)			1,331							
v_{12a} (pcph)			1,486							
Diverge Speed Index			0.47							
Diverge Area Speed			54.2							
Outer Lanes Volume			665							
Outer Lanes Speed			71.3							
Segment Speed			61.1							
Diverge v/c ratio			0.34							
Diverge Density			3.5							
Diverge LOS			A							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	4,100 970 2,630 2,440 5,070				2,200 1,410 2,490 1,120 3,610					3,970 1,200 4,120 1,050 5,170
On to Off Volume (vph)	*467*				*437*					*244*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	496				465					259
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	503				973					956
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	535				1,042					1,017

Location	2	3	4	5	6	7	8	9	10	12



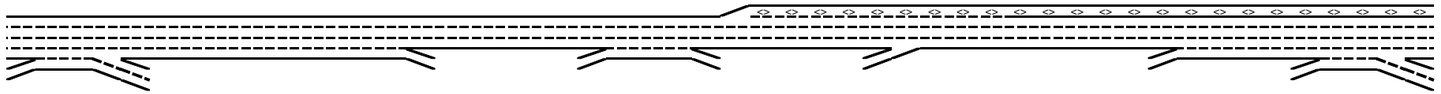
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,973				683					956
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	2,113				731					1,017
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	2,127				1,517					3,014
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	2,278				1,625					3,206

Location	2	3	4	5	6	7	8	9	10	12



Key

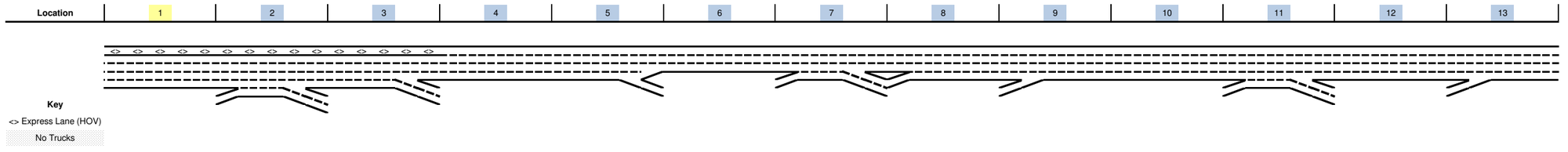
<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,648				1,773					2,034
Non-Weave Flow	2,774				2,090					3,465
Segment Flow	5,423				3,863					5,499
Max Weave Length	7,691				7,350					6,346
Length Check	OK				OK					OK
Ideal Weave Capacity	1,822				1,818					2,015
f_{HV}	0.984				0.984					0.990
f_P	0.999				0.995					0.998
Capacity Condition 1	7,164				5,341					7,960
Capacity Condition 2	4,832				5,121					6,408
Weave v/c ratio	1.10				0.74					0.85
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	535				1,773					1,017
Weave LC Rate	705				1,852					1,647
Non-Weave LC Rate 1	227				70					1,008
Non-Weave LC Rate 2	2,308				2,155					2,462
Non-Weave LC Rate 3	-3,703				-4,012					-1,391
Segment LC Rate	932				1,922					2,656
Weave Intensity Factor	0.259				0.780					0.287
Weave Speed	54.7				43.1					53.9
Non-Weave Speed	54.6				46.1					51.1
Segment Speed	54.7				44.6					52.1
Weave Density	-				28.8					26.4
Weave LOS	F				D					C
Summarize Segment Operations										
Segment v/c ratio	1.10	0.30	0.34	0.33	0.74	0.38	0.48	0.46	0.45	0.85
Segment Density	-	10.8	3.5	12.1	28.8	13.7	15.8	16.8	16.2	26.4
Segment LOS	F	A	A	B	D	B	B	B	B	C
Over Capacity	Weave									

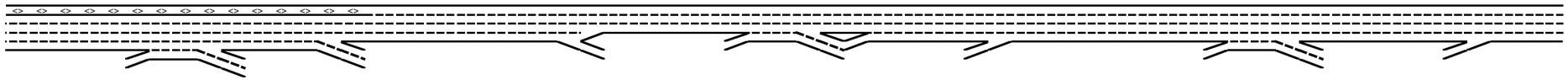
Project: John Wayne Airport Expansion **Scenario:** Existing Plus Proposed Project

Freeway Corridor: 55S **Peak Hour:** PM



Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*8,000*	8,000	7,220	6,150	6,150	5,520	5,520	5,080	5,700	6,930	6,930	6,400	6,400
On Ramp Volume		*900*					*1,650*	*620*	*1,230*		*1,210*		*250*
Off Ramp Volume		*1,680*	*1,070*		*630*		*2,090*				*1,740*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	8,000	8,900	7,220	6,150	6,150	5,520	7,170	5,700	6,930	6,930	8,140	6,400	6,650
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,509	9,467	7,680	6,587	6,587	5,912	7,679	6,105	7,422	7,422	8,718	6,855	7,123
GP Flow (pcphpl)	2,127	1,893	1,920	1,647	1,647	1,971	1,920	1,526	1,856	1,856	1,744	1,714	1,781
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*55.7*	*55.7*	*63.9*	*63.9*	*63.9*	*63.9*	*58.0*	*51.0*	*51.0*	*51.0*	*51.0*	*65.1*	*65.1*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.91	0.81	0.82	0.70	0.70	0.84	0.82	0.65	0.79	0.79	0.74	0.73	0.76
Speed (mph)	57.5	61.5	61.2	64.1	64.1	60.4	61.2	64.8	62.1	62.1	63.3	63.6	62.9
Density (pcphpl)	37.0	30.8	31.4	25.7	25.7	32.6	31.4	23.6	29.9	29.9	27.5	26.9	28.3
LOS	E	D	D	C	C	D	D	C	D	D	D	D	D
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,510					5,912	5,446	6,105		7,422		6,857
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.91					0.84	0.77	0.65		0.79		0.73
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		7,680	6,542		5,917		5,441				6,868		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.82	0.93		0.84		0.77				0.73		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



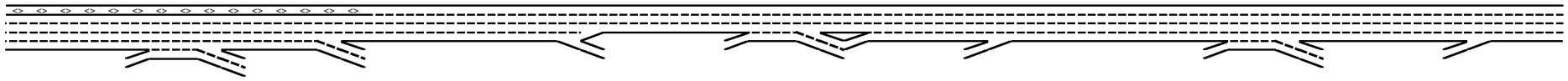
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



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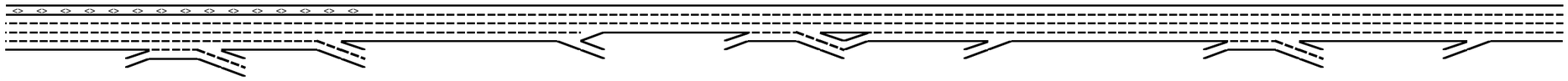
No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		900					1,650	620	1,230		1,210		250
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		957					1,767	659	1,317		1,296		266
On Flow (pcphpl)		957					1,767	659	1,317		1,296		266
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.48					0.79	0.33	0.60		0.58		0.13

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



Key

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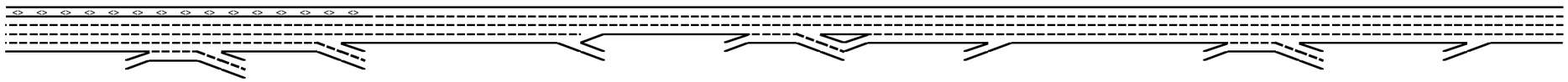
No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		1,680	1,070		630		2,090				1,740		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		1,787	1,138		670		2,239				1,850		
Off Flow (pcphpl)		893	569		670		1,119				925		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.40	0.25		0.33		0.50				0.46		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									6,105				6,857
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.053				0.185
v_{12} (pcph)									324				1,266
v_3 (pcph)													
v_{34} (pcph)									5,781				5,591
v_{12a} (pcph)									2,442				2,743
v_{R12a} (pcph)									3,759				3,008
Merge Speed Index									0.42				0.36
Merge Area Speed									55.4				56.7
Outer Lanes Volume									1,832				2,057
Outer Lanes Speed									60.2				59.4
Segment Speed									57.7				58.2
Merge v/c ratio									0.82				0.65
Merge Density									30.1				25.4
Merge LOS									D				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



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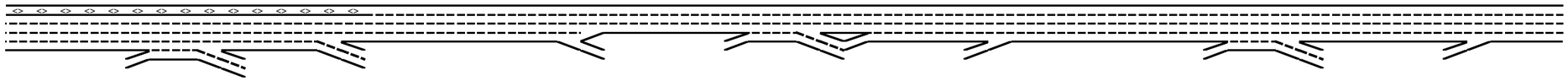
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			7,680		6,587								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.516		0.565								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,839		3,250								
v_3 (pcph)													
v_{34} (pcph)			4,841		3,337								
v_{12a} (pcph)			3,072		3,250								
Diverge Speed Index			0.27		0.49								
Diverge Area Speed			58.8		53.8								
Outer Lanes Volume			2,304		1,669								
Outer Lanes Speed			66.2		68.7								
Segment Speed			63.0		60.4								
Diverge v/c ratio			0.70		0.74								
Diverge Density			33.6		30.5								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		8,000 900 7,220 1,680 8,900					5,520 1,650 5,080 2,090 7,170				6,930 1,210 6,400 1,740 8,140		
On to Off Volume (vph)		*170*					*481*				*259*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		181					511				275		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		730					1,169				951		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		776					1,252				1,019		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



Key

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No Trucks

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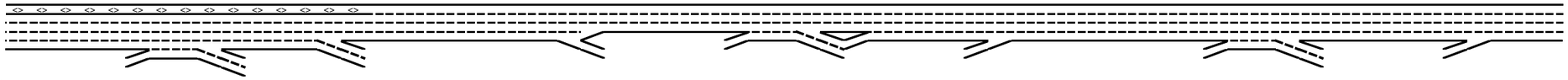
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		1,510					1,609				1,481		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		1,606					1,723				1,575		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		6,490					3,911				5,449		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		6,903					4,189				5,836		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



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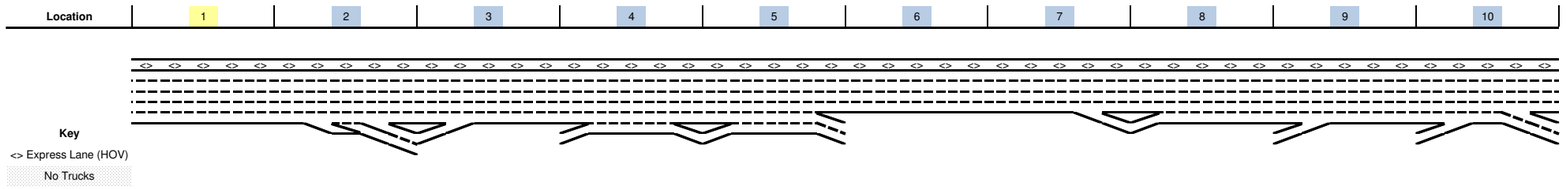
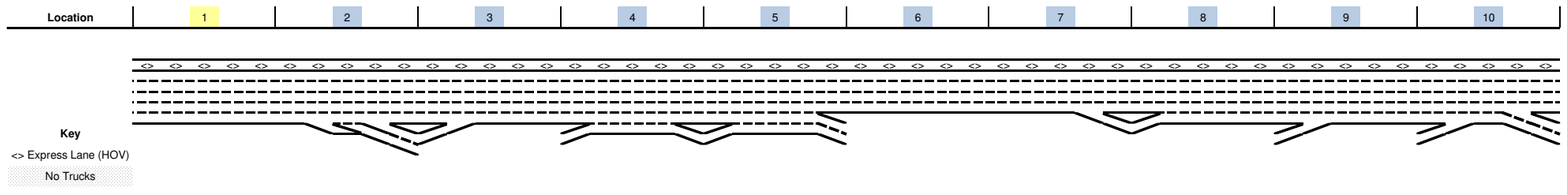
No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,383					2,975				2,594		
Non-Weave Flow		7,084					4,700				6,111		
Segment Flow		9,466					7,676				8,705		
Max Weave Length		5,071					6,543				5,562		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,110					2,023				2,004		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.997				0.998		
Capacity Condition 1		8,346					5,950				7,875		
Capacity Condition 2		9,430					6,071				7,912		
Weave v/c ratio		1.12					1.26				1.09		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		776					1,252				1,019		
Weave LC Rate		1,395					2,059				1,288		
Non-Weave LC Rate 1		1,738					1,618				1,052		
Non-Weave LC Rate 2		3,269					2,737				3,052		
Non-Weave LC Rate 3		-248					-9				-2,295		
Segment LC Rate		3,132					3,677				2,341		
Weave Intensity Factor		0.330					0.331				0.429		
Weave Speed		52.6					52.6				50.0		
Non-Weave Speed		48.1					43.7				47.2		
Segment Speed		49.1					46.8				48.0		
Weave Density		-					-				-		
Weave LOS		F					F				F		
Summarize Segment Operations													
Segment v/c ratio	0.91	1.12	0.70	0.70	0.74	0.84	1.26	0.65	0.82	0.79	1.09	0.73	0.65
Segment Density	37.0	-	33.6	25.7	30.5	32.6	-	23.6	30.1	29.9	-	26.9	25.4
Segment LOS	E	F	D	C	D	D	F	C	D	D	F	D	C
Over Capacity		Weave					Weave				Weave		

Project: John Wayne Airport Expansion **Scenario:** Existing Plus Proposed Project
Freeway Corridor: 405N **Peak Hour:** PM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*7,600*	7,600	6,560	7,280	7,650	6,260	6,260	5,670	6,780	7,070
On Ramp Volume			*720*	*1,130*	*1,350*			*1,110*	*290*	*540*
Off Ramp Volume		*1,040*		*760*	*2,740*		*590*			*2,750*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	7,600	7,600	7,280	8,410	9,000	6,260	6,260	6,780	7,070	7,610
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,224	8,224	7,855	9,074	9,639	6,705	6,705	7,262	7,572	8,151
GP Flow (pcphpl)	1,645	1,645	1,571	1,512	1,607	1,676	1,676	1,452	1,514	1,358
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*23.5*	*23.5*	*22.3*	*20.6*	*26.8*	*26.8*	*26.8*	*26.8*	*11.4*	*11.3*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.70	0.70	0.67	0.64	0.68	0.71	0.71	0.62	0.64	0.58
Speed (mph)	64.2	64.2	64.6	64.8	64.4	63.9	63.9	65.0	64.8	65.0
Density (pcphpl)	25.6	25.6	24.3	23.3	24.9	26.2	26.2	22.4	23.4	20.9
LOS	C	C	C	C	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			7,089	7,873	8,204			6,073	7,264	7,577
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.60	0.67	0.70			0.65	0.62	0.64
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		7,118		8,266	6,705		6,078			5,227
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.61		0.70	0.71		0.65			0.56


Location
1
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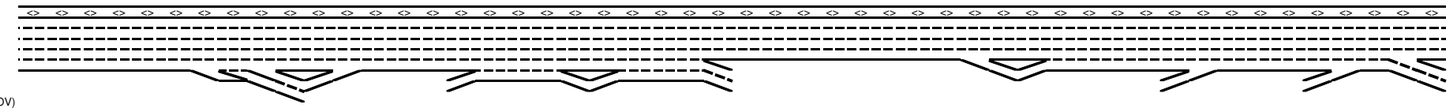
Key
<> Express Lane (HOV)
No Trucks
Name
Culver On to Jamboree Off
Jamboree Off Ramp
Jamboree N On Ramp
Jamboree S On to McArthur Off
McArthur On to 55 N&S Off
55 Off to Bristol Off
Bristol/Ave Arts Off Ramp
On Ramp from 55 S
Bristol N On Ramp
Bristol S On Ramp to S Coast Off

Location	1	2	3	4	5	6	7	8	9	10



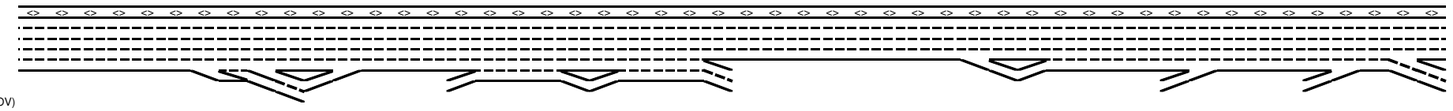
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			720	1,130	1,350			1,110	290	540
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			765	1,201	1,435			1,189	308	574
On Flow (pcphpl)			765	1,201	1,435			1,189	308	574
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.38	0.60	0.72			0.53	0.15	0.29

Location	1	2	3	4	5	6	7	8	9	10



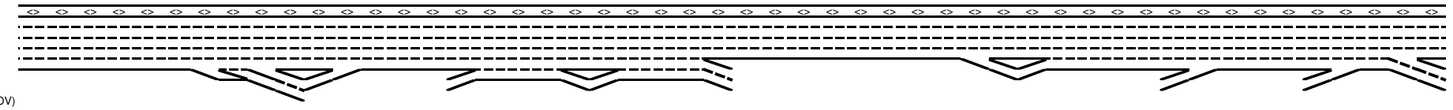
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,040		760	2,740		590			2,750
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,106		808	2,935		627			2,924
Off Flow (pcphpl)		553		808	1,467		627			1,462
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.28		0.40	0.65		0.31			0.73
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			5,175						5,303	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.122						0.179	
v_{12} (pcph)			632						951	
v_3 (pcph)										
v_{34} (pcph)			4,543						4,352	
v_{12a} (pcph)			2,070						2,121	
v_{R12a} (pcph)			2,836						2,429	
Merge Speed Index			0.35						0.33	
Merge Area Speed			57.0						57.4	
Outer Lanes Volume			1,553						1,591	
Outer Lanes Speed			61.2						61.1	
Segment Speed			59.1						59.4	
Merge v/c ratio			0.62						0.53	
Merge Density			23.7						21.3	
Merge LOS			C						C	

Location	1	2	3	4	5	6	7	8	9	10



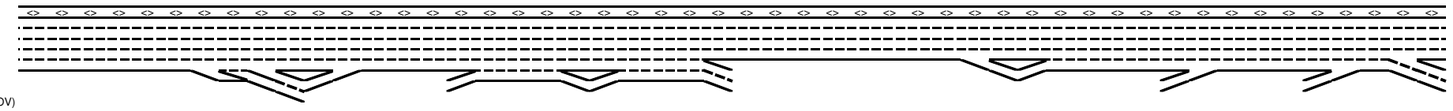
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		6,579					6,705			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.545					0.564			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		2,529					3,277			
v_3 (pcph)										
v_{34} (pcph)		4,050					3,428			
v_{12a} (pcph)		2,632					3,277			
Diverge Speed Index		0.53					0.48			
Diverge Area Speed		52.9					53.9			
Outer Lanes Volume		1,974					1,714			
Outer Lanes Speed		67.5					68.5			
Segment Speed		60.8					60.5			
Diverge v/c ratio		0.60					0.74			
Diverge Density		18.4					30.9			
Diverge LOS		B					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				7,280 1,130 7,650 760 8,410	7,650 1,350 6,260 2,740 9,000					7,070 540 4,860 2,750 7,610
On to Off Volume (vph)				*102*	*411*					*195*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				109	437					207
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				1,028	939					345
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,093	998					367

Location	1	2	3	4	5	6	7	8	9	10



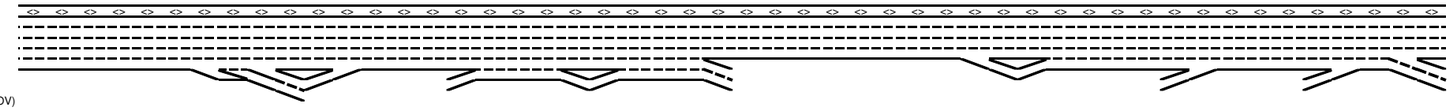
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				658	2,329					2,555
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				699	2,494					2,716
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				6,622	5,321					4,515
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				7,145	5,699					4,836

Location	1	2	3	4	5	6	7	8	9	10



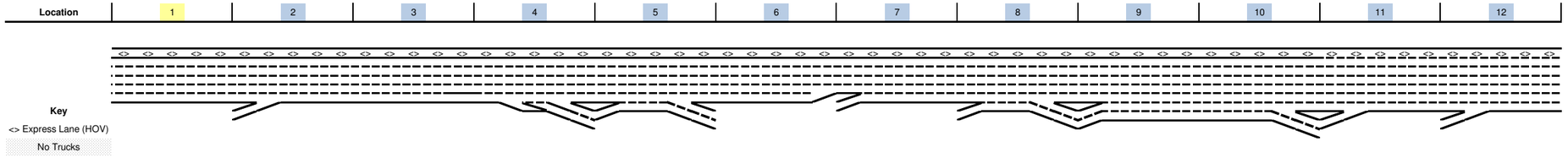
Key

<> Express Lane (HOV)

No Trucks

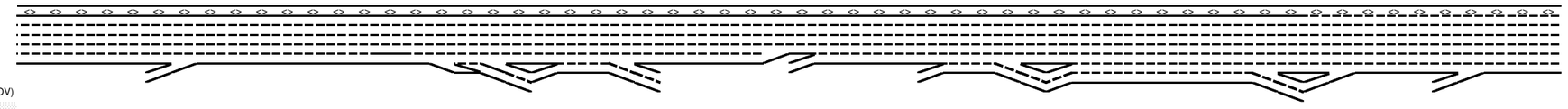
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				1,792	3,493					3,083
Non-Weave Flow				7,253	6,136					5,043
Segment Flow				9,046	9,629					8,126
Max Weave Length				4,517	4,701					6,451
Length Check				OK	OK					OK
Ideal Weave Capacity				2,167	2,157					1,895
f_{HV}				0.979	0.984					0.986
f_P				0.999	0.999					1.000
Capacity Condition 1				10,593	10,599					9,335
Capacity Condition 2				11,840	9,484					6,233
Weave v/c ratio				0.83	1.00					1.28
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				1,792	1,997					367
Weave LC Rate				2,410	2,632					349
Non-Weave LC Rate 1				1,686	1,480					347
Non-Weave LC Rate 2				3,307	3,057					2,814
Non-Weave LC Rate 3				-272	-595					-4,268
Segment LC Rate				4,096	4,112					696
Weave Intensity Factor				0.379	0.374					0.293
Weave Speed				51.3	51.4					53.7
Non-Weave Speed				43.4	41.4					54.6
Segment Speed				44.8	44.5					54.2
Weave Density				40.4	43.2					-
Weave LOS				E	E					F
Summarize Segment Operations										
Segment v/c ratio	0.70	0.60	0.62	0.83	1.00	0.71	0.74	0.62	0.53	1.28
Segment Density	25.6	18.4	23.7	40.4	43.2	26.2	30.9	22.4	21.3	-
Segment LOS	C	B	C	E	E	D	D	C	C	F
Over Capacity										Weave

Project: John Wayne Airport Expansion **Scenario:** Existing Plus Proposed Project
Freeway Corridor: 405S **Peak Hour:** PM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*6,010*	6,010	7,090	7,090	6,060	6,310	6,310	7,920	8,130		6,092	6,617
On Ramp Volume		*1,080*			*1,160*		*1,610*	*1,420*	*960*		*630*	*1,080*
Off Ramp Volume				*1,030*	*910*			*1,210*	*1,780*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	6,010	7,090	7,090	7,090	7,220	6,310	7,920	9,340	9,090		6,722	7,697
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	6,437	7,594	7,594	7,594	7,733	6,758	8,483	10,004	9,808		7,274	8,329
GP Flow (pcphpl)	1,287	1,519	1,519	1,519	1,289	1,690	1,697	1,667	1,401		1,455	1,666
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*67.6*	*67.6*	*67.6*	*67.6*	*70.8*	*70.8*	*70.8*	*50.3*	*50.3*		*23.7*	*23.7*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.55	0.65	0.65	0.65	0.55	0.72	0.72	0.71	0.60		0.62	0.71
Speed (mph)	65.0	64.8	64.8	64.8	65.0	63.8	63.8	64.0	65.0		65.0	64.0
Density (pcphpl)	19.8	23.4	23.4	23.4	19.8	26.5	26.6	26.1	21.6		22.4	26.0
LOS	C	C	C	C	C	D	D	D	C		C	D
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		6,446			6,500		6,758	8,483	8,787		6,604	7,180
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.55			0.55		0.72	0.72	0.75		0.56	0.61
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				6,499	6,758	6,758		8,717	7,915			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.55	0.58	0.72		0.74	0.67			

Location	1	2	3	4	5	6	7	8	9	10	11	12



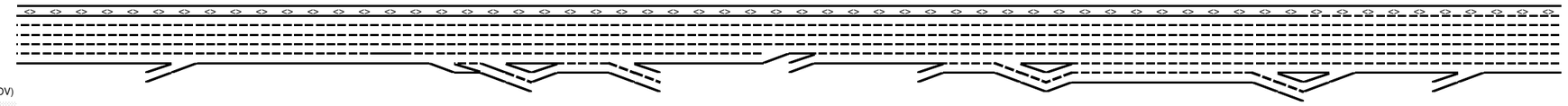
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12



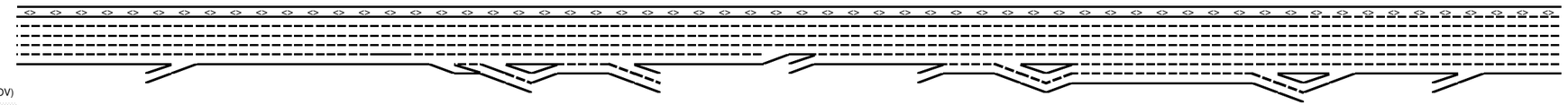
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,080			1,160		1,610	1,420	960		630	1,080
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,148			1,233		1,724	1,521	1,021		670	1,148
On Flow (pcphpl)		1,148			1,233		1,724	1,521	510		670	1,148
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.57			0.62		0.77	0.68	0.26		0.33	0.57

Location	1	2	3	4	5	6	7	8	9	10	11	12



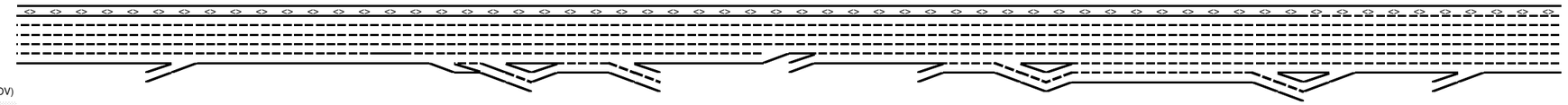
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,030	910			1,210	1,780			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,095	975			1,286	1,892			
Off Flow (pcphpl)				548	487			643	946			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.27	0.22			0.32	0.47			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		4,899									4,821	5,242
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.074									0.134	0.074
v_{12} (pcph)		364									646	389
v_3 (pcph)												
v_{34} (pcph)		4,535									4,174	4,852
v_{12a} (pcph)		1,959									1,928	2,097
v_{R12a} (pcph)		3,108									2,598	3,245
Merge Speed Index		0.37									0.34	0.34
Merge Area Speed		56.5									57.3	57.2
Outer Lanes Volume		1,470									1,446	1,573
Outer Lanes Speed		61.5									61.6	61.1
Segment Speed		58.8									59.5	59.1
Merge v/c ratio		0.68									0.56	0.71
Merge Density		25.7									22.1	22.9
Merge LOS		C									C	C

Location	1	2	3	4	5	6	7	8	9	10	11	12



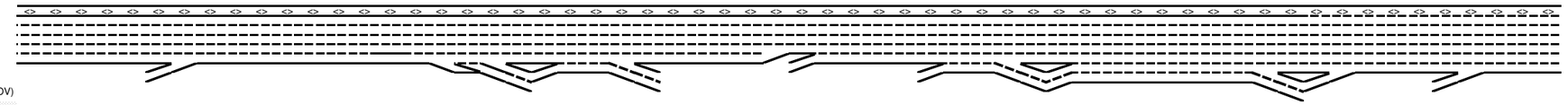
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				6,075								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.558								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				2,390								
v_3 (pcph)												
v_{34} (pcph)				3,685								
v_{12a} (pcph)				2,430								
Diverge Speed Index				0.53								
Diverge Area Speed				52.9								
Outer Lanes Volume				1,823								
Outer Lanes Speed				68.1								
Segment Speed				61.1								
Diverge v/c ratio				0.55								
Diverge Density				18.2								
Diverge LOS				B								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					6,060 1,160 6,310 910 7,220			7,920 1,420 8,130 1,210 9,340	8,130 960 7,310 1,780 9,090			
On to Off Volume (vph)					*146*			*184*	*188*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					155			196	200			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					1,014			1,236	772			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					1,078			1,324	821			

Location	1	2	3	4	5	6	7	8	9	10	11	12



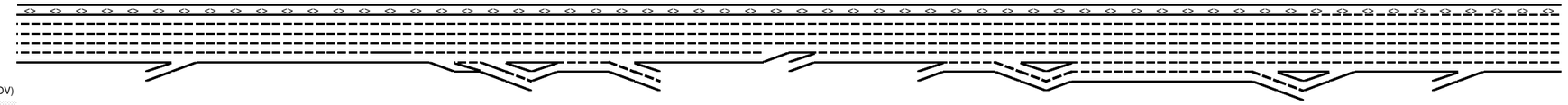
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					764			1,026	1,592			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					818			1,091	1,693			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					5,296			6,894	6,538			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					5,673			7,384	7,054			

Location	1	2	3	4	5	6	7	8	9	10	11	12



Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					1,896			2,415	2,513			
Non-Weave Flow					5,828			7,579	7,254			
Segment Flow					7,724			9,994	9,767			
Max Weave Length					5,006			4,966	3,565			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,088			2,008	2,116			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	0.999			
Capacity Condition 1					10,256			9,856	10,354			
Capacity Condition 2					9,608			9,749	13,314			
Weave v/c ratio					0.79			1.01	0.92			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					1,078			1,324	1,693			
Weave LC Rate					1,479			1,306	1,675			
Non-Weave LC Rate 1					1,091			869	802			
Non-Weave LC Rate 2					2,989			3,379	3,307			
Non-Weave LC Rate 3					-1,810			-3,663	-3,741			
Segment LC Rate					2,571			2,176	2,477			
Weave Intensity Factor					0.333			0.721	0.799			
Weave Speed					52.5			44.1	42.8			
Non-Weave Speed					49.8			45.9	43.4			
Segment Speed					50.5			45.4	43.3			
Weave Density					30.6			-	45.1			
Weave LOS					D			F	E			
Summarize Segment Operations												
Segment v/c ratio	0.55	0.68	0.65	0.55	0.79	0.72	0.72	1.01	0.92		0.56	0.71
Segment Density	19.8	25.7	23.4	18.2	30.6	26.5	26.6	-	45.1		22.1	22.9
Segment LOS	C	C	C	B	D	D	D	F	E		C	C
Over Capacity								Weave				

Project: John Wayne Airport Expansion **Scenarios:** 2016 Plus: Proposed Project, Project Alt A, Project Alt B or No Project (10.8 MAP)
Freeway Corridor: 73N **Peak Hour:** AM

Location	1	2	3	4	5	6	7	8	9	10

Key
<> Express Lane (HOV)
No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*6,290*	6,290	7,970	8,690	8,690	7,700	6,450	5,700		5,350
On Ramp Volume		*1,680*	*720*			*730*		*630*		
Off Ramp Volume					*990*	*1,980*	*750*	*980*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	6,290	7,970	8,690	8,690	8,690	8,430	6,450	6,330		5,350
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	6,699	8,488	9,255	9,255	9,255	8,978	6,869	6,741		5,698
GP Flow (pcphpl)	2,233	2,122	2,314	2,314	2,314	1,796	1,717	1,348		1,424
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*62.3*	*62.3*	*62.3*	*66.1*	*66.1*	*66.1*	*66.1*	*65.5*		*65.5*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.95	0.90	0.98	0.98	0.98	0.76	0.73	0.57		0.61
Speed (mph)	55.2	57.6	53.2	53.2	53.2	62.8	63.6	65.0		65.0
Density (pcphpl)	40.5	36.8	43.5	43.5	43.5	28.6	27.0	20.7		21.9
LOS	E	E	E	E	E	D	D	C		C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		6,702	8,489			8,202		6,071		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.95	0.90			0.87		0.86		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					8,202	6,869	6,071	5,700		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.87	0.73	0.86	0.81		

Location	1	2	3	4	5	6	7	8	9	10

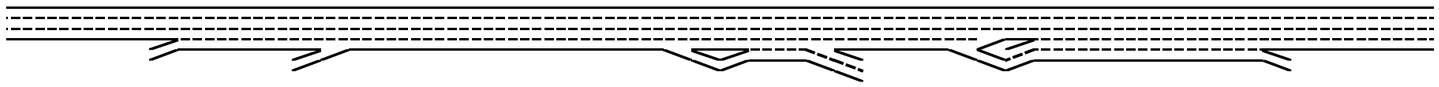
Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,680	720			730		630		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,786	765			776		671		
On Flow (pcphpl)		1,786	765			776		335		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.89	0.38			0.39		0.15		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					990	1,980	750	980		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					1,053	2,109	799	1,042		
Off Flow (pcphpl)					1,053	1,054	799	1,042		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.53	0.47	0.36	0.46		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			8,489							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.122							
v_{12} (pcph)			1,037							
v_3 (pcph)										
v_{34} (pcph)			7,453							
v_{12a} (pcph)			3,396							
v_{R12a} (pcph)			4,161							
Merge Speed Index			0.54							
Merge Area Speed			52.5							
Outer Lanes Volume			2,547							
Outer Lanes Speed			57.0							
Segment Speed			54.9							
Merge v/c ratio			0.90							
Merge Density			35.1							
Merge LOS			E							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					9,255		6,869			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.480		0.552			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					4,629		3,445			
v_3 (pcph)										
v_{34} (pcph)					4,626		3,424			
v_{12a} (pcph)					4,629		3,445			
Diverge Speed Index					0.52		0.24			
Diverge Area Speed					53.0		59.5			
Outer Lanes Volume					2,313		1,712			
Outer Lanes Speed					66.2		68.5			
Segment Speed					58.8		63.7			
Diverge v/c ratio					1.05		0.78			
Diverge Density					42.3		32.1			
Diverge LOS					F		D			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,700 730 6,450 1,980 8,430		5,700 630 5,350 980 6,330		
On to Off Volume (vph)						*171*		*98*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						182		104		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						559		532		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						594		567		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,809		882		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,926		940		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						5,891		4,818		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,274		5,131		

Location	1	2	3	4	5	6	7	8	9	10

Key

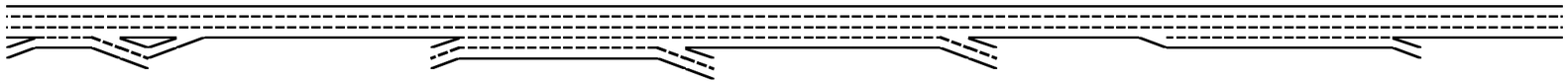
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						2,520		1,507		
Non-Weave Flow						6,457		5,234		
Segment Flow						8,977		6,741		
Max Weave Length						5,378		3,212		
Length Check						OK		OK		
Ideal Weave Capacity						2,067		2,219		
f_{HV}						0.989		0.988		
f_P						0.999		0.999		
Capacity Condition 1						8,167		6,573		
Capacity Condition 2						8,446		15,461		
Weave v/c ratio						1.09		1.01		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						594		1,880		
Weave LC Rate						1,111		2,388		
Non-Weave LC Rate 1						1,468		1,313		
Non-Weave LC Rate 2						3,129		2,856		
Non-Weave LC Rate 3						-934		-1,151		
Segment LC Rate						2,579		3,702		
Weave Intensity Factor						0.318		0.461		
Weave Speed						52.9		49.2		
Non-Weave Speed						50.0		40.7		
Segment Speed						50.8		42.3		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.95	0.90	0.90	0.98	1.05	1.09	0.78	1.01		0.61
Segment Density	40.5	36.8	35.1	43.5	-	-	32.1	-		21.9
Segment LOS	E	E	E	E	F	F	D	F		C
Over Capacity					Diverge	Weave		Weave		

Project: John Wayne Airport Expansion **Scenarios:** 2016 Plus: Proposed Project, Project Alt A, Project Alt B or No Project (10.8 MAP)
Freeway Corridor: 73S **Peak Hour:** AM

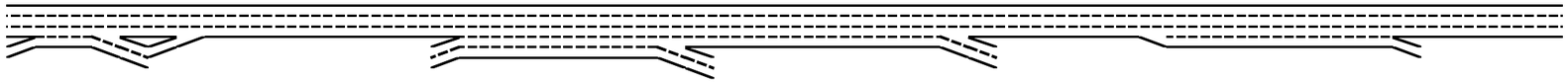
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,820	4,690	5,430	5,430		5,520	5,520	3,770	3,770		2,800
On Ramp Volume	*800*	*740*		*2,420*							
Off Ramp Volume	*930*			*2,330*			*1,750*		*970*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	5,620	5,430	5,430	7,850		5,520	5,520	3,770	3,770		2,800
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,985	5,783	5,783	8,360		5,879	5,879	4,015	4,015		2,982
GP Flow (pcphpl)	1,496	1,928	1,928	1,672		1,470	1,470	1,338	803		994
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*62.8*	*62.8*	*52.5*	*52.5*		*63.4*	*63.4*	*63.4*	*63.4*		*63.4*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.64	0.82	0.82	0.71		0.63	0.63	0.57	0.34		0.42
Speed (mph)	64.9	61.1	61.1	64.0		64.9	64.9	65.0	65.0		65.0
Density (pcphpl)	23.1	31.6	31.6	26.1		22.6	22.6	20.6	12.4		15.3
LOS	C	D	D	D		C	C	C	B		B
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	5,135	4,995		5,783					4,015		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.73	0.71		0.82					0.57		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	4,995			5,883			4,018		2,984		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.71			0.83			0.57		0.32		

Location	2	3	4	5	6	7	8	9	10	11	12



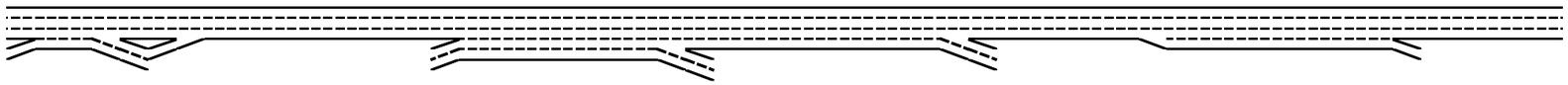
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On

Location	2	3	4	5	6	7	8	9	10	11	12



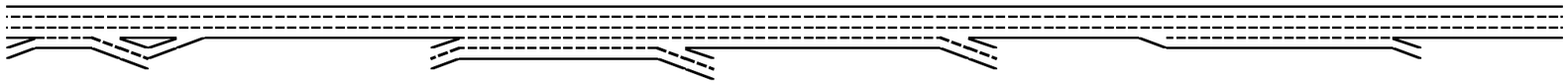
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	800	740		2,420							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	851	788		2,577							
On Flow (pcphpl)	851	788		1,289							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.43	0.36		0.57							

Location	2	3	4	5	6	7	8	9	10	11	12



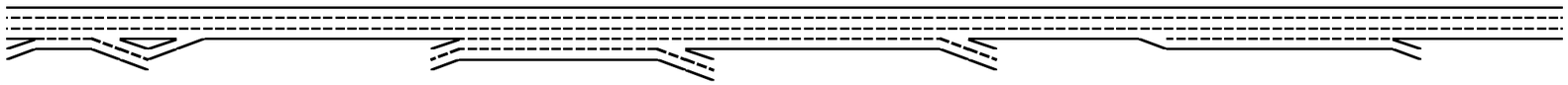
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	930			2,330			1,750		970		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	990			2,477			1,861		1,031		
Off Flow (pcphpl)	495			1,239			930		1,031		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.22			0.62			0.47		0.52		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		4,995									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,971									
v_3 (pcph)		2,024									
v_{34} (pcph)											
v_{12a} (pcph)		2,971									
v_{R12a} (pcph)		3,759									
Merge Speed Index		0.42									
Merge Area Speed		55.3									
Outer Lanes Volume		2,024									
Outer Lanes Speed		59.5									
Segment Speed		56.7									
Merge v/c ratio		0.82									
Merge Density		30.6									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



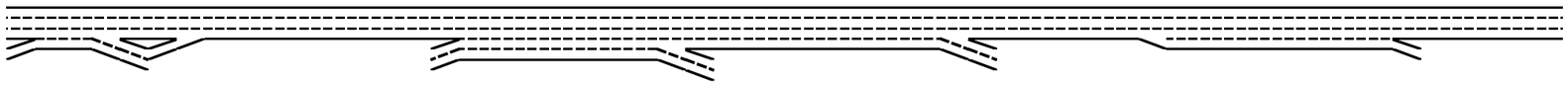
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							5,879				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.527				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,905				
v_3 (pcph)											
v_{34} (pcph)							2,974				
v_{12a} (pcph)							2,905				
Diverge Speed Index							0.60				
Diverge Area Speed							51.3				
Outer Lanes Volume							1,487				
Outer Lanes Speed							69.4				
Segment Speed							59.1				
Diverge v/c ratio							0.66				
Diverge Density							27.9				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,820 800 4,690 930 5,620			5,430 2,420 5,520 2,330 7,850							
On to Off Volume (vph)	*132*			*718*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	141			764							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	668			1,702							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	710			1,812							

Location	2	3	4	5	6	7	8	9	10	11	12



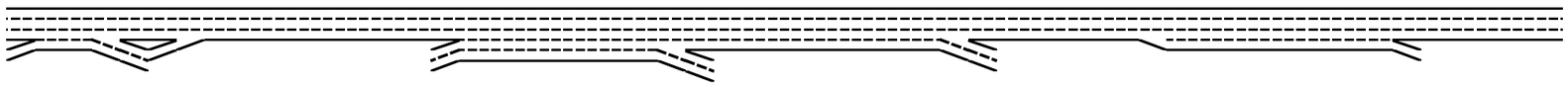
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	798			1,612							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	849			1,713							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	4,022			3,818							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	4,284			4,066							

Location	2	3	4	5	6	7	8	9	10	11	12



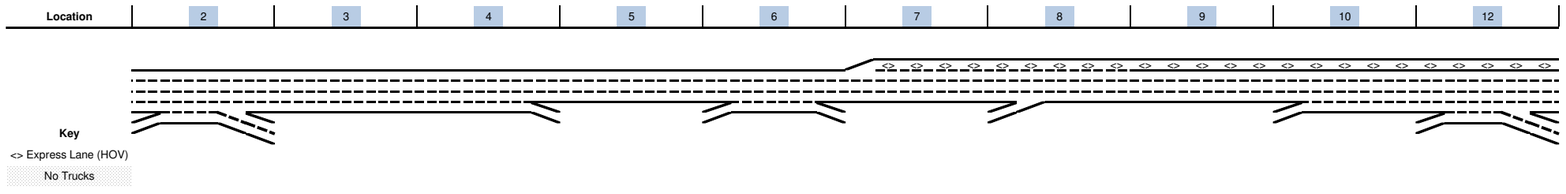
Key

<> Express Lane (HOV)

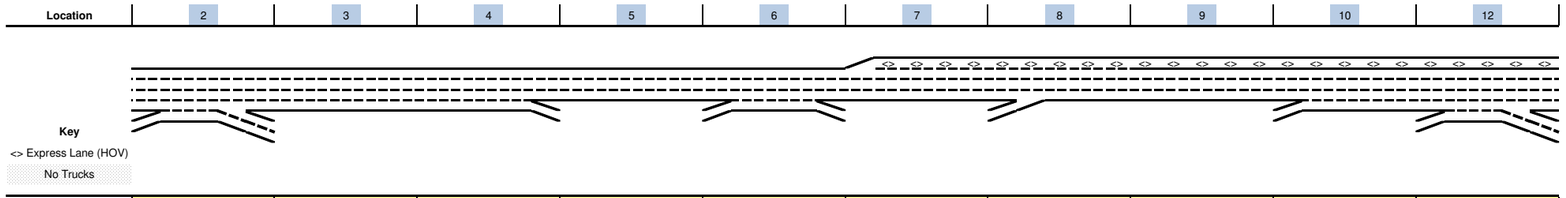
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,559			3,526							
Non-Weave Flow	4,425			4,830							
Segment Flow	5,984			8,356							
Max Weave Length	5,165			5,362							
Length Check	OK			OK							
Ideal Weave Capacity	2,085			2,028							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,176			6,003							
Capacity Condition 2	9,095			8,182							
Weave v/c ratio	0.96			1.37							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	710			1,713							
Weave LC Rate	1,296			2,089							
Non-Weave LC Rate 1	1,255			1,046							
Non-Weave LC Rate 2	2,676			2,766							
Non-Weave LC Rate 3	-1,038			-1,900							
Segment LC Rate	2,551			3,135							
Weave Intensity Factor	0.311			0.495							
Weave Speed	53.1			48.4							
Non-Weave Speed	50.3			39.3							
Segment Speed	51.0			42.7							
Weave Density	39.1			-							
Weave LOS	E			F							
Summarize Segment Operations											
Segment v/c ratio	0.96	0.82	0.82	1.37		0.63	0.66	0.57	0.34		0.42
Segment Density	39.1	30.6	31.6	-		22.6	27.9	20.6	12.4		15.3
Segment LOS	E	D	D	F		C	C	C	B		B
Over Capacity				Weave							

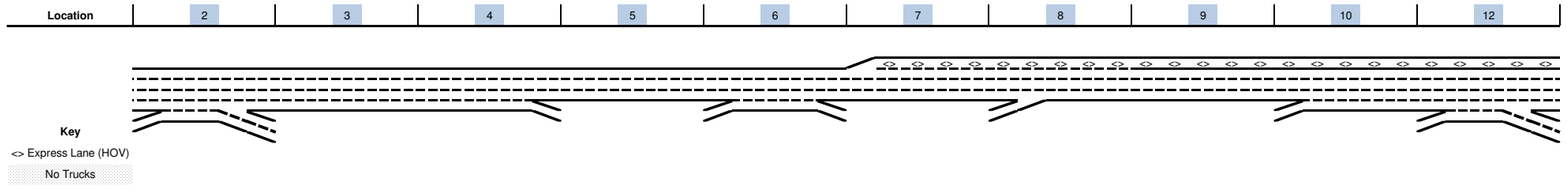
Project: John Wayne Airport Expansion **Scenarios:** 2016 Plus: Proposed Project, Project Alt A, Project Alt B or No Project (10.8 MAP)
Freeway Corridor: 55N **Peak Hour:** AM



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	6,260	6,770	6,770	6,040	6,040	6,560	6,560	7,280	7,280	9,860
On Ramp Volume	*1,860*				*1,980*		*720*		*2,580*	*1,300*
Off Ramp Volume	*1,350*		*730*		*1,460*					*1,770*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	8,120	6,770	6,770	6,040	8,020	6,560	7,280	7,280	9,860	11,160
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,697	7,251	7,251	6,469	8,590	7,026	7,797	7,797	10,488	11,871
GP Flow (pcphpl)	1,739	1,813	1,813	2,156	2,147	2,342	2,599	2,599	2,622	2,374
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*53.0*	*53.0*	*53.0*	*29.2*	*32.9*	*32.9*	*43.6*	*43.6*	*43.6*	*64.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

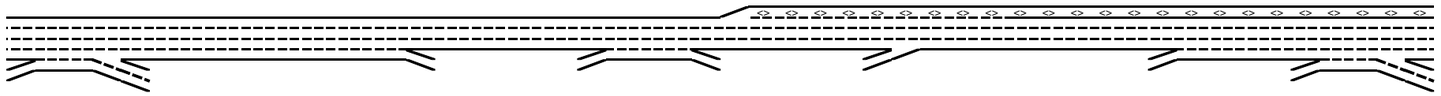


Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	1,860				1,980		720		2,580	1,300
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,977				2,121		765		2,744	1,383
On Flow (pcphpl)	1,977				2,121		765		2,744	1,383
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.99				0.94		0.38		1.37	0.61



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	1,350		730		1,460					1,300
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	1,446		776		1,564					1,383
Off Flow (pcphpl)	723		776		1,564					691
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.32		0.39		0.69					0.35
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							7,032			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							4,273			
v_3 (pcph)							2,758			
v_{34} (pcph)										
v_{12a} (pcph)							4,332			
v_{R12a} (pcph)							5,097			
Merge Speed Index							-			
Merge Area Speed							-			
Outer Lanes Volume										
Outer Lanes Speed										
Segment Speed										
Merge v/c ratio							1.11			
Merge Density							-			
Merge LOS							F			

Location	2	3	4	5	6	7	8	9	10	12

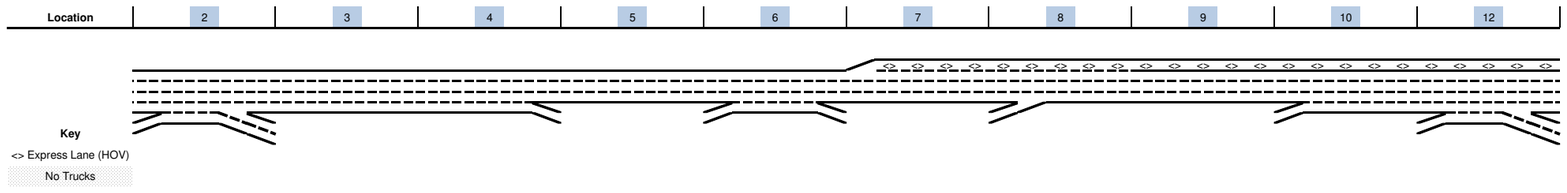


Key

<> Express Lane (HOV)

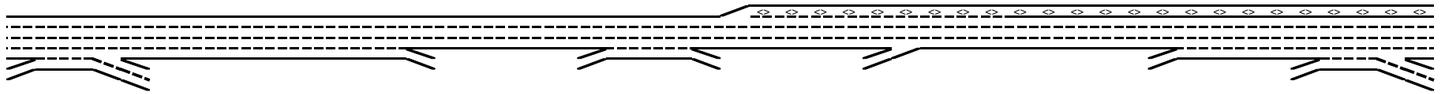
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			7,251							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.543							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			3,599							
v_3 (pcph)										
v_{34} (pcph)			3,652							
v_{12a} (pcph)			3,599							
Diverge Speed Index			0.50							
Diverge Area Speed			53.5							
Outer Lanes Volume			1,826							
Outer Lanes Speed			68.1							
Segment Speed			60.0							
Diverge v/c ratio			0.82							
Diverge Density			21.7							
Diverge LOS			C							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	6,260 1,860 6,770 1,350 8,120				6,040 1,980 6,560 1,460 8,020					9,860 1,300 9,390 1,770 11,160
On to Off Volume (vph)	*309*				*360*					*206*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	329				383					219
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	1,551				1,620					1,094
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	1,649				1,735					1,163



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,041				1,100					1,094
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	1,115				1,178					1,163
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	5,219				4,940					8,766
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	5,590				5,291					9,324

Location	2	3	4	5	6	7	8	9	10	12



Key

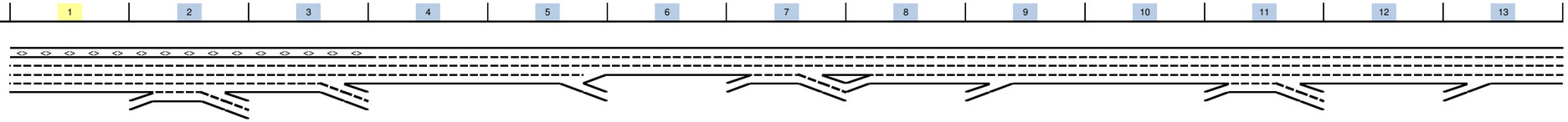
<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,763				2,912					2,327
Non-Weave Flow	5,919				5,675					9,544
Segment Flow	8,682				8,587					11,871
Max Weave Length	5,781				6,008					4,496
Length Check	OK				OK					OK
Ideal Weave Capacity	1,968				1,921					2,156
f_{HV}	0.984				0.983					0.990
f_P	0.998				0.997					0.999
Capacity Condition 1	7,734				5,646					8,527
Capacity Condition 2	7,409				6,933					12,104
Weave v/c ratio	1.15				1.49					1.38
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	1,649				2,912					1,163
Weave LC Rate	1,819				2,992					1,794
Non-Weave LC Rate 1	874				808					2,261
Non-Weave LC Rate 2	3,009				2,954					3,817
Non-Weave LC Rate 3	-2,886				-3,235					644
Segment LC Rate	2,693				3,800					4,054
Weave Intensity Factor	0.598				1.335					0.400
Weave Speed	46.3				36.4					50.7
Non-Weave Speed	42.7				30.3					42.4
Segment Speed	43.8				32.1					43.8
Weave Density	-				-					-
Weave LOS	F				F					F
Summarize Segment Operations										
Segment v/c ratio	1.15	0.77	0.82	0.92	1.49	1.00	1.11	1.11	1.12	1.38
Segment Density	-	29.0	21.7	37.9	-	44.7	-	-	-	-
Segment LOS	F	D	C	E	F	E	F	F	F	F
Over Capacity	Weave				Weave		Segment GP Lanes Merge	Segment GP Lanes	Segment GP Lanes In GP Lanes On Ramp Roadway	Segment GP Lanes In GP Lanes Out GP Lanes Weave

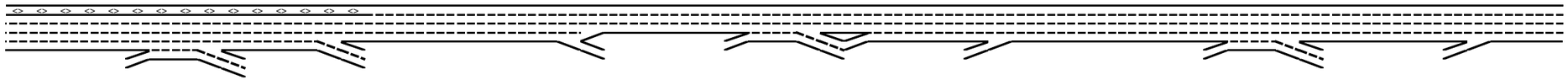
Project: John Wayne Airport Expansion **Scenarios:** 2016 Plus: Proposed Project, Project Alt A, Project Alt B or No Project (10.8 MAP)

Freeway Corridor: 55S **Peak Hour:** AM



Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*7,670*	7,670	6,190	5,540	5,540	4,900	4,900	3,740	4,050	4,800	4,800	4,960	4,960
On Ramp Volume		*880*					*1,260*	*310*	*750*		*930*		*290*
Off Ramp Volume		*2,360*	*650*		*640*		*2,420*				*770*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	7,670	8,550	6,190	5,540	5,540	4,900	6,160	4,050	4,800	4,800	5,730	4,960	5,250
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,158	9,095	6,584	5,934	5,934	5,248	6,598	4,338	5,141	5,141	6,137	5,312	5,623
GP Flow (pcphpl)	2,040	1,819	1,646	1,483	1,483	1,749	1,649	1,084	1,285	1,285	1,227	1,328	1,406
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*64.0*	*64.0*	*65.9*	*65.9*	*65.9*	*65.9*	*62.2*	*52.4*	*52.4*	*52.4*	*52.4*	*68.0*	*68.0*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.87	0.77	0.70	0.63	0.63	0.74	0.70	0.46	0.55	0.55	0.52	0.57	0.60
Speed (mph)	59.2	62.5	64.1	64.9	64.9	63.3	64.1	65.0	65.0	65.0	65.0	65.0	65.0
Density (pcphpl)	34.5	29.1	25.7	22.9	22.9	27.6	25.7	16.7	19.8	19.8	18.9	20.4	21.6
LOS	D	D	C	C	C	D	C	B	C	C	C	C	C
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,159					5,248	4,008	4,338		5,141		5,315
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.87					0.74	0.57	0.46		0.55		0.57
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		6,584	5,893		5,253		4,006				5,319		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.70	0.84		0.75		0.57				0.57		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



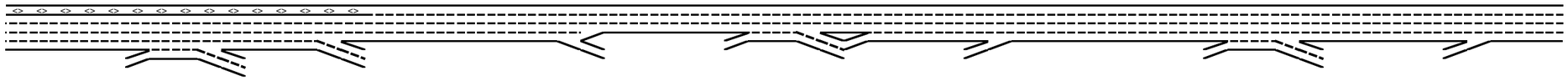
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



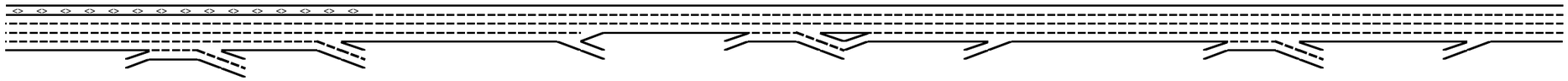
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		880					1,260	310	750		930		290
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		936					1,350	330	803		996		308
On Flow (pcphpl)		936					1,350	330	803		996		308
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.47					0.60	0.16	0.37		0.44		0.15

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



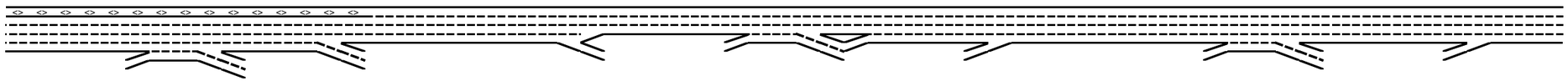
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		2,360	650		640		2,420				770		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		2,510	691		680		2,592				819		
Off Flow (pcphpl)		1,255	346		680		1,296				409		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.56	0.15		0.34		0.58				0.20		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									4,338				5,315
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.117				0.179
v_{12} (pcph)									509				953
v_3 (pcph)													
v_{34} (pcph)									3,829				4,362
v_{12a} (pcph)									1,735				2,126
v_{R12a} (pcph)									2,538				2,434
Merge Speed Index									0.30				0.33
Merge Area Speed									58.1				57.5
Outer Lanes Volume									1,301				1,594
Outer Lanes Speed									62.1				61.1
Segment Speed									60.1				59.5
Merge v/c ratio									0.55				0.53
Merge Density									20.8				20.9
Merge LOS									C				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



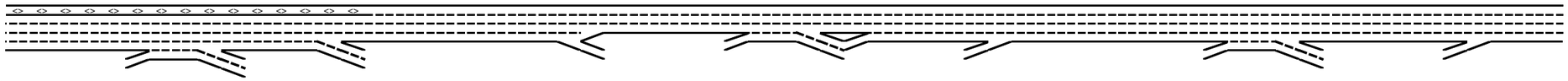
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			6,584		5,934								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.564		0.580								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,224		2,971								
v_3 (pcph)													
v_{34} (pcph)			4,361		2,963								
v_{12a} (pcph)			2,634		2,971								
Diverge Speed Index			0.23		0.49								
Diverge Area Speed			59.7		53.7								
Outer Lanes Volume			1,975		1,481								
Outer Lanes Speed			67.5		69.4								
Segment Speed			64.2		60.6								
Diverge v/c ratio			0.60		0.68								
Diverge Density			28.8		28.1								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		7,670 880 6,190 2,360 8,550					4,900 1,260 3,740 2,420 6,160				4,800 930 4,960 770 5,730		
On to Off Volume (vph)		*243*					*495*				*125*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		258					526				133		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		637					765				805		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		677					819				862		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



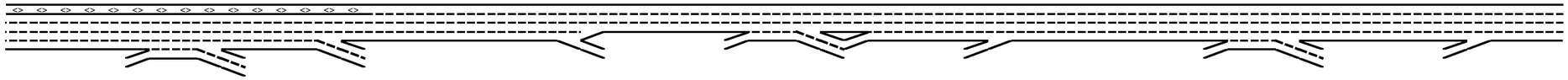
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		2,117					1,925				645		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		2,252					2,062				686		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		5,553					2,975				4,155		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		5,907					3,186				4,450		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



Key

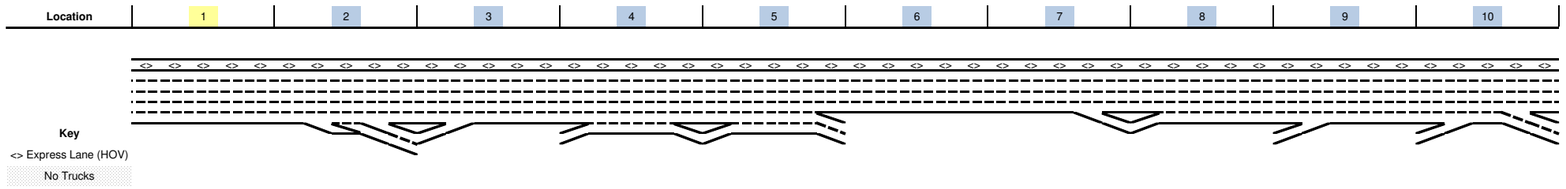
<> Express Lane (HOV)

No Trucks

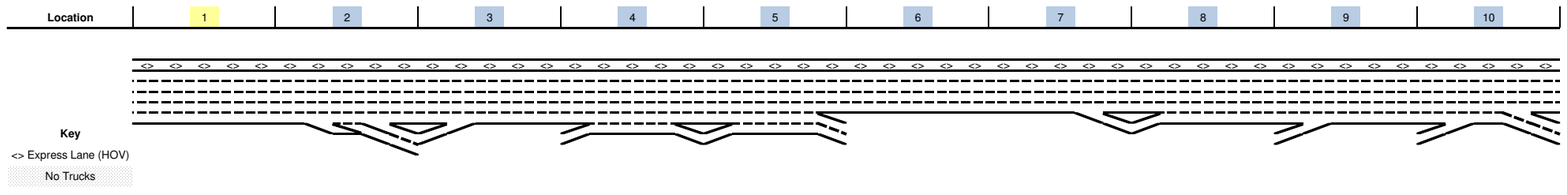
Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,929					2,881				1,548		
Non-Weave Flow		6,165					3,713				4,583		
Segment Flow		9,094					6,594				6,131		
Max Weave Length		5,822					7,099				5,080		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,053					1,980				2,041		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.998				0.998		
Capacity Condition 1		8,120					5,829				8,012		
Capacity Condition 2		7,368					5,390				9,329		
Weave v/c ratio		1.22					1.20				0.75		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		677					819				862		
Weave LC Rate		1,296					1,626				1,132		
Non-Weave LC Rate 1		1,548					1,415				737		
Non-Weave LC Rate 2		3,064					2,517				2,711		
Non-Weave LC Rate 3		-556					-315				-2,727		
Segment LC Rate		2,844					3,041				1,869		
Weave Intensity Factor		0.306					0.285				0.359		
Weave Speed		53.3					53.9				51.8		
Non-Weave Speed		49.2					48.6				51.4		
Segment Speed		50.5					50.8				51.5		
Weave Density		-					-				29.7		
Weave LOS		F					F				D		
Summarize Segment Operations													
Segment v/c ratio	0.87	1.22	0.60	0.63	0.68	0.74	1.20	0.46	0.55	0.55	0.75	0.57	0.53
Segment Density	34.5	-	28.8	22.9	28.1	27.6	-	16.7	20.8	19.8	29.7	20.4	20.9
Segment LOS	D	F	D	C	D	D	F	B	C	C	D	C	C
Over Capacity		Weave					Weave						

Project: John Wayne Airport Expansion **Scenarios:** 2016 Plus: Proposed Project, Project Alt A, Project Alt B or No Project (10.8 MAP)

Freeway Corridor: 405N **Peak Hour:** AM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*10,640*	10,640	8,780	9,220	8,600	6,550	6,550	5,920	7,360	7,540
On Ramp Volume			*440*	*1,200*	*460*			*1,440*	*180*	*290*
Off Ramp Volume		*1,860*		*1,820*	*2,510*		*630*			*2,660*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	10,640	10,640	9,220	10,420	9,060	6,550	6,550	7,360	7,540	7,830
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	11,514	11,514	9,948	11,243	9,704	7,015	7,015	7,883	8,076	8,386
GP Flow (pcphpl)	2,303	2,303	1,990	1,874	1,617	1,754	1,754	1,577	1,615	1,398
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*47.1*	*47.1*	*65.4*	*61.3*	*66.2*	*66.2*	*66.2*	*66.2*	*64.9*	*66.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.98	0.98	0.85	0.80	0.69	0.75	0.75	0.67	0.69	0.59
Speed (mph)	53.4	53.4	60.1	61.8	64.3	63.2	63.2	64.6	64.3	65.0
Density (pcphpl)	43.1	43.1	33.1	30.3	25.1	27.7	27.7	24.4	25.1	21.5
LOS	E	E	D	D	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			9,480	9,967	9,215			6,341	7,884	8,078
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.81	0.85	0.78			0.67	0.67	0.69
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		9,536		9,308	7,015		6,346			5,558
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.81		0.79	0.75		0.68			0.59


Location
1
2
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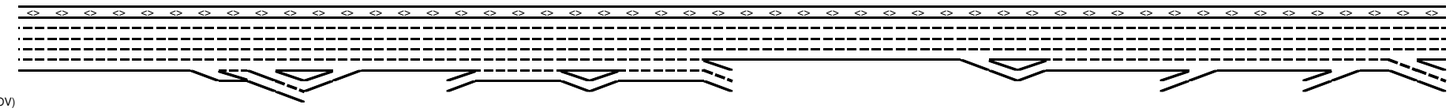
10
Key
<> Express Lane (HOV)
No Trucks
Name
Culver On to Jamboree Off
Jamboree Off Ramp
Jamboree N On Ramp
Jamboree S On to McArthur Off
McArthur On to 55 N&S Off
55 Off to Bristol Off
Bristol/Ave Arts Off Ramp
On Ramp from 55 S
Bristol N On Ramp
Bristol S On Ramp to S Coast Off

Location	1	2	3	4	5	6	7	8	9	10



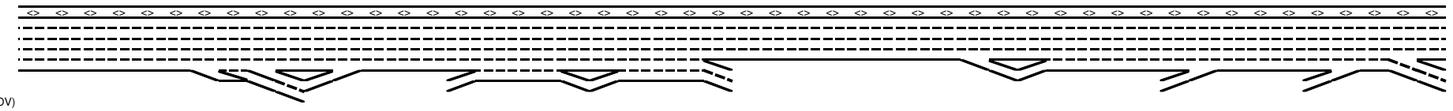
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			440	1,200	460			1,440	180	290
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			468	1,276	489			1,542	191	308
On Flow (pcphpl)			468	1,276	489			1,542	191	308
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.23	0.64	0.24			0.69	0.10	0.15

Location	1	2	3	4	5	6	7	8	9	10



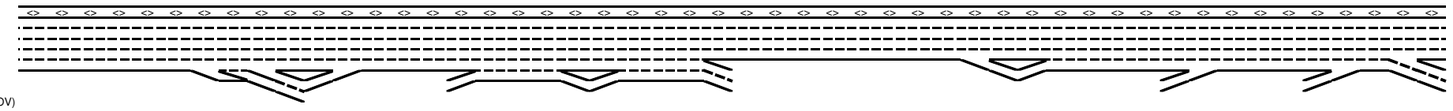
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,860		1,820	2,510		630			2,660
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,977		1,935	2,688		670			2,828
Off Flow (pcphpl)		989		1,935	1,344		670			1,414
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.49		0.97	0.60		0.33			0.71
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			6,980						5,637	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.159						0.194	
v_{12} (pcph)			1,112						1,093	
v_3 (pcph)										
v_{34} (pcph)			5,868						4,544	
v_{12a} (pcph)			2,792						2,255	
v_{R12a} (pcph)			3,260						2,446	
Merge Speed Index			0.38						0.33	
Merge Area Speed			56.2						57.3	
Outer Lanes Volume			2,094						1,691	
Outer Lanes Speed			59.3						60.7	
Segment Speed			57.9						59.3	
Merge v/c ratio			0.71						0.53	
Merge Density			27.2						21.5	
Merge LOS			C						C	

Location	1	2	3	4	5	6	7	8	9	10



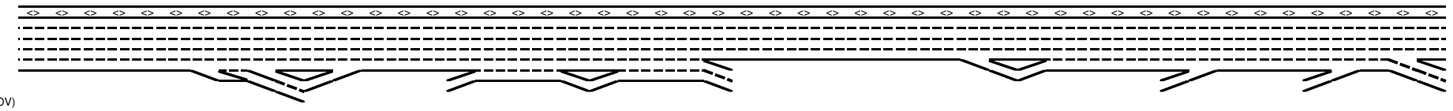
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		9,211					7,015			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.439					0.554			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		3,858					3,436			
v_3 (pcph)										
v_{34} (pcph)		5,353					3,579			
v_{12a} (pcph)		3,858					3,436			
Diverge Speed Index		0.61					0.49			
Diverge Area Speed		51.1					53.8			
Outer Lanes Volume		2,676					1,789			
Outer Lanes Speed		64.8					68.2			
Segment Speed		58.2					60.3			
Diverge v/c ratio		0.88					0.78			
Diverge Density		28.9					32.3			
Diverge LOS		D					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				9,220 1,200 8,600 1,820 10,420	8,600 460 6,550 2,510 9,060					7,540 290 5,170 2,660 7,830
On to Off Volume (vph)				*210*	*127*					*99*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				223	135					105
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				990	333					191
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,053	354					204

Location	1	2	3	4	5	6	7	8	9	10

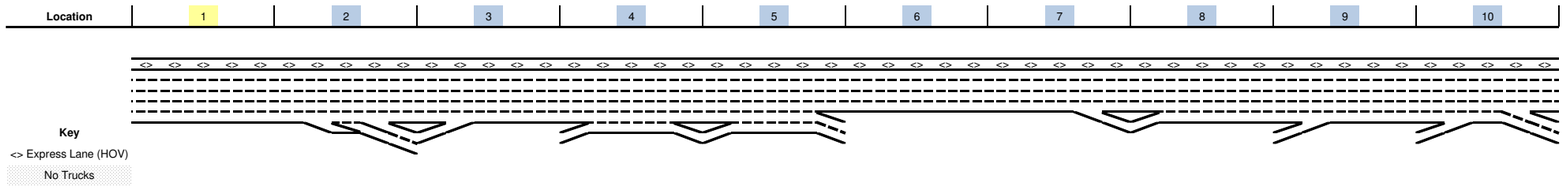


Key

<> Express Lane (HOV)

No Trucks

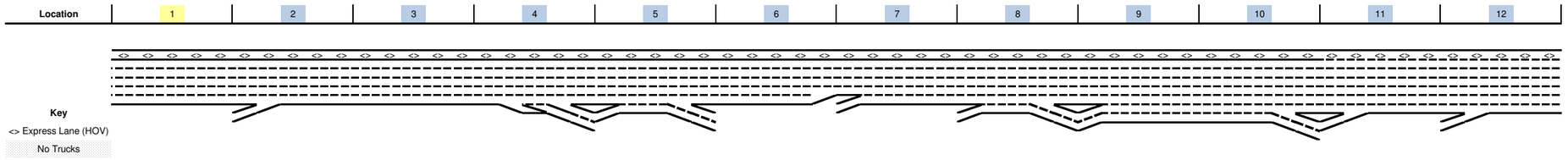
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				1,610	2,383					2,561
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				1,712	2,552					2,723
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				7,610	6,217					4,979
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				8,210	6,659					5,332



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				2,765	2,905					2,927
Non-Weave Flow				8,433	6,795					5,437
Segment Flow				11,198	9,700					8,364
Max Weave Length				5,022	4,013					6,126
Length Check				OK	OK					OK
Ideal Weave Capacity				2,129	2,209					1,920
f_{HV}				0.979	0.983					0.985
f_P				0.999	1.000					1.000
Capacity Condition 1				10,416	10,857					9,456
Capacity Condition 2				9,511	11,484					6,757
Weave v/c ratio				1.15	0.88					1.22
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				2,765	707					204
Weave LC Rate				3,383	1,343					186
Non-Weave LC Rate 1				1,929	1,616					428
Non-Weave LC Rate 2				3,570	3,204					2,901
Non-Weave LC Rate 3				158	-358					-4,174
Segment LC Rate				5,312	2,958					614
Weave Intensity Factor				0.465	0.288					0.266
Weave Speed				49.1	53.8					54.5
Non-Weave Speed				34.3	50.6					55.5
Segment Speed				37.1	51.5					55.1
Weave Density				-	37.7					-
Weave LOS				F	E					F
Summarize Segment Operations										
Segment v/c ratio	0.98	0.88	0.71	1.15	0.88	0.75	0.78	0.67	0.53	1.22
Segment Density	43.1	28.9	27.2	-	37.7	27.7	32.3	24.4	21.5	-
Segment LOS	E	D	C	F	E	D	D	C	C	F
Over Capacity				Weave						Weave

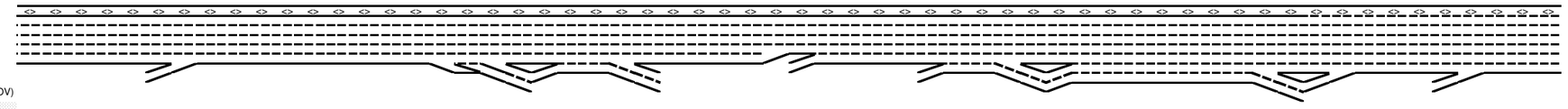
Project: John Wayne Airport Expansion **Scenarios:** 2016 Plus: Proposed Project, Project A

Freeway Corridor: 405S **Peak Hour:** AM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*8,890*	8,890	10,220	10,220	9,080	7,620	7,620	9,630	9,340		5,958	6,158
On Ramp Volume		*1,330*			*1,120*		*2,010*	*2,060*	*510*		*240*	*540*
Off Ramp Volume				*1,140*	*2,580*			*2,350*	*2,700*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	8,890	10,220	10,220	10,220	10,200	7,620	9,630	11,690	9,850		6,198	6,698
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	9,522	10,946	10,946	10,946	10,925	8,161	10,314	12,521	10,628		6,707	7,248
GP Flow (pcphpl)	1,904	2,189	2,189	2,189	1,821	2,040	2,063	2,087	1,518		1,341	1,450
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*35.7*	*35.7*	*35.7*	*35.7*	*44.8*	*44.8*	*44.8*	*50.1*	*50.1*		*54.0*	*54.0*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.81	0.93	0.93	0.93	0.77	0.87	0.88	0.89	0.65		0.57	0.62
Speed (mph)	61.4	56.2	56.2	56.2	62.5	59.2	58.8	58.3	64.8		65.0	65.0
Density (pcphpl)	31.0	39.0	39.0	39.0	29.1	34.5	35.1	35.8	23.4		20.6	22.3
LOS	D	E	E	E	D	D	E	E	C		C	C
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		9,532			9,734		8,161	10,314	10,085		6,452	6,674
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.81			0.83		0.87	0.88	0.86		0.55	0.57
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				9,734	8,161	8,161		10,022	7,757			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.83	0.69	0.87		0.85	0.66			

Location	1	2	3	4	5	6	7	8	9	10	11	12



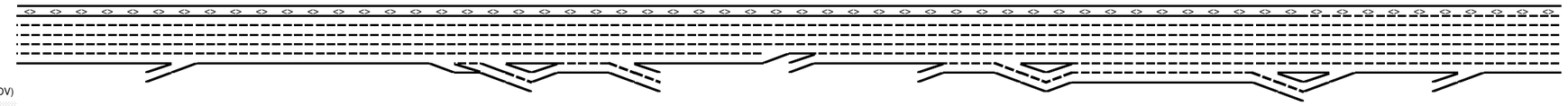
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12



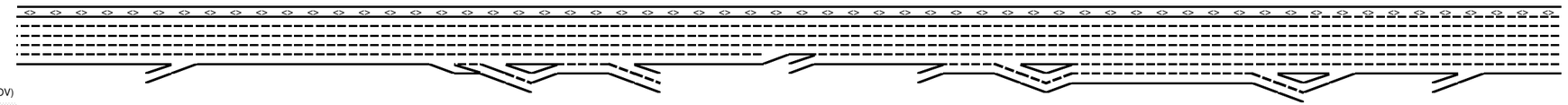
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,330			1,120		2,010	2,060	510		240	540
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,414			1,191		2,153	2,206	542		255	574
On Flow (pcphpl)		1,414			1,191		2,153	2,206	271		255	574
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.71			0.60		0.96	0.98	0.14		0.13	0.29

Location	1	2	3	4	5	6	7	8	9	10	11	12



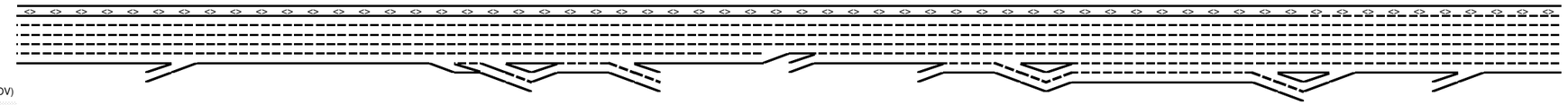
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,140	2,580			2,350	2,700			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,212	2,763			2,498	2,871			
Off Flow (pcphpl)				606	1,382			1,249	1,435			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.30	0.61			0.62	0.72			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		7,032									4,904	4,872
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.041									0.186	0.146
v_{12} (pcph)		289									912	712
v_3 (pcph)												
v_{34} (pcph)		6,743									3,992	4,161
v_{12a} (pcph)		2,813									1,961	1,949
v_{R12a} (pcph)		4,227									2,217	2,523
Merge Speed Index		0.55									0.32	0.29
Merge Area Speed		52.4									57.6	58.4
Outer Lanes Volume		2,110									1,471	1,462
Outer Lanes Speed		59.2									61.5	61.5
Segment Speed		55.6									59.8	60.0
Merge v/c ratio		0.92									0.48	0.55
Merge Density		34.3									19.4	17.5
Merge LOS		D									B	B

Location	1	2	3	4	5	6	7	8	9	10	11	12



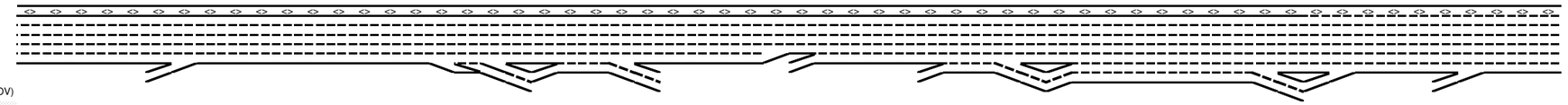
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				8,757								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.485								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				3,174								
v_3 (pcph)												
v_{34} (pcph)				5,583								
v_{12a} (pcph)				3,503								
Diverge Speed Index				0.54								
Diverge Area Speed				52.6								
Outer Lanes Volume				2,627								
Outer Lanes Speed				65.0								
Segment Speed				59.4								
Diverge v/c ratio				0.80								
Diverge Density				27.4								
Diverge LOS				C								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					9,080 1,120 7,620 2,580 10,200			9,630 2,060 9,340 2,350 11,690	9,340 510 7,150 2,700 9,850			
On to Off Volume (vph)					*283*			*414*	*140*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					301			440	149			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					837			1,646	370			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					890			1,763	394			

Location	1	2	3	4	5	6	7	8	9	10	11	12



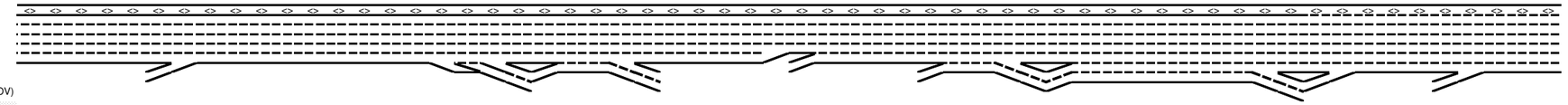
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					2,297			1,936	2,560			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					2,460			2,058	2,722			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					6,783			7,694	6,780			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					7,265			8,241	7,315			

Location	1	2	3	4	5	6	7	8	9	10	11	12



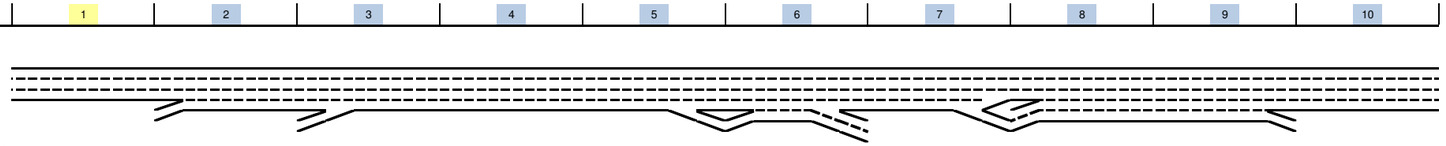
Key

<> Express Lane (HOV)

No Trucks

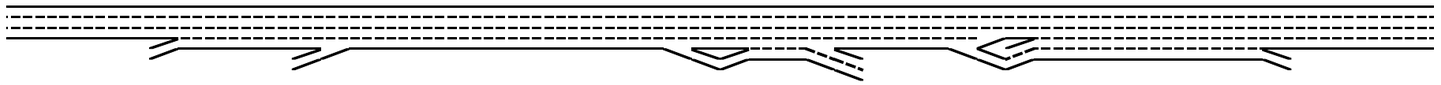
Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					3,349			3,821	3,115			
Non-Weave Flow					7,566			8,681	7,464			
Segment Flow					10,916			12,502	10,579			
Max Weave Length					5,657			5,644	3,959			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,038			1,956	2,085			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	1.000			
Capacity Condition 1					10,013			9,605	10,215			
Capacity Condition 2					7,687			7,710	11,644			
Weave v/c ratio					1.40			1.59	1.01			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					890			1,763	2,722			
Weave LC Rate					1,291			1,745	2,704			
Non-Weave LC Rate 1					1,449			1,096	846			
Non-Weave LC Rate 2					3,376			3,625	3,353			
Non-Weave LC Rate 3					-1,227			-3,398	-3,690			
Segment LC Rate					2,741			2,842	3,550			
Weave Intensity Factor					0.350			0.890	1.061			
Weave Speed					52.0			41.5	39.3			
Non-Weave Speed					48.1			40.3	35.2			
Segment Speed					49.3			40.6	36.3			
Weave Density					-			-	-			
Weave LOS					F			F	F			
Summarize Segment Operations												
Segment v/c ratio	0.81	0.92	0.93	0.80	1.40	0.87	0.88	1.59	1.01		0.48	0.55
Segment Density	31.0	34.3	39.0	27.4	-	34.5	35.1	-	-		19.4	17.5
Segment LOS	D	D	E	C	F	D	E	F	F		B	B
Over Capacity					Weave			Weave	Weave			

Project: John Wayne Airport Expansion **Scenarios:** 2016 Plus: Proposed Project, Project Alt A, Project Alt B or No Project (10.8 MAP)
Freeway Corridor: 73N **Peak Hour:** PM



Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*4,940*	4,940	6,780	7,680	7,680	7,110	8,120	6,880		7,540
On Ramp Volume		*1,840*	*900*			*2,420*		*1,220*		
Off Ramp Volume					*570*	*1,410*	*1,240*	*560*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	4,940	6,780	7,680	7,680	7,680	9,530	8,120	8,100		7,540
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,261	7,221	8,179	8,179	8,179	10,149	8,648	8,627		8,030
GP Flow (pcphpl)	1,754	1,805	2,045	2,045	2,045	2,030	2,162	1,725		2,008
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*57.9*	*57.9*	*57.9*	*65.1*	*65.1*	*64.5*	*64.5*	*60.4*		*60.4*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.75	0.77	0.87	0.87	0.87	0.86	0.92	0.73		0.85
Speed (mph)	63.2	62.7	59.1	59.1	59.1	59.4	56.8	63.5		59.8
Density (pcphpl)	27.7	28.8	34.6	34.6	34.6	34.2	38.1	27.2		33.6
LOS	D	D	D	D	D	D	E	D		D
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		5,264	7,222			7,577		7,327		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.75	0.77			0.81		1.04		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					7,573	8,648	7,327	8,031		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.81	0.92	1.04	1.14		

Location	1	2	3	4	5	6	7	8	9	10



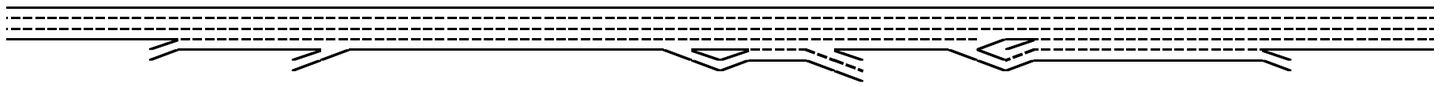
Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,840	900			2,420		1,220		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,956	957			2,573		1,299		
On Flow (pcphpl)		1,956	957			2,573		650		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.98	0.48			1.29		0.29		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					570	1,410	1,240	560		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					606	1,502	1,321	595		
Off Flow (pcphpl)					606	751	1,321	595		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.30	0.33	0.60	0.26		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			7,222							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.098							
v_{12} (pcph)			709							
v_3 (pcph)										
v_{34} (pcph)			6,513							
v_{12a} (pcph)			2,889							
v_{R12a} (pcph)			3,846							
Merge Speed Index			0.48							
Merge Area Speed			54.1							
Outer Lanes Volume			2,167							
Outer Lanes Speed			59.0							
Segment Speed			56.6							
Merge v/c ratio			0.84							
Merge Density			32.5							
Merge LOS			D							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					8,179		8,648			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.528		0.483			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					3,908		4,515			
v_3 (pcph)										
v_{34} (pcph)					4,271		4,133			
v_{12a} (pcph)					3,908		4,515			
Diverge Speed Index					0.48		-			
Diverge Area Speed					53.9		-			
Outer Lanes Volume					2,136					
Outer Lanes Speed					66.9					
Segment Speed					60.0					
Diverge v/c ratio					0.89		1.03			
Diverge Density					36.1		-			
Diverge LOS					E		F			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,110 2,420 8,120 1,410 9,530		6,880 1,220 7,540 560 8,100		
On to Off Volume (vph)						*358*		*84*		
PHF						0.95		0.95		0.95
Terrain						Level		Level		Level
Grade %						0.0%		0.0%		0.0%
Grade Length (mi)						0.00		0.00		0.00
Truck & Bus %						2.0%		2.0%		3.0%
RV %						0.0%		0.0%		0.0%
E_T						1.5		1.5		1.5
E_R						1.2		1.2		1.2
f_{HV}						0.990		0.990		0.985
f_P						1.00		1.00		1.00
On to Off Flow (pcph)						381		90		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						2,062		1,136		
PHF						0.95		0.95		0.95
Terrain						Level		Level		Level
Grade %						0.0%		0.0%		0.0%
Grade Length (mi)						0.00		0.00		0.00
Truck & Bus %						2.0%		2.4%		3.0%
RV %						0.0%		0.0%		0.0%
E_T						1.5		1.5		1.5
E_R						1.2		1.2		1.2
f_{HV}						0.990		0.988		0.985
f_P						1.00		1.00		1.00
On to ML Flow (pcph)						2,192		1,209		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,052		476		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,120		507		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						6,058		6,404		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,452		6,821		

Location	1	2	3	4	5	6	7	8	9	10

Key

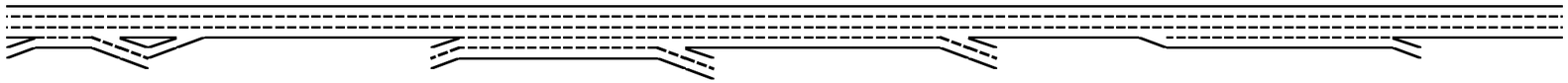
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						3,313		1,716		
Non-Weave Flow						6,832		6,910		
Segment Flow						10,145		8,626		
Max Weave Length						5,870		2,959		
Length Check						OK		OK		
Ideal Weave Capacity						2,029		2,238		
f_{HV}						0.989		0.988		
f_P						0.998		0.998		
Capacity Condition 1						8,008		6,626		
Capacity Condition 2						7,253		17,362		
Weave v/c ratio						1.38		1.28		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						2,192		1,013		
Weave LC Rate						2,709		1,522		
Non-Weave LC Rate 1						1,545		1,659		
Non-Weave LC Rate 2						3,213		3,230		
Non-Weave LC Rate 3						-812		-649		
Segment LC Rate						4,254		3,180		
Weave Intensity Factor						0.472		0.409		
Weave Speed						49.0		50.5		
Non-Weave Speed						37.0		43.9		
Segment Speed						40.2		45.1		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.75	0.77	0.84	0.87	0.89	1.38	1.03	1.28		0.85
Segment Density	27.7	28.8	32.5	34.6	36.1	-	-	-		33.6
Segment LOS	D	D	D	D	E	F	F	F		D
Over Capacity						On Ramp Roadway Weave	Out GP Lanes Diverge	In GP Lanes Out GP Lanes Weave		

Project: John Wayne Airport Expansion **Scenarios:** 2016 Plus: Proposed Project, Project Alt A, Project Alt B or No Project (10.8 MAP)
Freeway Corridor: 73S **Peak Hour:** PM

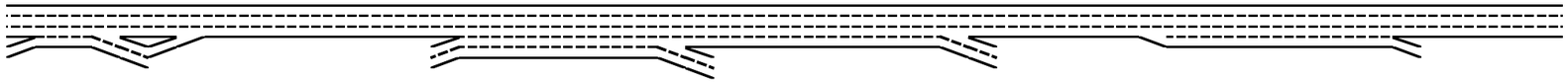
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,240	3,700	4,940	4,940		6,030	6,030	5,100	5,100		4,530
On Ramp Volume	*670*	*1,240*		*2,090*							
Off Ramp Volume	*1,210*			*1,000*			*930*		*570*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	4,910	4,940	4,940	7,030		6,030	6,030	5,100	5,100		4,530
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,229	5,261	5,261	7,487		6,422	6,422	5,432	5,432		4,824
GP Flow (pcphpl)	1,307	1,754	1,754	1,497		1,605	1,605	1,811	1,086		1,608
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*63.8*	*63.8*	*63.9*	*63.9*		*72.7*	*72.7*	*72.7*	*72.7*		*72.7*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.56	0.75	0.75	0.64		0.68	0.68	0.77	0.46		0.68
Speed (mph)	65.0	63.2	63.2	64.9		64.4	64.4	62.6	65.0		64.4
Density (pcphpl)	20.1	27.7	27.7	23.1		24.9	24.9	28.9	16.7		25.0
LOS	C	D	D	C		C	C	D	B		C
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	4,517	3,941		5,261					5,432		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.64	0.56		0.75					0.77		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	3,941			6,424			5,433		4,826		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.56			0.91			0.77		0.51		

Location	2	3	4	5	6	7	8	9	10	11	12



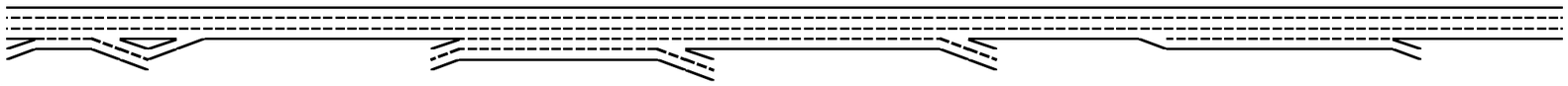
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On

Location	2	3	4	5	6	7	8	9	10	11	12



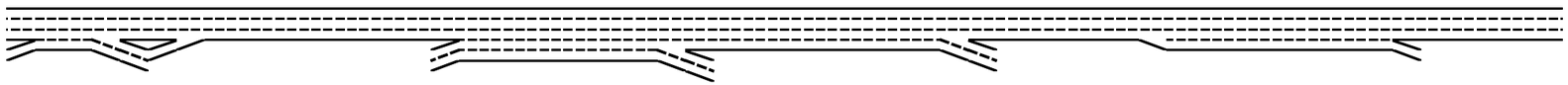
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	670	1,240		2,090							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	712	1,321		2,226							
On Flow (pcphpl)	712	1,321		1,113							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.36	0.60		0.49							

Location	2	3	4	5	6	7	8	9	10	11	12



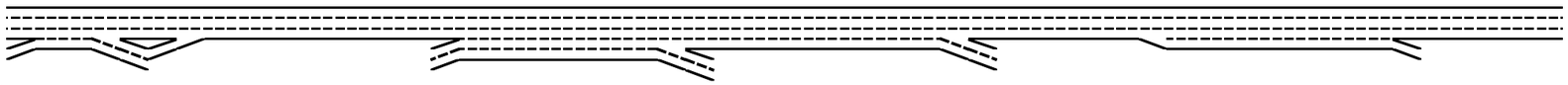
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	1,210			1,000			930		570		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	1,289			1,063			989		606		
Off Flow (pcphpl)	644			532			494		606		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.29			0.27			0.25		0.30		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		3,941									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,343									
v_3 (pcph)		1,597									
v_{34} (pcph)											
v_{12a} (pcph)		2,343									
v_{R12a} (pcph)		3,664									
Merge Speed Index		0.41									
Merge Area Speed		55.7									
Outer Lanes Volume		1,597									
Outer Lanes Speed		61.1									
Segment Speed		57.2									
Merge v/c ratio		0.80									
Merge Density		29.6									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



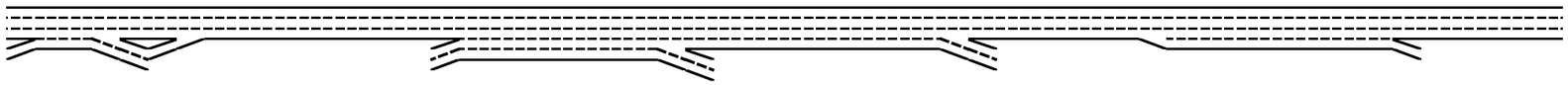
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							6,422				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.554				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,401				
v_3 (pcph)											
v_{34} (pcph)							4,021				
v_{12a} (pcph)							2,569				
Diverge Speed Index							0.52				
Diverge Area Speed							53.1				
Outer Lanes Volume							1,927				
Outer Lanes Speed							67.7				
Segment Speed							61.0				
Diverge v/c ratio							0.58				
Diverge Density							25.0				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,240 670 3,700 1,210 4,910			4,940 2,090 6,030 1,000 7,030							
On to Off Volume (vph)	*165*			*297*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	176			316							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	505			1,793							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	537			1,909							

Location	2	3	4	5	6	7	8	9	10	11	12



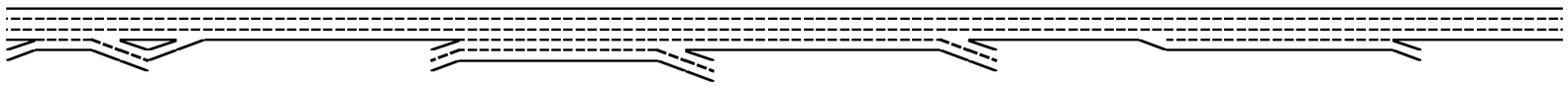
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	1,045			703							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	1,113			747							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	3,195			4,237							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	3,403			4,513							

Location	2	3	4	5	6	7	8	9	10	11	12



Key

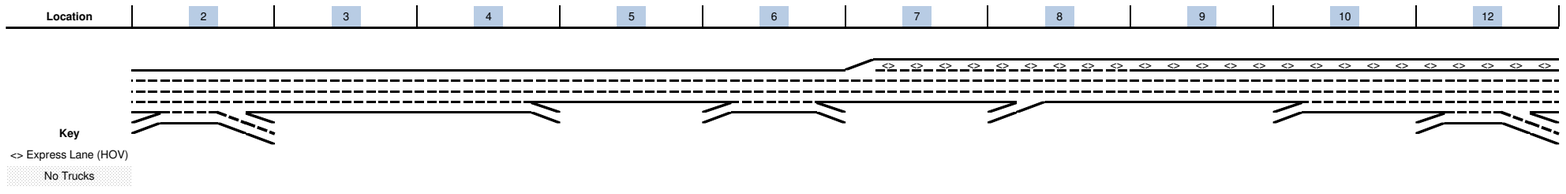
<> Express Lane (HOV)

No Trucks

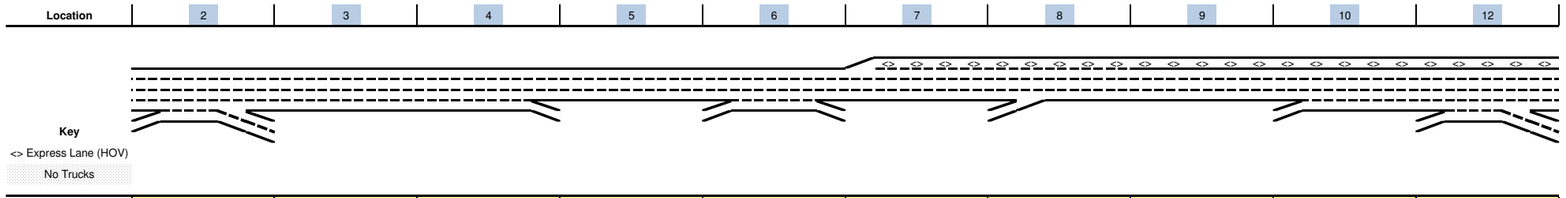
Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,650			2,656							
Non-Weave Flow	3,578			4,829							
Segment Flow	5,228			7,485							
Max Weave Length	5,751			4,614							
Length Check	OK			OK							
Ideal Weave Capacity	2,040			2,086							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,044			6,168							
Capacity Condition 2	7,512			9,721							
Weave v/c ratio	0.85			1.20							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	537			747							
Weave LC Rate	1,123			1,123							
Non-Weave LC Rate 1	1,081			1,046							
Non-Weave LC Rate 2	2,487			2,766							
Non-Weave LC Rate 3	-1,293			-1,901							
Segment LC Rate	2,204			2,169							
Weave Intensity Factor	0.277			0.370							
Weave Speed	54.1			51.5							
Non-Weave Speed	52.8			47.6							
Segment Speed	53.2			48.9							
Weave Density	32.8			-							
Weave LOS	D			F							
Summarize Segment Operations											
Segment v/c ratio	0.85	0.80	0.75	1.20		0.68	0.58	0.77	0.46		0.68
Segment Density	32.8	29.6	27.7	-		24.9	25.0	28.9	16.7		25.0
Segment LOS	D	D	D	F		C	C	D	B		C
Over Capacity				Weave							

Project: John Wayne Airport Expansion **Scenarios:** 2016 Plus: Proposed Project, Project Alt A, Project Alt B or No Project (10.8 MAP)

Freeway Corridor: 55N **Peak Hour:** PM

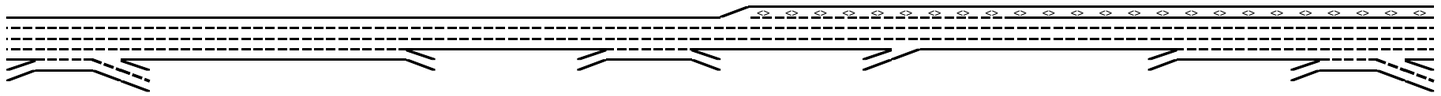


Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Define Freeway Segment										
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	4,090	2,630	2,630	2,200	2,200	2,480	2,480	3,060	3,060	3,970
On Ramp Volume	*980*				*1,410*		*580*		*910*	*1,160*
Off Ramp Volume	*2,440*		*430*		*1,130*					*1,060*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	5,070	2,630	2,630	2,200	3,610	2,480	3,060	3,060	3,970	5,130
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	5,430	2,817	2,817	2,356	3,867	2,656	3,277	3,277	4,223	5,457
GP Flow (pcphpl)	1,086	704	704	785	967	885	1,092	1,092	1,056	1,091
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*63.2*	*63.2*	*63.2*	*62.3*	*60.5*	*60.5*	*13.5*	*13.5*	*13.5*	*14.0*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	980				1,410		580		910	1,160
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,042				1,510		617		968	1,234
On Flow (pcphpl)	1,042				1,510		617		968	1,234
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.52				0.67		0.31		0.48	0.55

Location	2	3	4	5	6	7	8	9	10	12



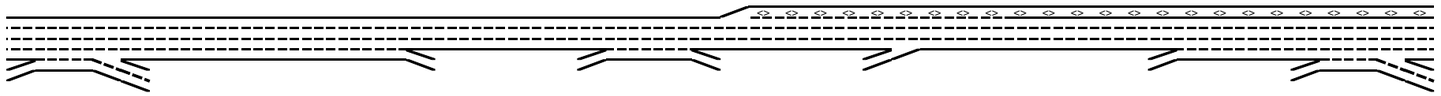
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	2,440		430		1,130					1,160
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	2,613		457		1,210					1,234
Off Flow (pcphpl)	1,307		457		1,210					617
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.58		0.23		0.54					0.31
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							2,661			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							1,617			
v_3 (pcph)							1,044			
v_{34} (pcph)										
v_{12a} (pcph)							1,617			
v_{R12a} (pcph)							2,234			
Merge Speed Index							0.28			
Merge Area Speed							58.5			
Outer Lanes Volume							1,044			
Outer Lanes Speed							63.0			
Segment Speed							59.9			
Merge v/c ratio							0.49			
Merge Density							15.8			
Merge LOS							B			

Location	2	3	4	5	6	7	8	9	10	12



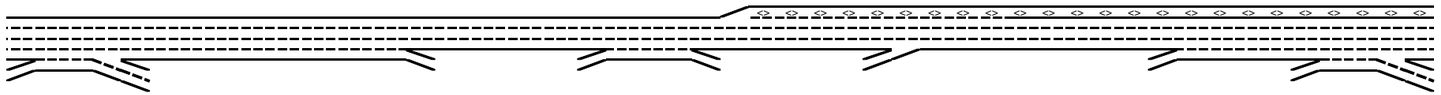
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			2,817							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.669							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			1,486							
v_3 (pcph)										
v_{34} (pcph)			1,331							
v_{12a} (pcph)			1,486							
Diverge Speed Index			0.47							
Diverge Area Speed			54.2							
Outer Lanes Volume			665							
Outer Lanes Speed			71.3							
Segment Speed			61.1							
Diverge v/c ratio			0.34							
Diverge Density			3.5							
Diverge LOS			A							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	4,090 980 2,630 2,440 5,070				2,200 1,410 2,480 1,130 3,610					3,970 1,160 4,070 1,060 5,130
On to Off Volume (vph)	*472*				*441*					*240*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	501				469					255
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	508				969					920
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	540				1,037					979

Location	2	3	4	5	6	7	8	9	10	12



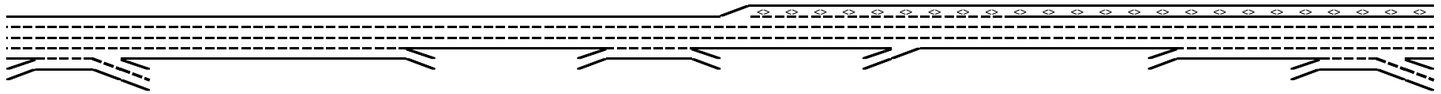
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,968				689					920
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	2,108				738					979
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	2,122				1,511					3,050
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	2,272				1,619					3,244

Location	2	3	4	5	6	7	8	9	10	12



Key

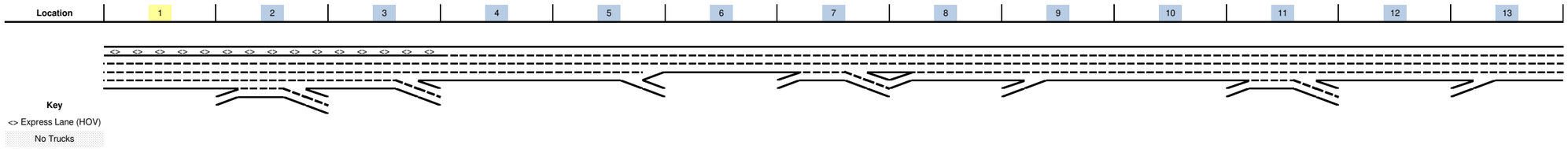
<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,649				1,775					1,958
Non-Weave Flow	2,774				2,088					3,499
Segment Flow	5,423				3,863					5,457
Max Weave Length	7,692				7,357					6,223
Length Check	OK				OK					OK
Ideal Weave Capacity	1,822				1,818					2,024
f_{HV}	0.984				0.984					0.990
f_P	0.999				0.995					0.998
Capacity Condition 1	7,164				5,340					7,998
Capacity Condition 2	4,831				5,114					6,607
Weave v/c ratio	1.10				0.74					0.82
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	540				1,775					979
Weave LC Rate	711				1,855					1,609
Non-Weave LC Rate 1	226				69					1,015
Non-Weave LC Rate 2	2,308				2,155					2,469
Non-Weave LC Rate 3	-3,703				-4,013					-1,380
Segment LC Rate	937				1,924					2,625
Weave Intensity Factor	0.260				0.780					0.284
Weave Speed	54.7				43.1					53.9
Non-Weave Speed	54.6				46.0					51.4
Segment Speed	54.6				44.6					52.3
Weave Density	-				28.9					26.1
Weave LOS	F				D					C
Summarize Segment Operations										
Segment v/c ratio	1.10	0.30	0.34	0.33	0.74	0.38	0.49	0.46	0.45	0.82
Segment Density	-	10.8	3.5	12.1	28.9	13.6	15.8	16.8	16.2	26.1
Segment LOS	F	A	A	B	D	B	B	B	B	C
Over Capacity	Weave									

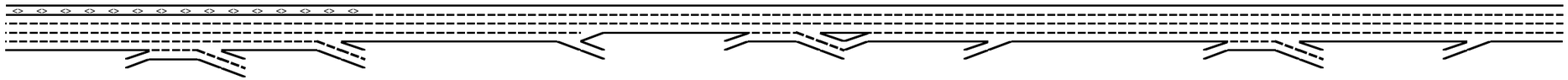
Project: John Wayne Airport Expansion **Scenarios:** 2016 Plus: Proposed Project, Project Alt A, Project Alt B or No Project (10.8 MAP)

Freeway Corridor: 55S **Peak Hour:** PM



Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*7,980*	7,980	7,240	6,170	6,170	5,530	5,530	5,110	5,730	6,970	6,970	6,430	6,430
On Ramp Volume		*910*					*1,670*	*620*	*1,240*		*1,210*		*260*
Off Ramp Volume		*1,650*	*1,070*		*640*		*2,090*				*1,750*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	7,980	8,890	7,240	6,170	6,170	5,530	7,200	5,730	6,970	6,970	8,180	6,430	6,690
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,488	9,456	7,701	6,608	6,608	5,923	7,712	6,137	7,465	7,465	8,761	6,887	7,165
GP Flow (pcphpl)	2,122	1,891	1,925	1,652	1,652	1,974	1,928	1,534	1,866	1,866	1,752	1,722	1,791
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*55.7*	*55.7*	*63.9*	*63.9*	*63.9*	*63.9*	*58.0*	*51.0*	*51.0*	*51.0*	*51.0*	*65.1*	*65.1*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.90	0.80	0.82	0.70	0.70	0.84	0.82	0.65	0.79	0.79	0.75	0.73	0.76
Speed (mph)	57.6	61.6	61.1	64.1	64.1	60.3	61.0	64.7	61.9	61.9	63.2	63.5	62.8
Density (pcphpl)	36.8	30.7	31.5	25.8	25.8	32.7	31.6	23.7	30.1	30.1	27.7	27.1	28.5
LOS	E	D	D	C	C	D	D	C	D	D	D	D	D
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,489					5,923	5,478	6,137		7,465		6,889
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.90					0.84	0.78	0.65		0.79		0.73
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		7,701	6,563		5,928		5,473				6,901		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.82	0.93		0.84		0.78				0.73		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



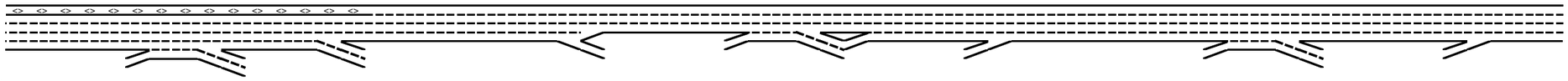
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



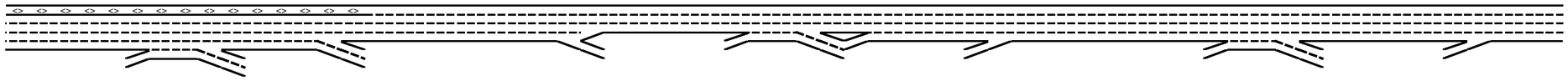
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		910					1,670	620	1,240		1,210		260
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		967					1,789	659	1,328		1,296		276
On Flow (pcphpl)		967					1,789	659	1,328		1,296		276
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.48					0.79	0.33	0.60		0.58		0.14

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



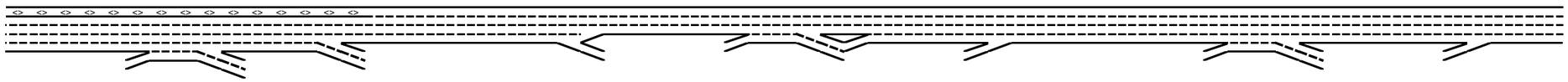
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		1,650	1,070		640		2,090				1,750		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		1,755	1,138		680		2,239				1,861		
Off Flow (pcphpl)		878	569		680		1,119				930		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.39	0.25		0.34		0.50				0.47		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									6,137				6,889
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.052				0.183
v_{12} (pcph)									318				1,262
v_3 (pcph)													
v_{34} (pcph)									5,819				5,627
v_{12a} (pcph)									2,455				2,756
v_{R12a} (pcph)									3,783				3,032
Merge Speed Index									0.42				0.36
Merge Area Speed									55.3				56.6
Outer Lanes Volume									1,841				2,067
Outer Lanes Speed									60.2				59.4
Segment Speed									57.6				58.2
Merge v/c ratio									0.82				0.66
Merge Density									30.3				25.5
Merge LOS									D				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



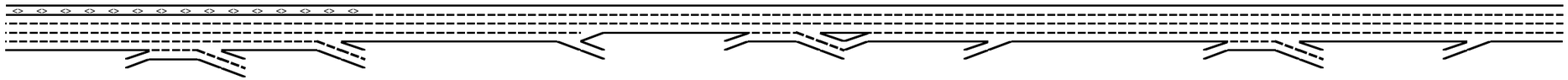
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			7,701		6,608								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.515		0.563								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,845		3,265								
v_3 (pcph)													
v_{34} (pcph)			4,857		3,343								
v_{12a} (pcph)			3,080		3,265								
Diverge Speed Index			0.27		0.49								
Diverge Area Speed			58.8		53.7								
Outer Lanes Volume			2,310		1,672								
Outer Lanes Speed			66.2		68.7								
Segment Speed			63.0		60.4								
Diverge v/c ratio			0.70		0.74								
Diverge Density			33.7		30.7								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		7,980 910 7,240 1,650 8,890					5,530 1,670 5,110 2,090 7,200				6,970 1,210 6,430 1,750 8,180		
On to Off Volume (vph)		*169*					*485*				*259*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		180					515				275		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		741					1,185				951		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		788					1,269				1,019		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



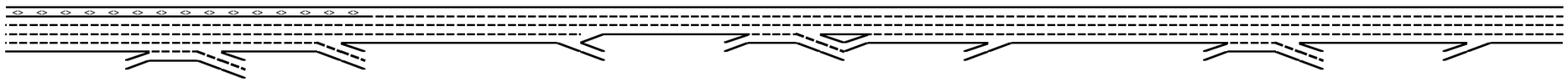
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		1,481					1,605				1,491		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		1,575					1,719				1,585		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		6,499					3,925				5,479		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		6,913					4,204				5,868		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



Key

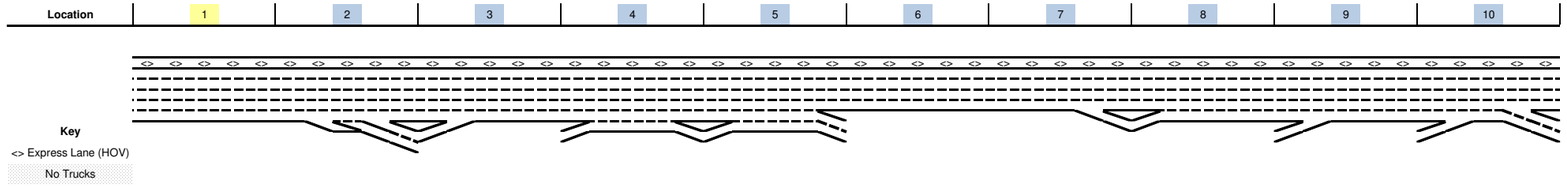
<> Express Lane (HOV)

No Trucks

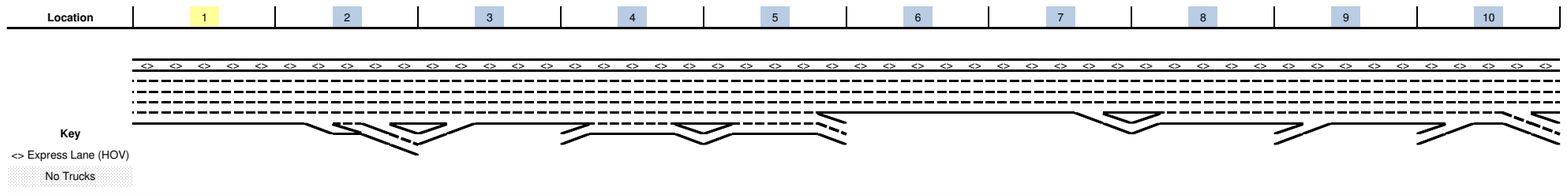
Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,363					2,989				2,604		
Non-Weave Flow		7,092					4,719				6,143		
Segment Flow		9,456					7,708				8,747		
Max Weave Length		5,053					6,544				5,559		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,111					2,023				2,004		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.997				0.998		
Capacity Condition 1		8,352					5,950				7,876		
Capacity Condition 2		9,495					6,069				7,920		
Weave v/c ratio		1.12					1.27				1.09		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		788					1,269				1,019		
Weave LC Rate		1,407					2,076				1,288		
Non-Weave LC Rate 1		1,739					1,622				1,059		
Non-Weave LC Rate 2		3,271					2,741				3,059		
Non-Weave LC Rate 3		-245					-3				-2,286		
Segment LC Rate		3,146					3,698				2,347		
Weave Intensity Factor		0.332					0.333				0.430		
Weave Speed		52.5					52.5				50.0		
Non-Weave Speed		48.0					43.5				47.2		
Segment Speed		49.0					46.6				48.0		
Weave Density		-					-				-		
Weave LOS		F					F				F		
Summarize Segment Operations													
Segment v/c ratio	0.90	1.12	0.70	0.70	0.74	0.84	1.27	0.65	0.82	0.79	1.09	0.73	0.66
Segment Density	36.8	-	33.7	25.8	30.7	32.7	-	23.7	30.3	30.1	-	27.1	25.5
Segment LOS	E	F	D	C	D	D	F	C	D	D	F	D	C
Over Capacity		Weave					Weave				Weave		

Project: John Wayne Airport Expansion **Scenarios:** 2016 Plus: Proposed Project, Project Alt A, Project Alt B or No Project (10.8 MAP)

Freeway Corridor: 405N **Peak Hour:** PM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*7,610*	7,610	6,570	7,310	7,700	6,310	6,310	5,710	6,820	7,110
On Ramp Volume			*740*	*1,130*	*1,360*			*1,110*	*290*	*540*
Off Ramp Volume		*1,040*		*740*	*2,750*		*600*			*2,750*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	7,610	7,610	7,310	8,440	9,060	6,310	6,310	6,820	7,110	7,650
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,235	8,235	7,887	9,106	9,704	6,758	6,758	7,305	7,615	8,194
GP Flow (pcphpl)	1,647	1,647	1,577	1,518	1,617	1,690	1,690	1,461	1,523	1,366
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*23.5*	*23.5*	*22.3*	*20.6*	*26.8*	*26.8*	*26.8*	*26.8*	*11.4*	*11.3*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.70	0.70	0.67	0.65	0.69	0.72	0.72	0.62	0.65	0.58
Speed (mph)	64.1	64.1	64.6	64.8	64.3	63.8	63.8	64.9	64.8	65.0
Density (pcphpl)	25.7	25.7	24.4	23.4	25.1	26.5	26.5	22.5	23.5	21.0
LOS	C	C	C	C	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			7,100	7,905	8,258			6,116	7,307	7,619
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.60	0.67	0.70			0.65	0.62	0.65
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		7,129		8,320	6,758		6,120			5,270
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.61		0.71	0.72		0.65			0.56


Location
1
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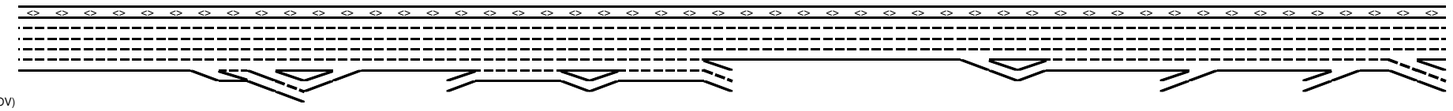
Key
<> Express Lane (HOV)
No Trucks
Name
Culver On to Jamboree Off
Jamboree Off Ramp
Jamboree N On Ramp
Jamboree S On to McArthur Off
McArthur On to 55 N&S Off
55 Off to Bristol Off
Bristol/Ave Arts Off Ramp
On Ramp from 55 S
Bristol N On Ramp
Bristol S On Ramp to S Coast Off

Location	1	2	3	4	5	6	7	8	9	10



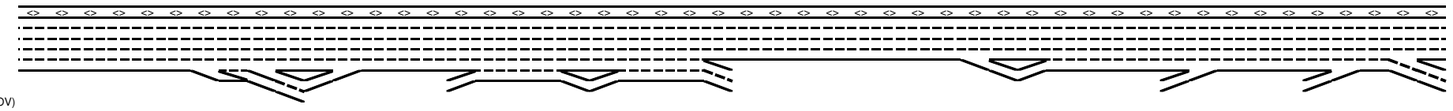
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			740	1,130	1,360			1,110	290	540
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			787	1,201	1,446			1,189	308	574
On Flow (pcphpl)			787	1,201	1,446			1,189	308	574
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.39	0.60	0.72			0.53	0.15	0.29

Location	1	2	3	4	5	6	7	8	9	10



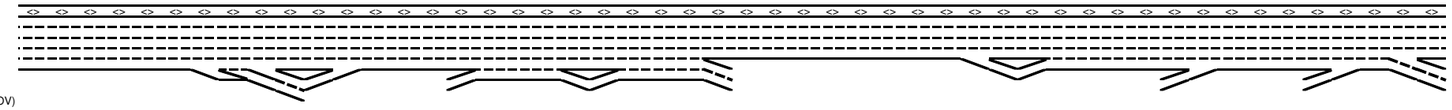
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,040		740	2,750		600			2,750
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,106		787	2,945		638			2,924
Off Flow (pcphpl)		553		787	1,473		638			1,462
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.28		0.39	0.65		0.32			0.73
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			5,183						5,334	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.119						0.179	
v_{12} (pcph)			619						956	
v_3 (pcph)										
v_{34} (pcph)			4,564						4,378	
v_{12a} (pcph)			2,073						2,134	
v_{R12a} (pcph)			2,860						2,442	
Merge Speed Index			0.35						0.33	
Merge Area Speed			57.0						57.4	
Outer Lanes Volume			1,555						1,600	
Outer Lanes Speed			61.2						61.0	
Segment Speed			59.1						59.4	
Merge v/c ratio			0.62						0.53	
Merge Density			23.9						21.4	
Merge LOS			C						C	

Location	1	2	3	4	5	6	7	8	9	10



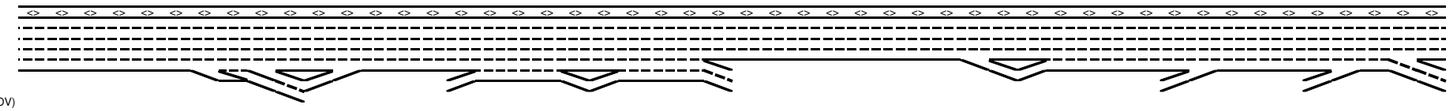
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		6,588					6,758			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.544					0.562			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		2,531					3,306			
v_3 (pcph)										
v_{34} (pcph)		4,057					3,452			
v_{12a} (pcph)		2,635					3,306			
Diverge Speed Index		0.53					0.49			
Diverge Area Speed		52.9					53.8			
Outer Lanes Volume		1,976					1,726			
Outer Lanes Speed		67.5					68.5			
Segment Speed		60.8					60.4			
Diverge v/c ratio		0.60					0.75			
Diverge Density		18.4					31.2			
Diverge LOS		B					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				7,310 1,130 7,700 740 8,440	7,700 1,360 6,310 2,750 9,060					7,110 540 4,900 2,750 7,650
On to Off Volume (vph)				*99*	*413*					*194*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				105	439					206
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				1,031	947					346
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,096	1,007					368

Location	1	2	3	4	5	6	7	8	9	10



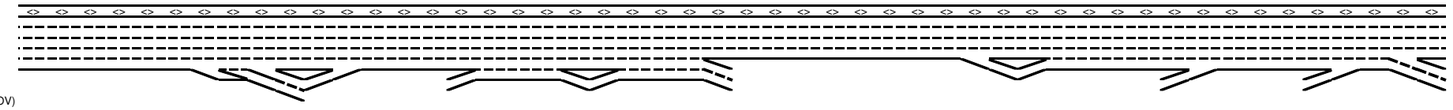
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				641	2,337					2,556
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				681	2,503					2,717
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				6,669	5,363					4,554
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				7,196	5,744					4,878

Location	1	2	3	4	5	6	7	8	9	10



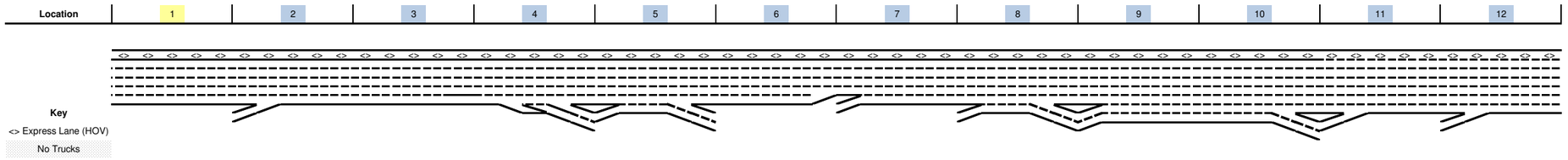
Key

<> Express Lane (HOV)

No Trucks

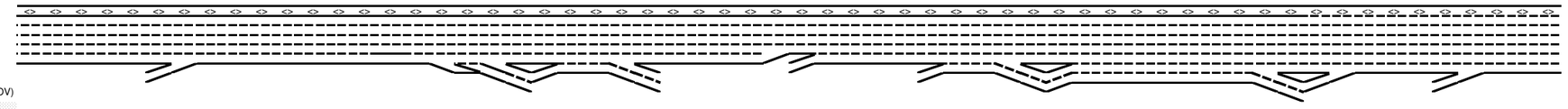
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				1,777	3,510					3,085
Non-Weave Flow				7,301	6,183					5,084
Segment Flow				9,078	9,693					8,169
Max Weave Length				4,493	4,694					6,432
Length Check				OK	OK					OK
Ideal Weave Capacity				2,169	2,157					1,896
f_{HV}				0.979	0.984					0.986
f_P				0.999	0.999					1.000
Capacity Condition 1				10,601	10,602					9,342
Capacity Condition 2				11,982	9,499					6,262
Weave v/c ratio				0.84	1.00					1.29
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				1,777	2,014					368
Weave LC Rate				2,396	2,650					350
Non-Weave LC Rate 1				1,695	1,489					355
Non-Weave LC Rate 2				3,317	3,068					2,823
Non-Weave LC Rate 3				-255	-579					-4,258
Segment LC Rate				4,091	4,139					705
Weave Intensity Factor				0.378	0.375					0.297
Weave Speed				51.3	51.4					53.6
Non-Weave Speed				43.5	41.2					54.5
Segment Speed				44.8	44.4					54.1
Weave Density				40.5	-					-
Weave LOS				E	F					F
Summarize Segment Operations										
Segment v/c ratio	0.70	0.60	0.62	0.84	1.00	0.72	0.75	0.62	0.53	1.29
Segment Density	25.7	18.4	23.9	40.5	-	26.5	31.2	22.5	21.4	-
Segment LOS	C	B	C	E	F	D	D	C	C	F
Over Capacity					Weave					Weave

Project: John Wayne Airport Expansion **Scenarios:** 2016 Plus: Proposed Project, Project Alt A, Project Alt B or No Project (10.8 MAP)
Freeway Corridor: 405S **Peak Hour:** PM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*6,000*	6,000	7,090	7,090	6,060	6,320	6,320	7,940	8,180		6,117	6,642
On Ramp Volume		*1,090*			*1,170*		*1,620*	*1,420*	*940*		*630*	*1,090*
Off Ramp Volume				*1,030*	*910*			*1,180*	*1,780*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	6,000	7,090	7,090	7,090	7,230	6,320	7,940	9,360	9,120		6,747	7,732
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	6,426	7,594	7,594	7,594	7,744	6,769	8,504	10,025	9,840		7,301	8,366
GP Flow (pcphpl)	1,285	1,519	1,519	1,519	1,291	1,692	1,701	1,671	1,406		1,460	1,673
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*67.6*	*67.6*	*67.6*	*67.6*	*70.8*	*70.8*	*70.8*	*50.3*	*50.3*		*23.7*	*23.7*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.55	0.65	0.65	0.65	0.55	0.72	0.72	0.71	0.60		0.62	0.71
Speed (mph)	65.0	64.8	64.8	64.8	65.0	63.8	63.7	64.0	65.0		64.9	63.9
Density (pcphpl)	19.8	23.4	23.4	23.4	19.9	26.5	26.7	26.1	21.6		22.5	26.2
LOS	C	C	C	C	C	D	D	D	C		C	D
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		6,435			6,500		6,769	8,504	8,841		6,631	7,208
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.55			0.55		0.72	0.72	0.75		0.56	0.61
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				6,499	6,769	6,769		8,771	7,948			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.55	0.58	0.72		0.75	0.68			

Location	1	2	3	4	5	6	7	8	9	10	11	12



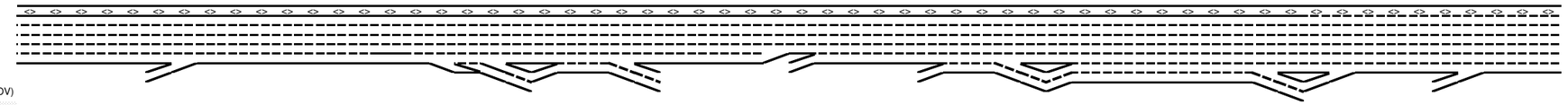
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12



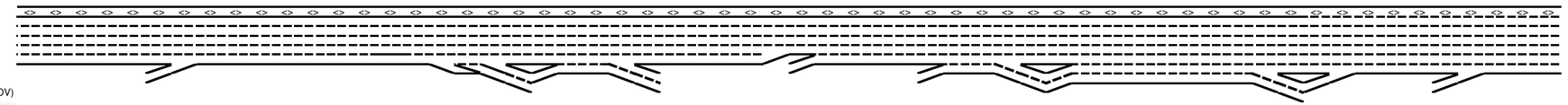
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,090			1,170		1,620	1,420	940		630	1,090
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,159			1,244		1,735	1,521	999		670	1,159
On Flow (pcphpl)		1,159			1,244		1,735	1,521	500		670	1,159
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.58			0.62		0.77	0.68	0.25		0.33	0.58

Location	1	2	3	4	5	6	7	8	9	10	11	12



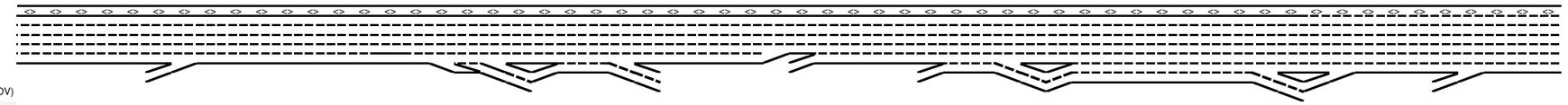
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,030	910			1,180	1,780			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,095	975			1,255	1,892			
Off Flow (pcphpl)				548	487			627	946			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.27	0.22			0.31	0.47			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		4,891									4,840	5,262
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.073									0.134	0.073
v_{12} (pcph)		357									649	384
v_3 (pcph)												
v_{34} (pcph)		4,534									4,191	4,878
v_{12a} (pcph)		1,956									1,936	2,105
v_{R12a} (pcph)		3,115									2,606	3,263
Merge Speed Index		0.37									0.34	0.34
Merge Area Speed		56.5									57.2	57.2
Outer Lanes Volume		1,467									1,452	1,578
Outer Lanes Speed		61.5									61.6	61.1
Segment Speed		58.8									59.4	59.0
Merge v/c ratio		0.68									0.57	0.71
Merge Density		25.8									22.2	23.0
Merge LOS		C									C	C

Location	1	2	3	4	5	6	7	8	9	10	11	12



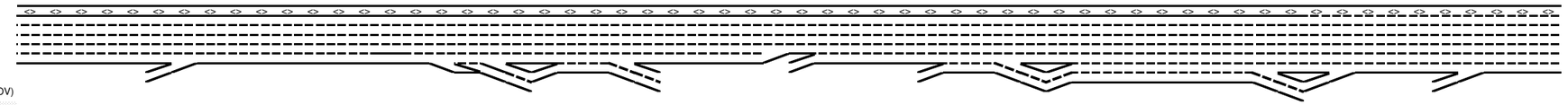
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				6,075								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.558								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				2,390								
v_3 (pcph)												
v_{34} (pcph)				3,685								
v_{12a} (pcph)				2,430								
Diverge Speed Index				0.53								
Diverge Area Speed				52.9								
Outer Lanes Volume				1,823								
Outer Lanes Speed				68.1								
Segment Speed				61.1								
Diverge v/c ratio				0.55								
Diverge Density				18.2								
Diverge LOS				B								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					6,060 1,170 6,320 910 7,230			7,940 1,420 8,180 1,180 9,360	8,180 940 7,340 1,780 9,120			
On to Off Volume (vph)					*147*			*179*	*183*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					157			190	195			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					1,023			1,241	757			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					1,087			1,329	804			

Location	1	2	3	4	5	6	7	8	9	10	11	12



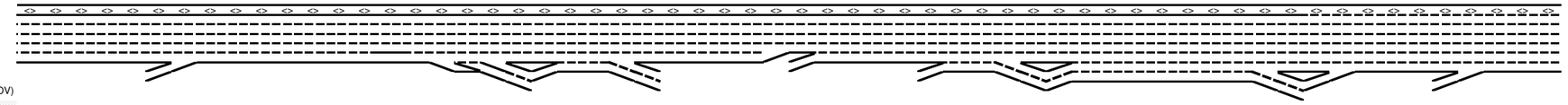
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					763			1,001	1,597			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					817			1,064	1,697			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					5,297			6,939	6,583			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					5,674			7,432	7,103			

Location	1	2	3	4	5	6	7	8	9	10	11	12



Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					1,904			2,393	2,502			
Non-Weave Flow					5,830			7,622	7,298			
Segment Flow					7,734			10,016	9,800			
Max Weave Length					5,014			4,938	3,543			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,087			2,010	2,117			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	0.999			
Capacity Condition 1					10,253			9,866	10,362			
Capacity Condition 2					9,578			9,857	13,420			
Weave v/c ratio					0.79			1.00	0.93			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					1,087			1,329	1,697			
Weave LC Rate					1,489			1,312	1,680			
Non-Weave LC Rate 1					1,092			878	811			
Non-Weave LC Rate 2					2,989			3,389	3,317			
Non-Weave LC Rate 3					-1,810			-3,652	-3,730			
Segment LC Rate					2,581			2,190	2,491			
Weave Intensity Factor					0.334			0.725	0.802			
Weave Speed					52.5			44.0	42.7			
Non-Weave Speed					49.7			45.8	43.4			
Segment Speed					50.4			45.4	43.2			
Weave Density					30.7			44.2	45.4			
Weave LOS					D			E	E			
Summarize Segment Operations												
Segment v/c ratio	0.55	0.68	0.65	0.55	0.79	0.72	0.72	1.00	0.93		0.57	0.71
Segment Density	19.8	25.8	23.4	18.2	30.7	26.5	26.7	44.2	45.4		22.2	23.0
Segment LOS	C	C	C	B	D	D	D	E	E		C	C
Over Capacity												

Project: John Wayne Airport Expansion **Scenario:** 2021 Plus Proposed Project
Freeway Corridor: 73N **Peak Hour:** AM

Location	1	2	3	4	5	6	7	8	9	10

Key
<> Express Lane (HOV)
No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*6,300*	6,300	7,980	8,700	8,700	7,700	6,470	5,720		5,370
On Ramp Volume		*1,680*	*720*			*760*		*630*		
Off Ramp Volume					*1,000*	*1,990*	*750*	*980*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	6,300	7,980	8,700	8,700	8,700	8,460	6,470	6,350		5,370
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	6,710	8,499	9,266	9,266	9,266	9,010	6,891	6,763		5,719
GP Flow (pcphpl)	2,237	2,125	2,316	2,316	2,316	1,802	1,723	1,353		1,430
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*62.3*	*62.3*	*62.3*	*66.1*	*66.1*	*66.1*	*66.1*	*65.5*		*65.5*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.95	0.90	0.99	0.99	0.99	0.77	0.73	0.58		0.61
Speed (mph)	55.1	57.6	53.1	53.1	53.1	62.7	63.5	65.0		65.0
Density (pcphpl)	40.6	36.9	43.6	43.6	43.6	28.7	27.1	20.8		22.0
LOS	E	E	E	E	E	D	D	C		C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		6,713	8,500			8,202		6,092		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.95	0.90			0.87		0.86		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					8,202	6,891	6,092	5,721		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.87	0.73	0.86	0.81		

Location	1	2	3	4	5	6	7	8	9	10

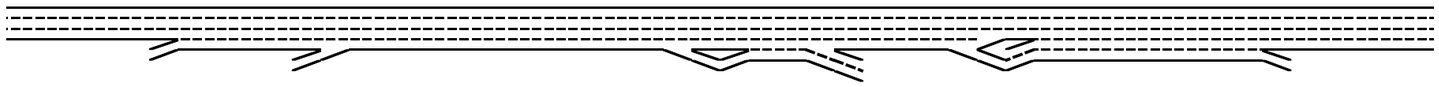
Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,680	720			760		630		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,786	765			808		671		
On Flow (pcphpl)		1,786	765			808		335		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.89	0.38			0.40		0.15		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					1,000	1,990	750	980		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					1,063	2,119	799	1,042		
Off Flow (pcphpl)					1,063	1,060	799	1,042		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.53	0.47	0.36	0.46		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			8,500							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.122							
v_{12} (pcph)			1,038							
v_3 (pcph)										
v_{34} (pcph)			7,462							
v_{12a} (pcph)			3,400							
v_{R12a} (pcph)			4,165							
Merge Speed Index			0.54							
Merge Area Speed			52.5							
Outer Lanes Volume			2,550							
Outer Lanes Speed			57.0							
Segment Speed			54.9							
Merge v/c ratio			0.91							
Merge Density			35.1							
Merge LOS			E							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					9,266		6,891			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.479		0.551			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					4,639		3,455			
v_3 (pcph)										
v_{34} (pcph)					4,626		3,436			
v_{12a} (pcph)					4,639		3,455			
Diverge Speed Index					0.52		0.24			
Diverge Area Speed					53.0		59.5			
Outer Lanes Volume					2,313		1,718			
Outer Lanes Speed					66.2		68.5			
Segment Speed					58.8		63.7			
Diverge v/c ratio					1.05		0.79			
Diverge Density					42.4		32.2			
Diverge LOS					F		D			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,700 760 6,470 1,990 8,460		5,720 630 5,370 980 6,350		
On to Off Volume (vph)						*179*		*97*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						190		103		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						581		533		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						618		567		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,811		883		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,929		940		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						5,889		4,837		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,272		5,152		

Location	1	2	3	4	5	6	7	8	9	10

Key

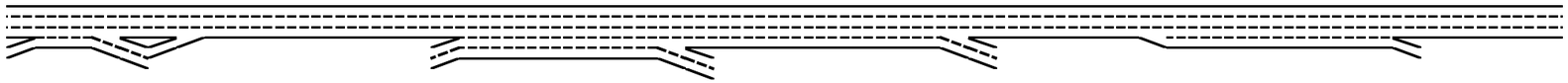
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						2,547		1,508		
Non-Weave Flow						6,462		5,255		
Segment Flow						9,009		6,763		
Max Weave Length						5,399		3,206		
Length Check						OK		OK		
Ideal Weave Capacity						2,065		2,219		
f_{HV}						0.989		0.988		
f_P						0.999		0.999		
Capacity Condition 1						8,160		6,575		
Capacity Condition 2						8,386		15,503		
Weave v/c ratio						1.09		1.02		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						618		1,880		
Weave LC Rate						1,135		2,389		
Non-Weave LC Rate 1						1,469		1,318		
Non-Weave LC Rate 2						3,130		2,861		
Non-Weave LC Rate 3						-932		-1,145		
Segment LC Rate						2,604		3,707		
Weave Intensity Factor						0.320		0.461		
Weave Speed						52.9		49.2		
Non-Weave Speed						49.7		40.6		
Segment Speed						50.6		42.3		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.95	0.90	0.91	0.99	1.05	1.09	0.79	1.02		0.61
Segment Density	40.6	36.9	35.1	43.6	-	-	32.2	-		22.0
Segment LOS	E	E	E	E	F	F	D	F		C
Over Capacity					Diverge	Weave		Weave		

Project: John Wayne Airport Expansion **Scenario:** 2021 Plus Proposed Project
Freeway Corridor: 73S **Peak Hour:** AM

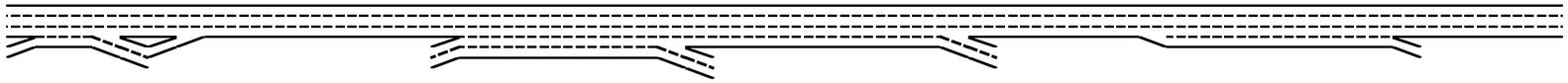
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,840	4,710	5,450	5,450		5,540	5,540	3,790	3,790		2,820
On Ramp Volume	*800*	*740*		*2,430*							
Off Ramp Volume	*930*			*2,340*			*1,750*		*970*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	5,640	5,450	5,450	7,880		5,540	5,540	3,790	3,790		2,820
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	6,007	5,804	5,804	8,392		5,900	5,900	4,036	4,036		3,003
GP Flow (pcphpl)	1,502	1,935	1,935	1,678		1,475	1,475	1,345	807		1,001
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*62.8*	*62.8*	*52.5*	*52.5*		*63.4*	*63.4*	*63.4*	*63.4*		*63.4*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.64	0.82	0.82	0.71		0.63	0.63	0.57	0.34		0.43
Speed (mph)	64.9	60.9	60.9	63.9		64.9	64.9	65.0	65.0		65.0
Density (pcphpl)	23.2	31.7	31.7	26.3		22.7	22.7	20.7	12.4		15.4
LOS	C	D	D	D		C	C	C	B		B
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	5,156	5,016		5,804					4,036		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.73	0.71		0.82					0.57		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	5,016			5,904			4,040		3,005		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.71			0.84			0.57		0.32		

Location	2	3	4	5	6	7	8	9	10	11	12



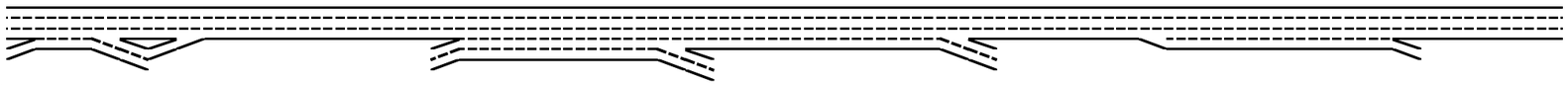
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On

Location	2	3	4	5	6	7	8	9	10	11	12



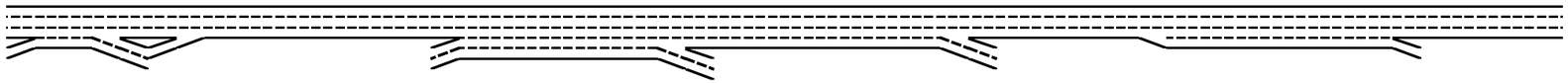
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	800	740		2,430							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	851	788		2,588							
On Flow (pcphpl)	851	788		1,294							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.43	0.36		0.58							

Location	2	3	4	5	6	7	8	9	10	11	12



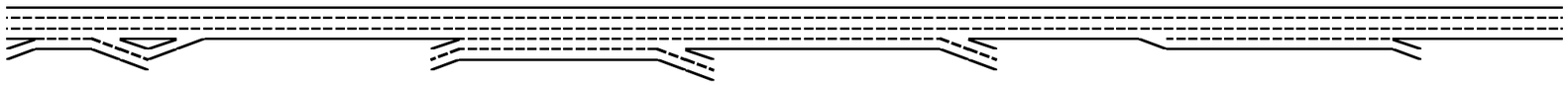
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	930			2,340			1,750		970		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	990			2,488			1,861		1,031		
Off Flow (pcphpl)	495			1,244			930		1,031		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.22			0.62			0.47		0.52		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		5,016									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,983									
v_3 (pcph)		2,033									
v_{34} (pcph)											
v_{12a} (pcph)		2,983									
v_{R12a} (pcph)		3,771									
Merge Speed Index		0.42									
Merge Area Speed		55.3									
Outer Lanes Volume		2,033									
Outer Lanes Speed		59.5									
Segment Speed		56.7									
Merge v/c ratio		0.82									
Merge Density		30.7									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



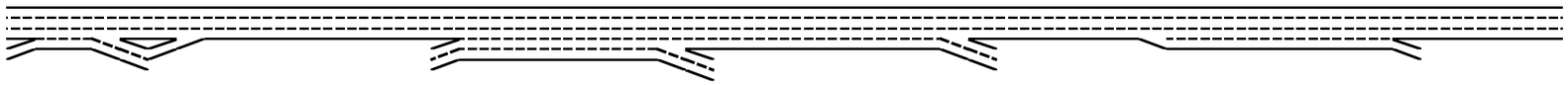
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							5,900				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.527				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,911				
v_3 (pcph)											
v_{34} (pcph)							2,989				
v_{12a} (pcph)							2,911				
Diverge Speed Index							0.60				
Diverge Area Speed							51.3				
Outer Lanes Volume							1,495				
Outer Lanes Speed							69.4				
Segment Speed							59.1				
Diverge v/c ratio							0.66				
Diverge Density							28.0				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,840 800 4,710 930 5,640			5,450 2,430 5,540 2,340 7,880							
On to Off Volume (vph)	*132*			*722*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	140			767							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	668			1,708							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	710			1,819							

Location	2	3	4	5	6	7	8	9	10	11	12



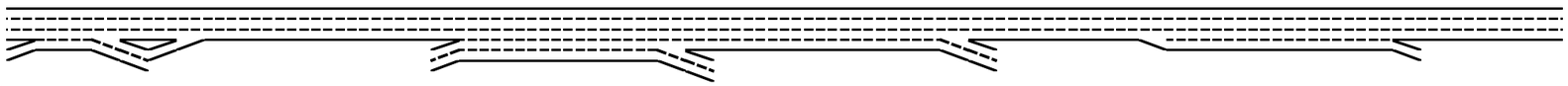
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	798			1,618							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	850			1,721							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	4,042			3,832							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	4,305			4,081							

Location	2	3	4	5	6	7	8	9	10	11	12



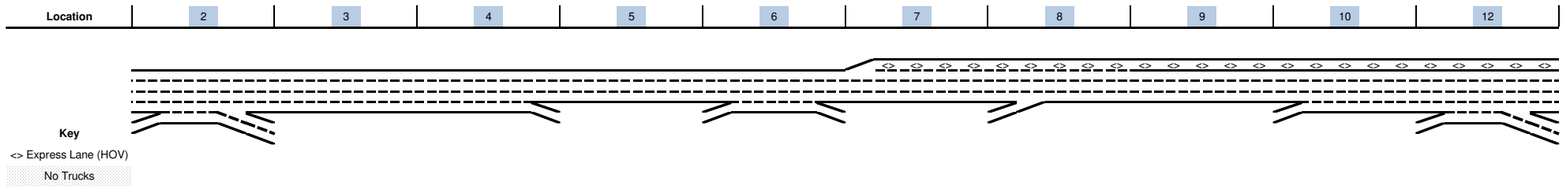
Key

<> Express Lane (HOV)

No Trucks

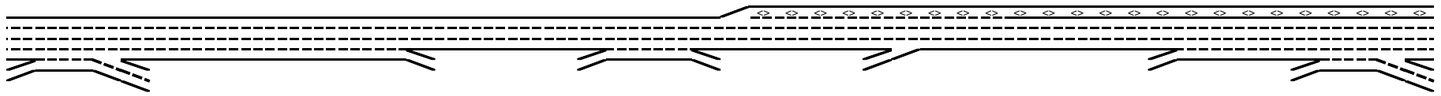
Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,560			3,540							
Non-Weave Flow	4,445			4,848							
Segment Flow	6,005			8,388							
Max Weave Length	5,157			5,364							
Length Check	OK			OK							
Ideal Weave Capacity	2,086			2,028							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,178			6,003							
Capacity Condition 2	9,122			8,180							
Weave v/c ratio	0.96			1.38							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	710			1,721							
Weave LC Rate	1,297			2,096							
Non-Weave LC Rate 1	1,259			1,050							
Non-Weave LC Rate 2	2,680			2,770							
Non-Weave LC Rate 3	-1,032			-1,895							
Segment LC Rate	2,556			3,146							
Weave Intensity Factor	0.312			0.497							
Weave Speed	53.1			48.4							
Non-Weave Speed	50.3			39.2							
Segment Speed	51.0			42.6							
Weave Density	39.3			-							
Weave LOS	E			F							
Summarize Segment Operations											
Segment v/c ratio	0.96	0.82	0.82	1.38		0.63	0.66	0.57	0.34		0.43
Segment Density	39.3	30.7	31.7	-		22.7	28.0	20.7	12.4		15.4
Segment LOS	E	D	D	F		C	C	C	B		B
Over Capacity				Weave							

Project: John Wayne Airport Expansion **Scenario:** 2021 Plus Proposed Project
Freeway Corridor: 55N **Peak Hour:** AM



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	6,280	6,790	6,790	6,060	6,060	6,580	6,580	7,310	7,310	9,890
On Ramp Volume	*1,860*				*1,990*		*730*		*2,580*	*1,330*
Off Ramp Volume	*1,350*		*730*		*1,470*					*1,770*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	8,140	6,790	6,790	6,060	8,050	6,580	7,310	7,310	9,890	11,220
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,718	7,272	7,272	6,491	8,622	7,048	7,829	7,829	10,520	11,935
GP Flow (pcphpl)	1,744	1,818	1,818	2,164	2,155	2,349	2,610	2,610	2,630	2,387
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*53.0*	*53.0*	*53.0*	*29.2*	*32.9*	*32.9*	*43.6*	*43.6*	*43.6*	*64.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

Location	2	3	4	5	6	7	8	9	10	12

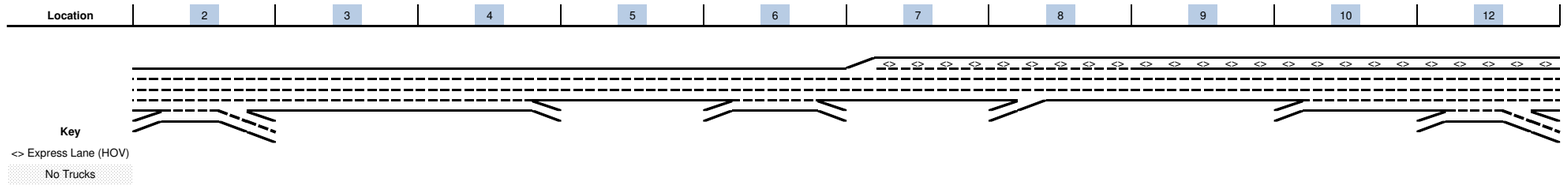


Key

<> Express Lane (HOV)

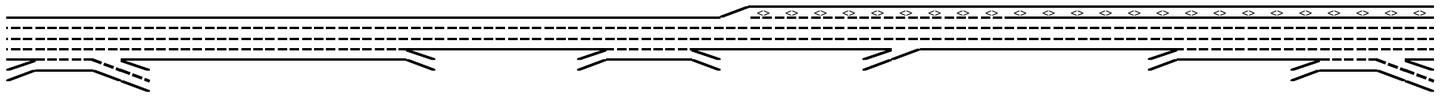
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	1,860				1,990		730		2,580	1,330
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,977				2,131		776		2,744	1,415
On Flow (pcphpl)	1,977				2,131		776		2,744	1,415
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.99				0.95		0.39		1.37	0.63



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	1,350		730		1,470					1,330
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	1,446		776		1,574					1,415
Off Flow (pcphpl)	723		776		1,574					707
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.32		0.39		0.70					0.35
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							7,053			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							4,287			
v_3 (pcph)							2,767			
v_{34} (pcph)										
v_{12a} (pcph)							4,353			
v_{R12a} (pcph)							5,129			
Merge Speed Index							-			
Merge Area Speed							-			
Outer Lanes Volume										
Outer Lanes Speed										
Segment Speed										
Merge v/c ratio							1.12			
Merge Density							-			
Merge LOS							F			

Location	2	3	4	5	6	7	8	9	10	12

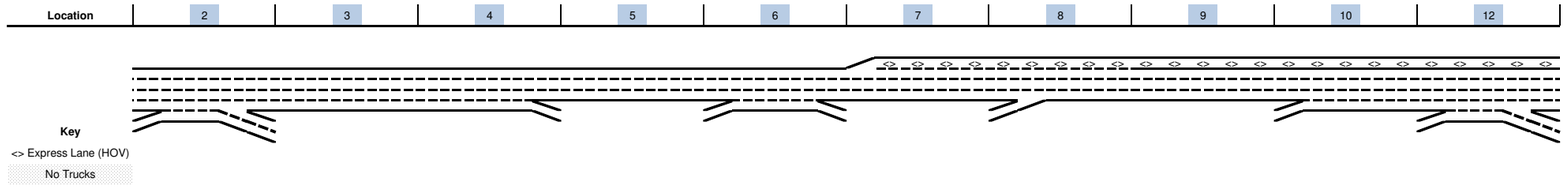


Key

<> Express Lane (HOV)

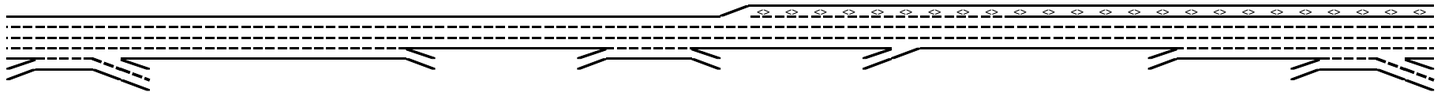
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			7,272							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.542							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			3,609							
v_3 (pcph)										
v_{34} (pcph)			3,664							
v_{12a} (pcph)			3,609							
Diverge Speed Index			0.50							
Diverge Area Speed			53.5							
Outer Lanes Volume			1,832							
Outer Lanes Speed			68.1							
Segment Speed			60.0							
Diverge v/c ratio			0.82							
Diverge Density			21.8							
Diverge LOS			C							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	6,280 1,860 6,790 1,350 8,140				6,060 1,990 6,580 1,470 8,050					9,890 1,330 9,450 1,770 11,220
On to Off Volume (vph)	*308*				*363*					*210*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	328				386					223
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	1,552				1,627					1,120
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	1,650				1,742					1,192



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,042				1,107					1,120
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	1,116				1,185					1,192
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	5,238				4,953					8,770
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	5,611				5,305					9,328

Location	2	3	4	5	6	7	8	9	10	12



Key

<> Express Lane (HOV)

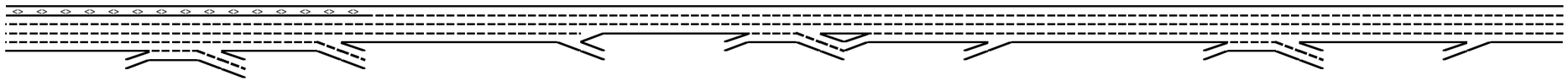
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,765				2,927					2,383
Non-Weave Flow	5,939				5,692					9,551
Segment Flow	8,704				8,619					11,934
Max Weave Length	5,774				6,013					4,533
Length Check	OK				OK					OK
Ideal Weave Capacity	1,968				1,921					2,154
f_{HV}	0.984				0.983					0.990
f_P	0.998				0.997					0.999
Capacity Condition 1	7,736				5,645					8,516
Capacity Condition 2	7,423				6,923					11,882
Weave v/c ratio	1.15				1.50					1.39
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	1,650				2,927					1,192
Weave LC Rate	1,820				3,007					1,822
Non-Weave LC Rate 1	878				811					2,262
Non-Weave LC Rate 2	3,013				2,958					3,819
Non-Weave LC Rate 3	-2,881				-3,231					647
Segment LC Rate	2,698				3,818					4,084
Weave Intensity Factor	0.599				1.340					0.403
Weave Speed	46.3				36.4					50.6
Non-Weave Speed	42.7				30.1					42.1
Segment Speed	43.8				32.0					43.6
Weave Density	-				-					-
Weave LOS	F				F					F
Summarize Segment Operations										
Segment v/c ratio	1.15	0.77	0.82	0.92	1.50	1.00	1.12	1.11	1.12	1.39
Segment Density	-	29.1	21.8	38.1	-	45.0	-	-	-	-
Segment LOS	F	D	C	E	F	E	F	F	F	F
Over Capacity	Weave				Weave		Segment GP Lanes In GP Lanes Merge	Segment GP Lanes	Segment GP Lanes In GP Lanes On Ramp Roadway	Segment GP Lanes In GP Lanes Out GP Lanes Weave

Project: John Wayne Airport Expansion **Scenario:** 2021 Plus Proposed Project

Freeway Corridor: 55S **Peak Hour:** AM

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



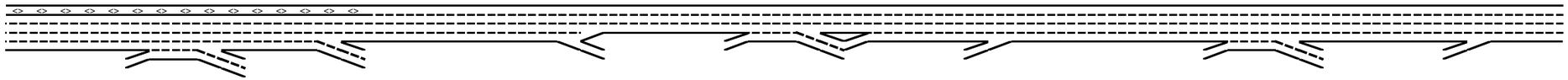
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*7,690*	7,690	6,180	5,530	5,530	4,890	4,890	3,730	4,040	4,790	4,790	4,950	4,950
On Ramp Volume		*880*					*1,270*	*310*	*750*		*930*		*290*
Off Ramp Volume		*2,390*	*650*		*640*		*2,430*				*770*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	7,690	8,570	6,180	5,530	5,530	4,890	6,160	4,040	4,790	4,790	5,720	4,950	5,240
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,180	9,116	6,574	5,923	5,923	5,237	6,598	4,327	5,130	5,130	6,126	5,302	5,612
GP Flow (pcphpl)	2,045	1,823	1,643	1,481	1,481	1,746	1,649	1,082	1,283	1,283	1,225	1,325	1,403
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*64.0*	*64.0*	*65.9*	*65.9*	*65.9*	*65.9*	*62.2*	*52.4*	*52.4*	*52.4*	*52.4*	*68.0*	*68.0*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.87	0.78	0.70	0.63	0.63	0.74	0.70	0.46	0.55	0.55	0.52	0.56	0.60
Speed (mph)	59.1	62.5	64.2	64.9	64.9	63.3	64.1	65.0	65.0	65.0	65.0	65.0	65.0
Density (pcphpl)	34.6	29.2	25.6	22.8	22.8	27.6	25.7	16.6	19.7	19.7	18.9	20.4	21.6
LOS	D	D	C	C	C	D	C	B	C	C	C	C	C
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,180					5,237	3,997	4,327		5,130		5,304
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.87					0.74	0.57	0.46		0.55		0.56
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		6,574	5,882		5,243		3,995				5,308		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.70	0.83		0.74		0.57				0.56		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



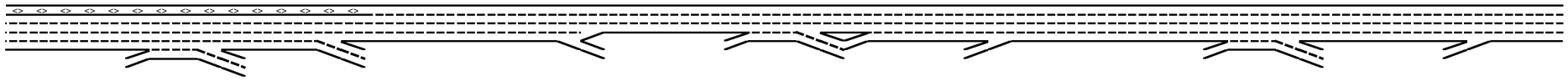
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



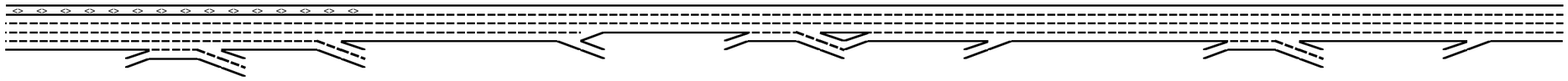
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		880					1,270	310	750		930		290
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		936					1,360	330	803		996		308
On Flow (pcphpl)		936					1,360	330	803		996		308
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.47					0.60	0.16	0.37		0.44		0.15

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



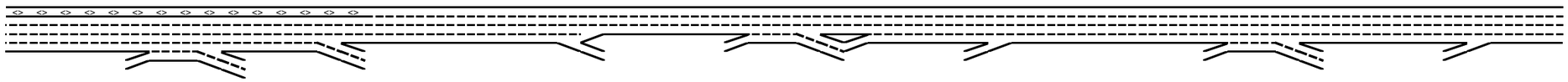
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		2,390	650		640		2,430				770		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		2,542	691		680		2,603				819		
Off Flow (pcphpl)		1,271	346		680		1,301				409		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.56	0.15		0.34		0.58				0.20		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									4,327				5,304
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.117				0.179
v_{12} (pcph)									508				951
v_3 (pcph)													
v_{34} (pcph)									3,819				4,353
v_{12a} (pcph)									1,731				2,122
v_{R12a} (pcph)									2,534				2,430
Merge Speed Index									0.30				0.33
Merge Area Speed									58.1				57.5
Outer Lanes Volume									1,298				1,591
Outer Lanes Speed									62.1				61.1
Segment Speed									60.1				59.5
Merge v/c ratio									0.55				0.53
Merge Density									20.8				20.8
Merge LOS									C				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



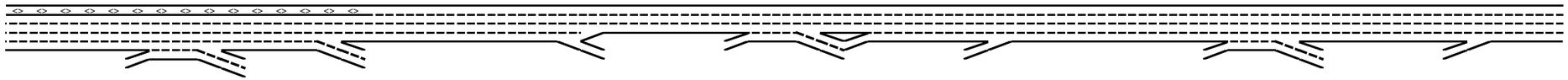
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			6,574		5,923								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.564		0.581								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,221		2,966								
v_3 (pcph)													
v_{34} (pcph)			4,353		2,957								
v_{12a} (pcph)			2,629		2,966								
Diverge Speed Index			0.23		0.49								
Diverge Area Speed			59.7		53.7								
Outer Lanes Volume			1,972		1,478								
Outer Lanes Speed			67.5		69.4								
Segment Speed			64.2		60.6								
Diverge v/c ratio			0.60		0.67								
Diverge Density			28.8		28.1								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		7,690 880 6,180 2,390 8,570					4,890 1,270 3,730 2,430 6,160				4,790 930 4,950 770 5,720		
On to Off Volume (vph)		*245*					*501*				*125*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		261					533				133		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		635					769				805		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		675					824				862		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



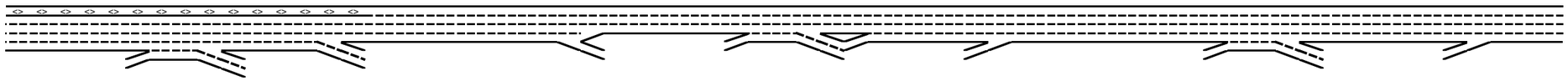
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		2,145					1,929				645		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		2,281					2,066				686		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		5,545					2,961				4,145		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		5,899					3,171				4,440		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



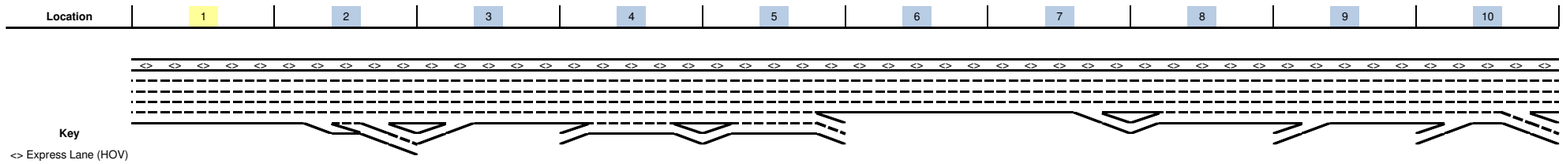
Key

<> Express Lane (HOV)

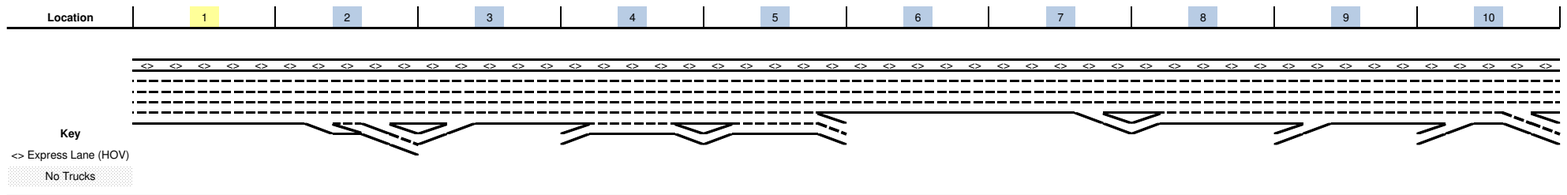
No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,956					2,890				1,548		
Non-Weave Flow		6,159					3,704				4,573		
Segment Flow		9,115					6,594				6,120		
Max Weave Length		5,846					7,114				5,084		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,051					1,979				2,041		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.998				0.998		
Capacity Condition 1		8,113					5,826				8,011		
Capacity Condition 2		7,319					5,374				9,315		
Weave v/c ratio		1.23					1.20				0.75		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		675					824				862		
Weave LC Rate		1,293					1,630				1,132		
Non-Weave LC Rate 1		1,547					1,413				735		
Non-Weave LC Rate 2		3,063					2,515				2,709		
Non-Weave LC Rate 3		-557					-317				-2,730		
Segment LC Rate		2,840					3,043				1,867		
Weave Intensity Factor		0.306					0.285				0.359		
Weave Speed		53.3					53.9				51.8		
Non-Weave Speed		49.2					48.5				51.4		
Segment Speed		50.5					50.7				51.5		
Weave Density		-					-				29.7		
Weave LOS		F					F				D		
Summarize Segment Operations													
Segment v/c ratio	0.87	1.23	0.60	0.63	0.67	0.74	1.20	0.46	0.55	0.55	0.75	0.56	0.53
Segment Density	34.6	-	28.8	22.8	28.1	27.6	-	16.6	20.8	19.7	29.7	20.4	20.8
Segment LOS	D	F	D	C	D	D	F	B	C	C	D	C	C
Over Capacity		Weave					Weave						

Project: John Wayne Airport Expansion **Scenario:** 2021 Plus Proposed Project
Freeway Corridor: 405N **Peak Hour:** AM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*10,660*	10,660	8,800	9,240	8,610	6,550	6,550	5,920	7,360	7,540
On Ramp Volume			*440*	*1,200*	*460*			*1,440*	*180*	*290*
Off Ramp Volume		*1,860*		*1,830*	*2,520*		*630*			*2,660*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	10,660	10,660	9,240	10,440	9,070	6,550	6,550	7,360	7,540	7,830
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	11,535	11,535	9,969	11,264	9,714	7,015	7,015	7,883	8,076	8,386
GP Flow (pcphpl)	2,307	2,307	1,994	1,877	1,619	1,754	1,754	1,577	1,615	1,398
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*47.1*	*47.1*	*65.4*	*61.3*	*66.2*	*66.2*	*66.2*	*66.2*	*64.9*	*66.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.98	0.98	0.85	0.80	0.69	0.75	0.75	0.67	0.69	0.59
Speed (mph)	53.3	53.3	60.0	61.8	64.3	63.2	63.2	64.6	64.3	65.0
Density (pcphpl)	43.3	43.3	33.2	30.4	25.2	27.7	27.7	24.4	25.1	21.5
LOS	E	E	D	D	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			9,502	9,988	9,225			6,341	7,884	8,078
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.81	0.85	0.79			0.67	0.67	0.69
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		9,558		9,319	7,015		6,346			5,558
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.81		0.79	0.75		0.68			0.59


Location
1
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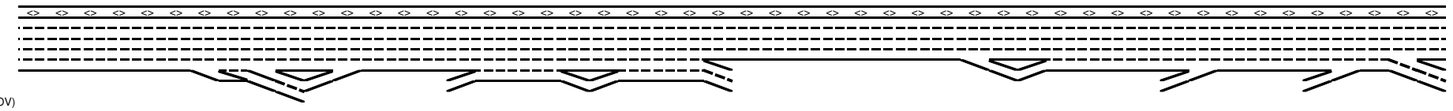
10
Key
<> Express Lane (HOV)
No Trucks
Name
Culver On to Jamboree Off
Jamboree Off Ramp
Jamboree N On Ramp
Jamboree S On to McArthur Off
McArthur On to 55 N&S Off
55 Off to Bristol Off
Bristol/Ave Arts Off Ramp
On Ramp from 55 S
Bristol N On Ramp
Bristol S On Ramp to S Coast Off

Location	1	2	3	4	5	6	7	8	9	10



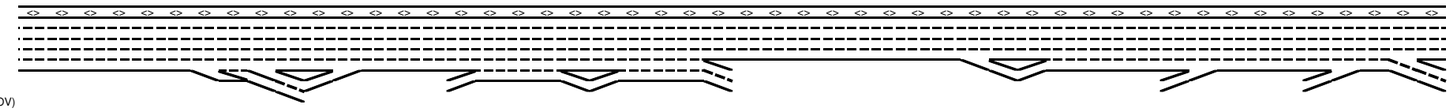
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			440	1,200	460			1,440	180	290
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			468	1,276	489			1,542	191	308
On Flow (pcphpl)			468	1,276	489			1,542	191	308
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.23	0.64	0.24			0.69	0.10	0.15

Location	1	2	3	4	5	6	7	8	9	10

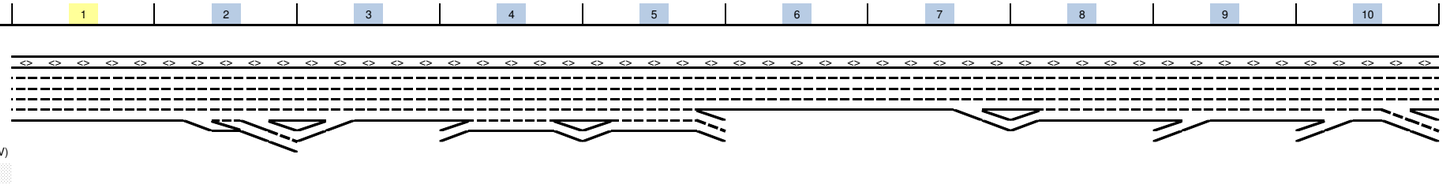


Key

<> Express Lane (HOV)

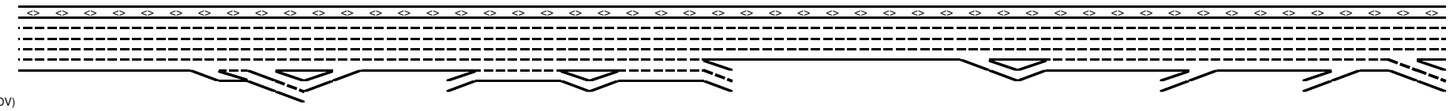
No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,860		1,830	2,520		630			2,660
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,977		1,946	2,699		670			2,828
Off Flow (pcphpl)		989		1,946	1,350		670			1,414
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.49		0.97	0.60		0.33			0.71
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			7,002						5,637	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.159						0.194	
v_{12} (pcph)			1,116						1,093	
v_3 (pcph)										
v_{34} (pcph)			5,886						4,544	
v_{12s} (pcph)			2,801						2,255	
v_{R12a} (pcph)			3,268						2,446	
Merge Speed Index			0.38						0.33	
Merge Area Speed			56.2						57.3	
Outer Lanes Volume			2,101						1,691	
Outer Lanes Speed			59.2						60.7	
Segment Speed			57.9						59.3	
Merge v/c ratio			0.71						0.53	
Merge Density			27.2						21.5	
Merge LOS			C						C	



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		9,228					7,015			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.438					0.554			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		3,863					3,436			
v_3 (pcph)										
v_{34} (pcph)		5,366					3,579			
v_{12a} (pcph)		3,863					3,436			
Diverge Speed Index		0.61					0.49			
Diverge Area Speed		51.1					53.8			
Outer Lanes Volume		2,683					1,789			
Outer Lanes Speed		64.7					68.2			
Segment Speed		58.2					60.3			
Diverge v/c ratio		0.88					0.78			
Diverge Density		29.0					32.3			
Diverge LOS		D					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				9,240 1,200 8,610 1,830 10,440	8,610 460 6,550 2,520 9,070					7,540 290 5,170 2,660 7,830
On to Off Volume (vph)				*210*	*128*					*99*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				224	136					105
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				990	332					191
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,052	353					204

Location	1	2	3	4	5	6	7	8	9	10



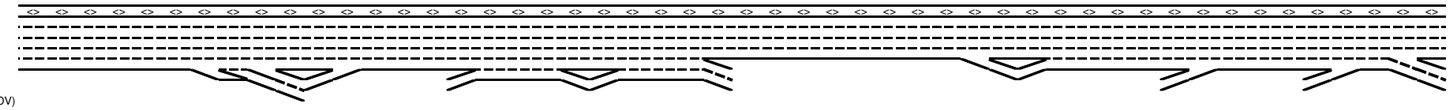
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				1,620	2,392					2,561
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				1,722	2,562					2,723
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				7,620	6,218					4,979
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				8,222	6,660					5,332

Location	1	2	3	4	5	6	7	8	9	10



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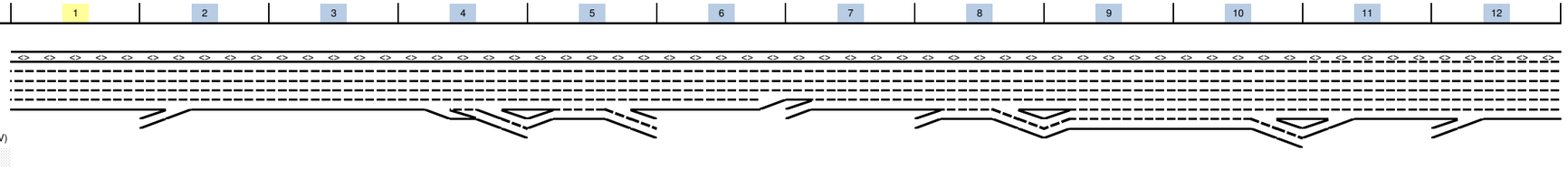
<> Express Lane (HOV)

No Trucks

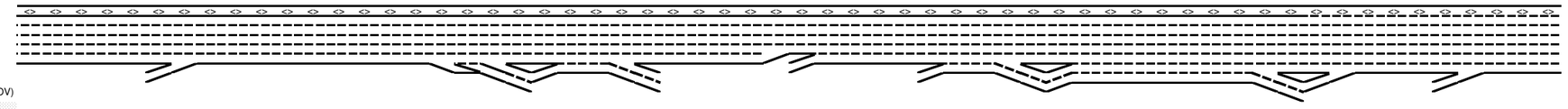
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				2,774	2,915					2,927
Non-Weave Flow				8,446	6,795					5,437
Segment Flow				11,220	9,711					8,364
Max Weave Length				5,025	4,020					6,126
Length Check				OK	OK					OK
Ideal Weave Capacity				2,129	2,209					1,920
f_{HV}				0.979	0.983					0.985
f_P				0.999	1.000					1.000
Capacity Condition 1				10,415	10,854					9,456
Capacity Condition 2				9,499	11,458					6,757
Weave v/c ratio				1.16	0.88					1.22
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				2,774	706					204
Weave LC Rate				3,392	1,342					186
Non-Weave LC Rate 1				1,931	1,616					428
Non-Weave LC Rate 2				3,572	3,204					2,901
Non-Weave LC Rate 3				163	-357					-4,174
Segment LC Rate				5,323	2,958					614
Weave Intensity Factor				0.466	0.288					0.266
Weave Speed				49.1	53.8					54.5
Non-Weave Speed				34.3	50.6					55.5
Segment Speed				37.0	51.5					55.1
Weave Density				-	37.7					-
Weave LOS				F	E					F
Summarize Segment Operations										
Segment v/c ratio	0.98	0.88	0.71	1.16	0.88	0.75	0.78	0.67	0.53	1.22
Segment Density	43.3	29.0	27.2	-	37.7	27.7	32.3	24.4	21.5	-
Segment LOS	E	D	C	F	E	D	D	C	C	F
Over Capacity				Weave						Weave

Project: John Wayne Airport Expansion **Scenario:** 2021 Plus Proposed Project
Freeway Corridor: 405S **Peak Hour:** AM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*8,920*	8,920	10,260	10,260	9,120	7,660	7,660	9,680	9,370		5,992	6,192
On Ramp Volume		*1,340*			*1,120*		*2,020*	*2,060*	*520*		*240*	*540*
Off Ramp Volume				*1,140*	*2,580*			*2,370*	*2,700*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	8,920	10,260	10,260	10,260	10,240	7,660	9,680	11,740	9,890		6,232	6,732
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	9,554	10,989	10,989	10,989	10,968	8,204	10,368	12,574	10,671		6,743	7,284
GP Flow (pcphpl)	1,911	2,198	2,198	2,198	1,828	2,051	2,074	2,096	1,524		1,349	1,457
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*35.7*	*35.7*	*35.7*	*35.7*	*44.8*	*44.8*	*44.8*	*50.1*	*50.1*		*54.0*	*54.0*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.81	0.94	0.94	0.94	0.78	0.87	0.88	0.89	0.65		0.57	0.62
Speed (mph)	61.3	56.0	56.0	56.0	62.4	59.0	58.6	58.1	64.8		65.0	65.0
Density (pcphpl)	31.2	39.3	39.3	39.3	29.3	34.8	35.4	36.0	23.5		20.7	22.4
LOS	D	E	E	E	D	D	E	E	C		C	C
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		9,564			9,777		8,204	10,368	10,118		6,488	6,710
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.81			0.83		0.87	0.88	0.86		0.55	0.57
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				9,777	8,204	8,204		10,054	7,800			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.83	0.70	0.87		0.86	0.66			

Location	1	2	3	4	5	6	7	8	9	10	11	12



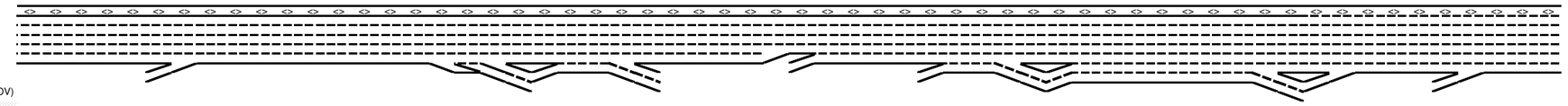
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12



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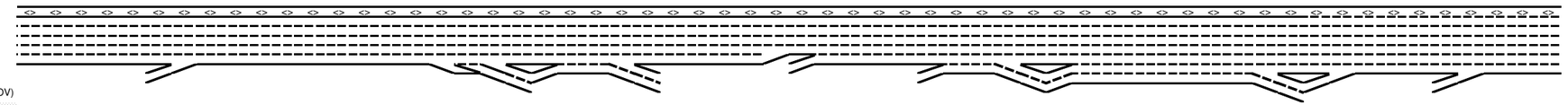
No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,340			1,120		2,020	2,060	520		240	540
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,425			1,191		2,164	2,206	553		255	574
On Flow (pcphpl)		1,425			1,191		2,164	2,206	276		255	574
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.71			0.60		0.96	0.98	0.14		0.13	0.29

Location	1	2	3	4	5	6	7	8	9	10	11	12



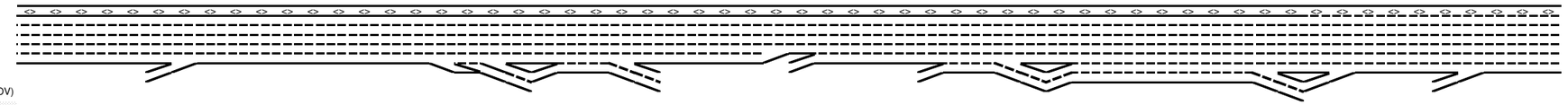
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,140	2,580			2,370	2,700			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,212	2,763			2,520	2,871			
Off Flow (pcphpl)				606	1,382			1,260	1,435			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.30	0.61			0.63	0.72			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		7,064									4,931	4,898
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.040									0.186	0.146
v_{12} (pcph)		281									917	715
v_3 (pcph)												
v_{34} (pcph)		6,784									4,014	4,183
v_{12a} (pcph)		2,826									1,972	1,959
v_{R12a} (pcph)		4,250									2,228	2,534
Merge Speed Index		0.56									0.32	0.29
Merge Area Speed		52.2									57.6	58.4
Outer Lanes Volume		2,119									1,479	1,470
Outer Lanes Speed		59.2									61.5	61.5
Segment Speed		55.5									59.8	60.0
Merge v/c ratio		0.92									0.48	0.55
Merge Density		34.5									19.4	17.6
Merge LOS		D									B	B

Location	1	2	3	4	5	6	7	8	9	10	11	12



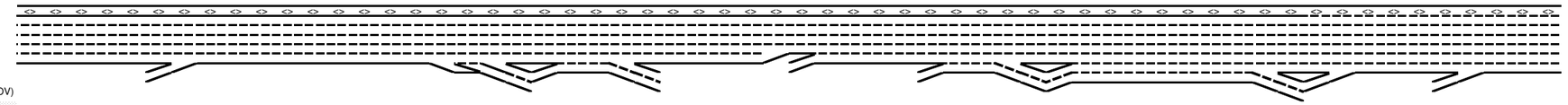
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				8,791								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.484								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				3,183								
v_3 (pcph)												
v_{34} (pcph)				5,609								
v_{12a} (pcph)				3,516								
Diverge Speed Index				0.54								
Diverge Area Speed				52.6								
Outer Lanes Volume				2,637								
Outer Lanes Speed				64.9								
Segment Speed				59.4								
Diverge v/c ratio				0.80								
Diverge Density				27.5								
Diverge LOS				C								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					9,120 1,120 7,660 2,580 10,240			9,680 2,060 9,370 2,370 11,740	9,370 520 7,190 2,700 9,890			
On to Off Volume (vph)					*282*			*416*	*142*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					300			442	151			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					838			1,644	378			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					891			1,761	402			

Location	1	2	3	4	5	6	7	8	9	10	11	12



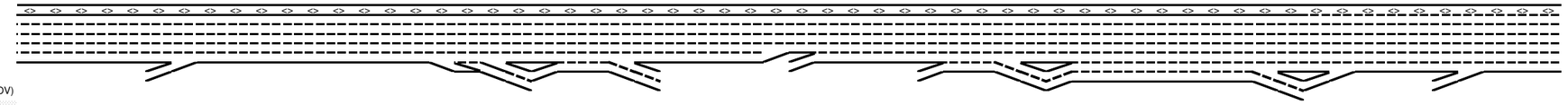
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					2,298			1,954	2,558			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					2,461			2,078	2,720			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					6,822			7,726	6,812			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					7,307			8,275	7,350			

Location	1	2	3	4	5	6	7	8	9	10	11	12



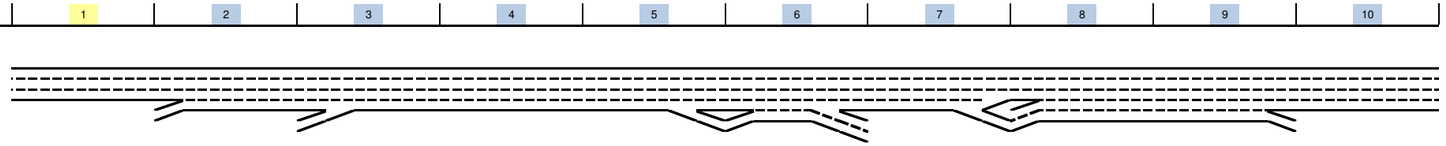
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					3,352			3,839	3,122			
Non-Weave Flow					7,607			8,717	7,501			
Segment Flow					10,959			12,555	10,622			
Max Weave Length					5,647			5,645	3,952			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,038			1,956	2,086			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	1.000			
Capacity Condition 1					10,017			9,605	10,218			
Capacity Condition 2					7,712			7,708	11,668			
Weave v/c ratio					1.40			1.60	1.02			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					891			1,761	2,720			
Weave LC Rate					1,292			1,743	2,702			
Non-Weave LC Rate 1					1,458			1,104	853			
Non-Weave LC Rate 2					3,385			3,633	3,362			
Non-Weave LC Rate 3					-1,213			-3,389	-3,681			
Segment LC Rate					2,750			2,847	3,555			
Weave Intensity Factor					0.351			0.892	1.062			
Weave Speed					52.0			41.4	39.2			
Non-Weave Speed					48.1			40.3	35.2			
Segment Speed					49.2			40.6	36.3			
Weave Density					-			-	-			
Weave LOS					F			F	F			
Summarize Segment Operations												
Segment v/c ratio	0.81	0.92	0.94	0.80	1.40	0.87	0.88	1.60	1.02		0.48	0.55
Segment Density	31.2	34.5	39.3	27.5	-	34.8	35.4	-	-		19.4	17.6
Segment LOS	D	D	E	C	F	D	E	F	F		B	B
Over Capacity					Weave			Weave	Weave			

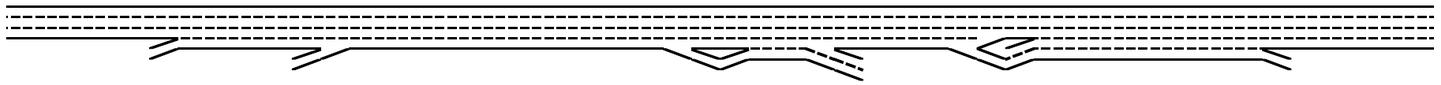
Project: John Wayne Airport Expansion **Scenario:** 2021 Plus Proposed Project
Freeway Corridor: 73N **Peak Hour:** PM



Key
<> Express Lane (HOV)
No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*4,950*	4,950	6,790	7,690	7,690	7,120	8,150	6,910		7,570
On Ramp Volume		*1,840*	*900*			*2,440*		*1,220*		
Off Ramp Volume					*570*	*1,410*	*1,240*	*560*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	4,950	6,790	7,690	7,690	7,690	9,560	8,150	8,130		7,570
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,272	7,231	8,190	8,190	8,190	10,181	8,680	8,658		8,062
GP Flow (pcphpl)	1,757	1,808	2,047	2,047	2,047	2,036	2,170	1,732		2,016
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*57.9*	*57.9*	*57.9*	*65.1*	*65.1*	*64.5*	*64.5*	*60.4*		*60.4*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.75	0.77	0.87	0.87	0.87	0.87	0.92	0.74		0.86
Speed (mph)	63.2	62.6	59.1	59.1	59.1	59.3	56.6	63.4		59.6
Density (pcphpl)	27.8	28.9	34.7	34.7	34.7	34.4	38.3	27.3		33.8
LOS	D	D	D	D	D	D	E	D		D
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		5,275	7,233			7,587		7,359		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.75	0.77			0.81		1.04		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					7,584	8,680	7,359	8,063		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.81	0.92	1.04	1.14		

Location	1	2	3	4	5	6	7	8	9	10



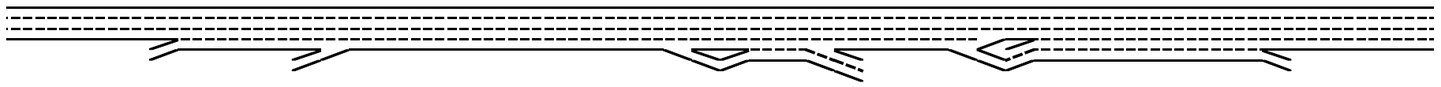
Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,840	900			2,440		1,220		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,956	957			2,594		1,299		
On Flow (pcphpl)		1,956	957			2,594		650		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.98	0.48			1.30		0.29		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					570	1,410	1,240	560		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					606	1,502	1,321	595		
Off Flow (pcphpl)					606	751	1,321	595		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.30	0.33	0.60	0.26		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			7,233							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.098							
v_{12} (pcph)			710							
v_3 (pcph)										
v_{34} (pcph)			6,523							
v_{12s} (pcph)			2,893							
v_{R12s} (pcph)			3,850							
Merge Speed Index			0.48							
Merge Area Speed			54.0							
Outer Lanes Volume			2,170							
Outer Lanes Speed			59.0							
Segment Speed			56.6							
Merge v/c ratio			0.84							
Merge Density			32.6							
Merge LOS			D							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					8,190		8,680			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.527		0.482			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					3,913		4,529			
v_3 (pcph)										
v_{34} (pcph)					4,277		4,151			
v_{12a} (pcph)					3,913		4,529			
Diverge Speed Index					0.48		-			
Diverge Area Speed					53.9		-			
Outer Lanes Volume					2,139					
Outer Lanes Speed					66.9					
Segment Speed					60.0					
Diverge v/c ratio					0.89		1.03			
Diverge Density					36.1		-			
Diverge LOS					E		F			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,120 2,440 8,150 1,410 9,560		6,910 1,220 7,570 560 8,130		
On to Off Volume (vph)						*360*		*84*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						383		89		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						2,080		1,136		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						2,212		1,210		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,050		476		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,118		507		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						6,070		6,434		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,464		6,852		

Location	1	2	3	4	5	6	7	8	9	10

Key

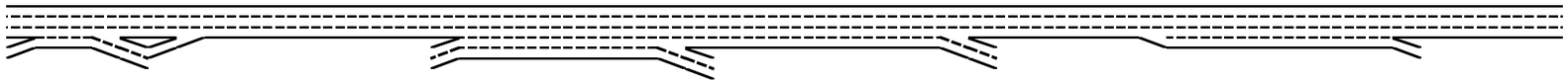
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						3,330		1,717		
Non-Weave Flow						6,847		6,942		
Segment Flow						10,177		8,658		
Max Weave Length						5,878		2,953		
Length Check						OK		OK		
Ideal Weave Capacity						2,028		2,239		
f_{HV}						0.989		0.988		
f_P						0.998		0.998		
Capacity Condition 1						8,006		6,628		
Capacity Condition 2						7,237		17,419		
Weave v/c ratio						1.39		1.29		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						2,212		1,014		
Weave LC Rate						2,729		1,522		
Non-Weave LC Rate 1						1,548		1,665		
Non-Weave LC Rate 2						3,216		3,237		
Non-Weave LC Rate 3						-807		-639		
Segment LC Rate						4,277		3,187		
Weave Intensity Factor						0.473		0.410		
Weave Speed						48.9		50.5		
Non-Weave Speed						36.9		43.8		
Segment Speed						40.1		45.0		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.75	0.77	0.84	0.87	0.89	1.39	1.03	1.29		0.86
Segment Density	27.8	28.9	32.6	34.7	36.1	-	-	-		33.8
Segment LOS	D	D	D	D	E	F	F	F		D
Over Capacity						On Ramp Roadway Weave	Out GP Lanes Diverge	In GP Lanes Out GP Lanes Weave		

Project: John Wayne Airport Expansion **Scenario:** 2021 Plus Proposed Project
Freeway Corridor: 73S **Peak Hour:** PM

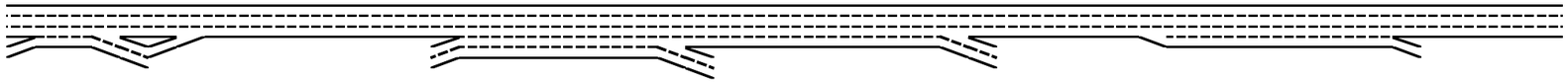
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,240	3,700	4,950	4,950		6,030	6,030	5,100	5,100		4,530
On Ramp Volume	*670*	*1,250*		*2,090*							
Off Ramp Volume	*1,210*			*1,010*			*930*		*570*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	4,910	4,950	4,950	7,040		6,030	6,030	5,100	5,100		4,530
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,229	5,272	5,272	7,498		6,422	6,422	5,432	5,432		4,824
GP Flow (pcphpl)	1,307	1,757	1,757	1,500		1,605	1,605	1,811	1,086		1,608
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*63.8*	*63.8*	*63.9*	*63.9*		*72.7*	*72.7*	*72.7*	*72.7*		*72.7*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.56	0.75	0.75	0.64		0.68	0.68	0.77	0.46		0.68
Speed (mph)	65.0	63.2	63.2	64.9		64.4	64.4	62.6	65.0		64.4
Density (pcphpl)	20.1	27.8	27.8	23.1		24.9	24.9	28.9	16.7		25.0
LOS	C	D	D	C		C	C	D	B		C
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	4,517	3,941		5,272					5,432		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.64	0.56		0.75					0.77		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	3,941			6,424			5,433		4,826		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.56			0.91			0.77		0.51		

Location	2	3	4	5	6	7	8	9	10	11	12



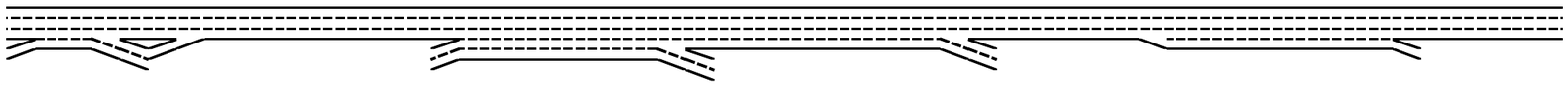
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On

Location	2	3	4	5	6	7	8	9	10	11	12



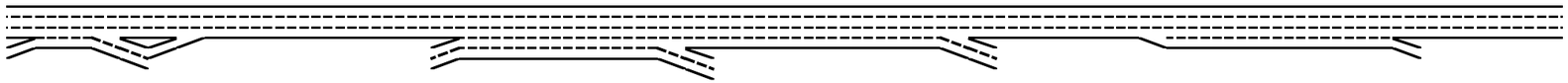
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	670	1,250		2,090							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	712	1,331		2,226							
On Flow (pcphpl)	712	1,331		1,113							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.36	0.61		0.49							

Location	2	3	4	5	6	7	8	9	10	11	12



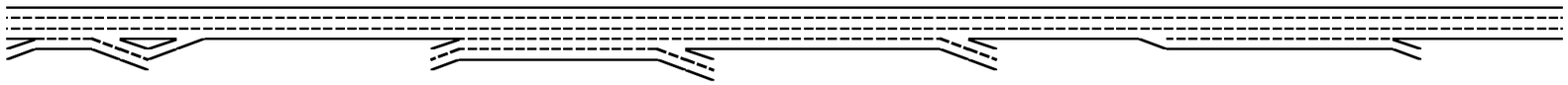
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	1,210			1,010			930		570		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	1,289			1,074			989		606		
Off Flow (pcphpl)	644			537			494		606		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.29			0.27			0.25		0.30		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		3,941									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,343									
v_3 (pcph)		1,597									
v_{34} (pcph)											
v_{12a} (pcph)		2,343									
v_{R12a} (pcph)		3,675									
Merge Speed Index		0.41									
Merge Area Speed		55.6									
Outer Lanes Volume		1,597									
Outer Lanes Speed		61.1									
Segment Speed		57.2									
Merge v/c ratio		0.80									
Merge Density		29.7									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



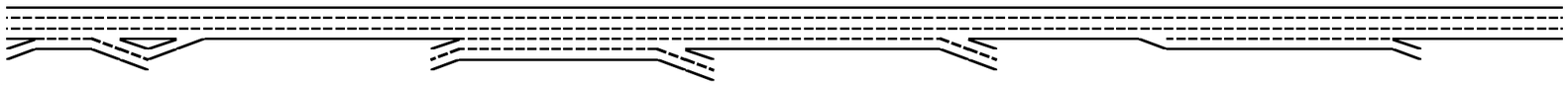
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							6,422				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.554				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,401				
v_3 (pcph)											
v_{34} (pcph)							4,021				
v_{12a} (pcph)							2,569				
Diverge Speed Index							0.52				
Diverge Area Speed							53.1				
Outer Lanes Volume							1,927				
Outer Lanes Speed							67.7				
Segment Speed							61.0				
Diverge v/c ratio							0.58				
Diverge Density							25.0				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,240 670 3,700 1,210 4,910			4,950 2,090 6,030 1,010 7,040							
On to Off Volume (vph)	*165*			*300*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	176			319							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	505			1,790							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	537			1,907							

Location	2	3	4	5	6	7	8	9	10	11	12



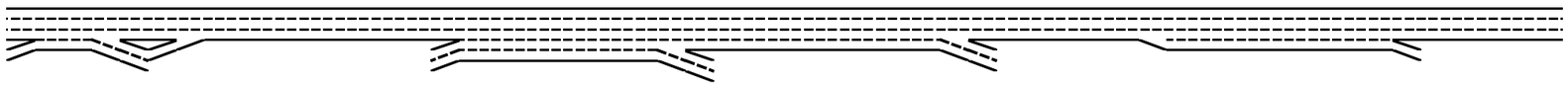
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	1,045			710							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	1,113			755							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	3,195			4,240							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	3,403			4,515							

Location	2	3	4	5	6	7	8	9	10	11	12



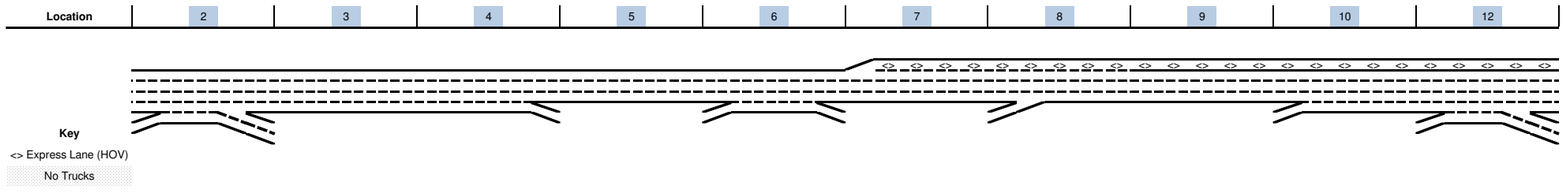
Key

<> Express Lane (HOV)

No Trucks

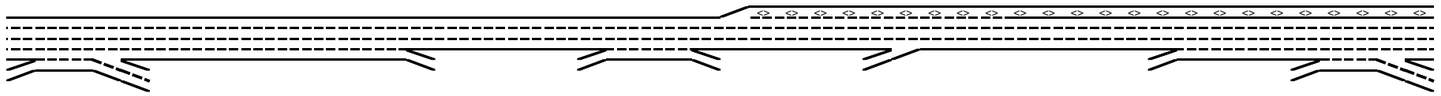
Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,650			2,662							
Non-Weave Flow	3,578			4,834							
Segment Flow	5,228			7,496							
Max Weave Length	5,751			4,616							
Length Check	OK			OK							
Ideal Weave Capacity	2,040			2,086							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,044			6,167							
Capacity Condition 2	7,512			9,716							
Weave v/c ratio	0.85			1.20							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	537			755							
Weave LC Rate	1,123			1,131							
Non-Weave LC Rate 1	1,081			1,047							
Non-Weave LC Rate 2	2,487			2,767							
Non-Weave LC Rate 3	-1,293			-1,899							
Segment LC Rate	2,204			2,178							
Weave Intensity Factor	0.277			0.371							
Weave Speed	54.1			51.5							
Non-Weave Speed	52.8			47.6							
Segment Speed	53.2			48.9							
Weave Density	32.8			-							
Weave LOS	D			F							
Summarize Segment Operations											
Segment v/c ratio	0.85	0.80	0.75	1.20		0.68	0.58	0.77	0.46		0.68
Segment Density	32.8	29.7	27.8	-		24.9	25.0	28.9	16.7		25.0
Segment LOS	D	D	D	F		C	C	D	B		C
Over Capacity				Weave							

Project: John Wayne Airport Expansion **Scenario:** 2021 Plus Proposed Project
Freeway Corridor: 55N **Peak Hour:** PM



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Define Freeway Segment										
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	4,100	2,640	2,640	2,210	2,210	2,490	2,490	3,070	3,070	3,980
On Ramp Volume	*980*				*1,410*		*580*		*910*	*1,190*
Off Ramp Volume	*2,440*		*430*		*1,130*					*1,060*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	5,080	2,640	2,640	2,210	3,620	2,490	3,070	3,070	3,980	5,170
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	5,441	2,828	2,828	2,367	3,877	2,667	3,288	3,288	4,233	5,499
GP Flow (pcphpl)	1,088	707	707	789	969	889	1,096	1,096	1,058	1,100
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*63.2*	*63.2*	*63.2*	*62.3*	*60.5*	*60.5*	*13.5*	*13.5*	*13.5*	*14.0*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

Location	2	3	4	5	6	7	8	9	10	12

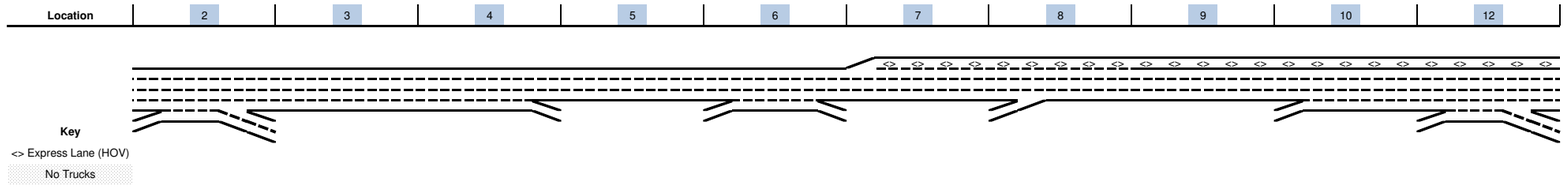


Key

<> Express Lane (HOV)

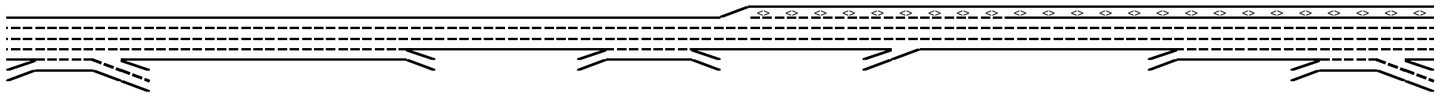
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	980				1,410		580		910	1,190
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,042				1,510		617		968	1,266
On Flow (pcphpl)	1,042				1,510		617		968	1,266
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.52				0.67		0.31		0.48	0.56



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	2,440		430		1,130					1,190
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	2,613		457		1,210					1,266
Off Flow (pcphpl)	1,307		457		1,210					633
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.58		0.23		0.54					0.32
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							2,672			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							1,624			
v_3 (pcph)							1,048			
v_{34} (pcph)										
v_{12a} (pcph)							1,624			
v_{R12a} (pcph)							2,240			
Merge Speed Index							0.28			
Merge Area Speed							58.5			
Outer Lanes Volume							1,048			
Outer Lanes Speed							63.0			
Segment Speed							59.9			
Merge v/c ratio							0.49			
Merge Density							15.9			
Merge LOS							B			

Location	2	3	4	5	6	7	8	9	10	12



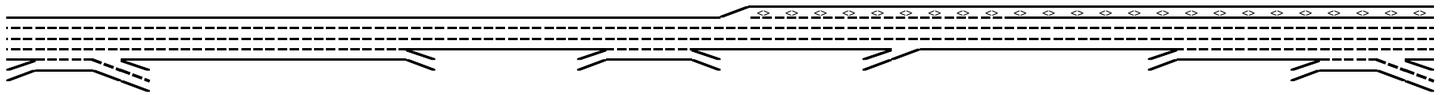
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			2,828							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.668							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			1,491							
v_3 (pcph)										
v_{34} (pcph)			1,337							
v_{12a} (pcph)			1,491							
Diverge Speed Index			0.47							
Diverge Area Speed			54.2							
Outer Lanes Volume			668							
Outer Lanes Speed			71.3							
Segment Speed			61.1							
Diverge v/c ratio			0.34							
Diverge Density			3.6							
Diverge LOS			A							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	4,100 980 2,640 2,440 5,080				2,210 1,410 2,490 1,130 3,620					3,980 1,190 4,110 1,060 5,170
On to Off Volume (vph)	*471*				*440*					*244*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	500				468					259
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	509				970					946
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	541				1,039					1,006

Location	2	3	4	5	6	7	8	9	10	12

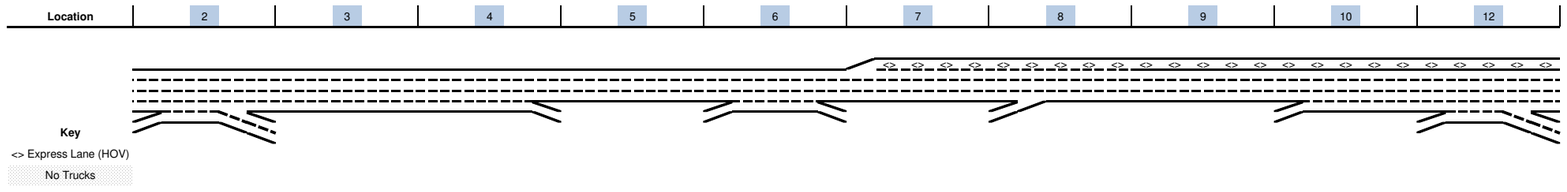


Key

<> Express Lane (HOV)

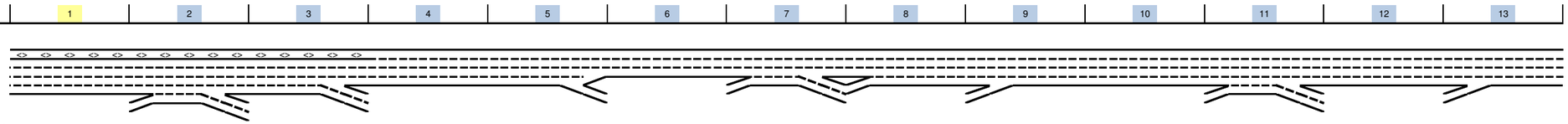
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,969				690					946
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	2,109				739					1,006
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	2,131				1,520					3,034
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	2,282				1,628					3,227



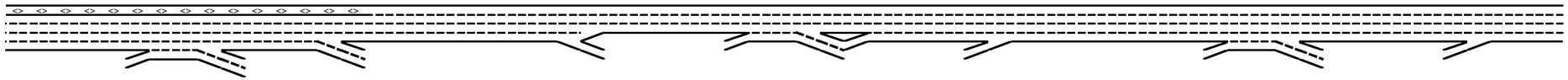
Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,651				1,778					2,013
Non-Weave Flow	2,783				2,096					3,487
Segment Flow	5,433				3,874					5,499
Max Weave Length	7,685				7,350					6,302
Length Check	OK				OK					OK
Ideal Weave Capacity	1,822				1,818					2,018
f_{HV}	0.984				0.984					0.990
f_P	0.999				0.995					0.998
Capacity Condition 1	7,166				5,341					7,974
Capacity Condition 2	4,837				5,121					6,478
Weave v/c ratio	1.10				0.74					0.84
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	541				1,778					1,006
Weave LC Rate	712				1,857					1,637
Non-Weave LC Rate 1	228				71					1,013
Non-Weave LC Rate 2	2,310				2,156					2,467
Non-Weave LC Rate 3	-3,701				-4,011					-1,384
Segment LC Rate	940				1,928					2,649
Weave Intensity Factor	0.260				0.782					0.286
Weave Speed	54.7				43.1					53.9
Non-Weave Speed	54.6				46.0					51.2
Segment Speed	54.6				44.6					52.1
Weave Density	-				28.9					26.4
Weave LOS	F				D					C
Summarize Segment Operations										
Segment v/c ratio	1.10	0.30	0.34	0.34	0.74	0.38	0.49	0.47	0.45	0.84
Segment Density	-	10.9	3.6	12.1	28.9	13.7	15.9	16.9	16.3	26.4
Segment LOS	F	A	A	B	D	B	B	B	B	C
Over Capacity	Weave									

Project: John Wayne Airport Expansion **Scenario:** 2021 Plus Proposed Project
Freeway Corridor: 55S **Peak Hour:** PM



Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*8,000*	8,000	7,240	6,170	6,170	5,530	5,530	5,120	5,740	6,980	6,980	6,430	6,430
On Ramp Volume		*910*					*1,680*	*620*	*1,240*		*1,210*		*260*
Off Ramp Volume		*1,670*	*1,070*		*640*		*2,090*				*1,760*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	8,000	8,910	7,240	6,170	6,170	5,530	7,210	5,740	6,980	6,980	8,190	6,430	6,690
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,509	9,477	7,701	6,608	6,608	5,923	7,722	6,148	7,476	7,476	8,772	6,887	7,165
GP Flow (pcphpl)	2,127	1,895	1,925	1,652	1,652	1,974	1,931	1,537	1,869	1,869	1,754	1,722	1,791
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*55.7*	*55.7*	*63.9*	*63.9*	*63.9*	*63.9*	*58.0*	*51.0*	*51.0*	*51.0*	*51.0*	*65.1*	*65.1*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.91	0.81	0.82	0.70	0.70	0.84	0.82	0.65	0.80	0.80	0.75	0.73	0.76
Speed (mph)	57.5	61.5	61.1	64.1	64.1	60.3	61.0	64.7	61.9	61.9	63.2	63.5	62.8
Density (pcphpl)	37.0	30.8	31.5	25.8	25.8	32.7	31.6	23.7	30.2	30.2	27.8	27.1	28.5
LOS	E	D	D	C	C	D	D	C	D	D	D	D	D
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,510					5,923	5,489	6,148		7,476		6,889
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.91					0.84	0.78	0.65		0.80		0.73
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		7,701	6,563		5,928		5,484				6,901		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.82	0.93		0.84		0.78				0.73		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



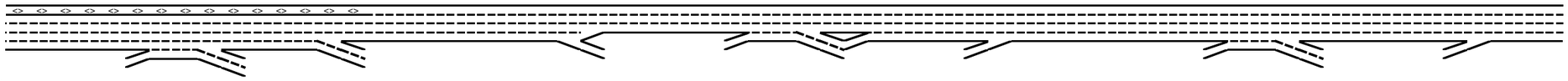
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



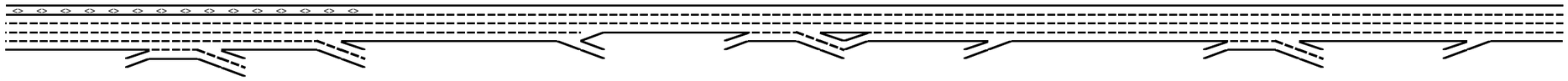
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		910					1,680	620	1,240		1,210		260
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		967					1,799	659	1,328		1,296		276
On Flow (pcphpl)		967					1,799	659	1,328		1,296		276
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.48					0.80	0.33	0.60		0.58		0.14

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



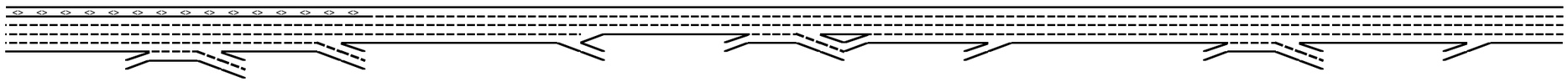
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		1,670	1,070		640		2,090				1,760		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		1,776	1,138		680		2,239				1,871		
Off Flow (pcphpl)		888	569		680		1,119				936		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.39	0.25		0.34		0.50				0.47		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									6,148				6,889
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.052				0.183
v_{12} (pcph)									318				1,262
v_3 (pcph)													
v_{34} (pcph)									5,829				5,627
v_{12a} (pcph)									2,459				2,756
v_{R12a} (pcph)									3,787				3,032
Merge Speed Index									0.42				0.36
Merge Area Speed									55.3				56.6
Outer Lanes Volume									1,844				2,067
Outer Lanes Speed									60.2				59.4
Segment Speed									57.6				58.2
Merge v/c ratio									0.82				0.66
Merge Density									30.3				25.5
Merge LOS									D				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



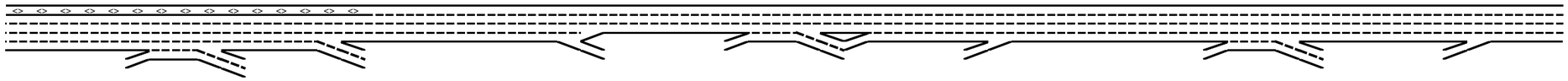
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			7,701		6,608								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.515		0.563								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,845		3,265								
v_3 (pcph)													
v_{34} (pcph)			4,857		3,343								
v_{12a} (pcph)			3,080		3,265								
Diverge Speed Index			0.27		0.49								
Diverge Area Speed			58.8		53.7								
Outer Lanes Volume			2,310		1,672								
Outer Lanes Speed			66.2		68.7								
Segment Speed			63.0		60.4								
Diverge v/c ratio			0.70		0.74								
Diverge Density			33.7		30.7								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		8,000 910 7,240 1,670 8,910					5,530 1,680 5,120 2,090 7,210				6,980 1,210 6,430 1,760 8,190		
On to Off Volume (vph)		*171*					*487*				*260*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		181					518				276		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		739					1,193				950		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		786					1,278				1,017		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



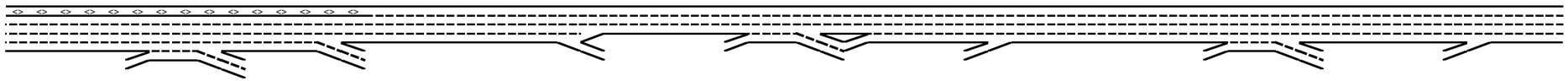
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		1,499					1,603				1,500		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		1,595					1,717				1,595		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		6,501					3,927				5,480		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		6,915					4,206				5,869		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



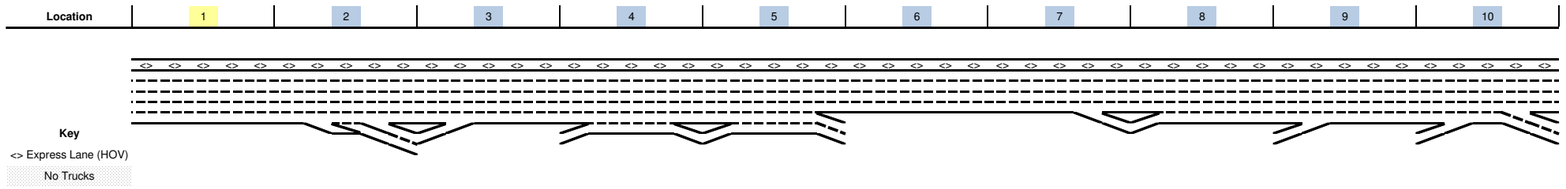
Key

<> Express Lane (HOV)

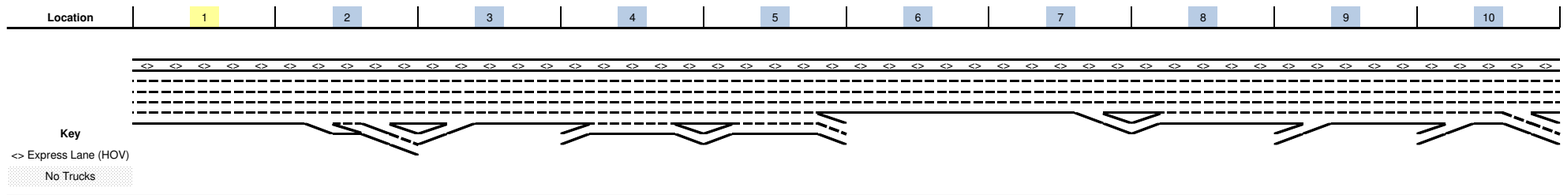
No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,381					2,995				2,612		
Non-Weave Flow		7,096					4,724				6,146		
Segment Flow		9,477					7,718				8,758		
Max Weave Length		5,067					6,547				5,565		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,110					2,022				2,004		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.997				0.998		
Capacity Condition 1		8,347					5,949				7,874		
Capacity Condition 2		9,446					6,065				7,905		
Weave v/c ratio		1.12					1.27				1.09		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		786					1,278				1,017		
Weave LC Rate		1,405					2,085				1,287		
Non-Weave LC Rate 1		1,740					1,623				1,059		
Non-Weave LC Rate 2		3,271					2,742				3,060		
Non-Weave LC Rate 3		-244					-2				-2,285		
Segment LC Rate		3,145					3,708				2,346		
Weave Intensity Factor		0.332					0.333				0.429		
Weave Speed		52.6					52.5				50.0		
Non-Weave Speed		48.0					43.5				47.2		
Segment Speed		49.0					46.6				48.0		
Weave Density		-					-				-		
Weave LOS		F					F				F		
Summarize Segment Operations													
Segment v/c ratio	0.91	1.12	0.70	0.70	0.74	0.84	1.27	0.65	0.82	0.80	1.09	0.73	0.66
Segment Density	37.0	-	33.7	25.8	30.7	32.7	-	23.7	30.3	30.2	-	27.1	25.5
Segment LOS	E	F	D	C	D	D	F	C	D	D	F	D	C
Over Capacity		Weave					Weave				Weave		

Project: John Wayne Airport Expansion **Scenario:** 2021 Plus Proposed Project
Freeway Corridor: 405N **Peak Hour:** PM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*7,640*	7,640	6,590	7,340	7,720	6,320	6,320	5,720	6,830	7,120
On Ramp Volume			*750*	*1,130*	*1,360*			*1,110*	*290*	*540*
Off Ramp Volume		*1,050*		*750*	*2,760*		*600*			*2,750*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	7,640	7,640	7,340	8,470	9,080	6,320	6,320	6,830	7,120	7,660
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,267	8,267	7,919	9,139	9,725	6,769	6,769	7,315	7,626	8,204
GP Flow (pcphpl)	1,653	1,653	1,584	1,523	1,621	1,692	1,692	1,463	1,525	1,367
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*23.5*	*23.5*	*22.3*	*20.6*	*26.8*	*26.8*	*26.8*	*26.8*	*11.4*	*11.3*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.70	0.70	0.67	0.65	0.69	0.72	0.72	0.62	0.65	0.58
Speed (mph)	64.1	64.1	64.5	64.8	64.3	63.8	63.8	64.9	64.8	65.0
Density (pcphpl)	25.8	25.8	24.5	23.5	25.2	26.5	26.5	22.5	23.5	21.0
LOS	C	C	C	C	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			7,122	7,937	8,279			6,126	7,318	7,630
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.61	0.68	0.70			0.65	0.62	0.65
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		7,151		8,341	6,769		6,131			5,281
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.61		0.71	0.72		0.65			0.56


Location
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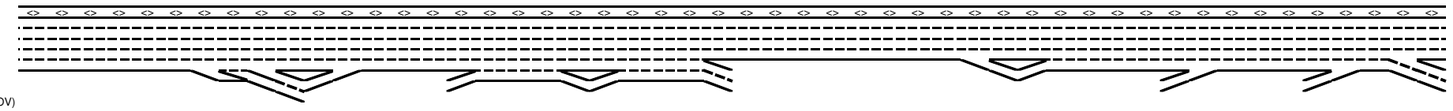
Key
<> Express Lane (HOV)
No Trucks
Name
Culver On to Jamboree Off
Jamboree Off Ramp
Jamboree N On Ramp
Jamboree S On to McArthur Off
McArthur On to 55 N&S Off
55 Off to Bristol Off
Bristol/Ave Arts Off Ramp
On Ramp from 55 S
Bristol N On Ramp
Bristol S On Ramp to S Coast Off

Location	1	2	3	4	5	6	7	8	9	10



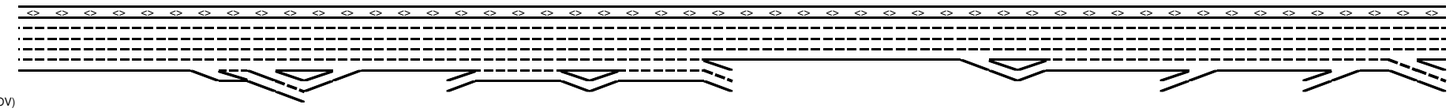
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			750	1,130	1,360			1,110	290	540
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			797	1,201	1,446			1,189	308	574
On Flow (pcphpl)			797	1,201	1,446			1,189	308	574
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.40	0.60	0.72			0.53	0.15	0.29

Location	1	2	3	4	5	6	7	8	9	10



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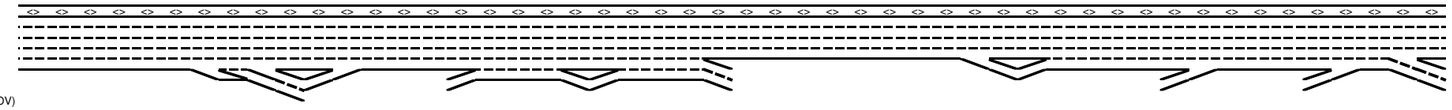
<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,050		750	2,760		600			2,750
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,116		797	2,956		638			2,924
Off Flow (pcphpl)		558		797	1,478		638			1,462
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.28		0.40	0.66		0.32			0.73
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			5,199						5,342	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.118						0.179	
v_{12} (pcph)			614						958	
v_3 (pcph)										
v_{34} (pcph)			4,585						4,384	
v_{12s} (pcph)			2,080						2,137	
v_{R12a} (pcph)			2,877						2,445	
Merge Speed Index			0.35						0.33	
Merge Area Speed			56.9						57.3	
Outer Lanes Volume			1,560						1,603	
Outer Lanes Speed			61.2						61.0	
Segment Speed			59.1						59.4	
Merge v/c ratio			0.63						0.53	
Merge Density			24.0						21.4	
Merge LOS			C						C	

Location	1	2	3	4	5	6	7	8	9	10



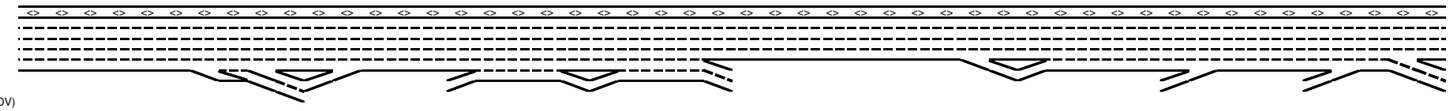
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		6,614					6,769			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.543					0.561			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		2,546					3,311			
v_3 (pcph)										
v_{34} (pcph)		4,068					3,458			
v_{12a} (pcph)		2,646					3,311			
Diverge Speed Index		0.53					0.49			
Diverge Area Speed		52.8					53.8			
Outer Lanes Volume		1,984					1,729			
Outer Lanes Speed		67.5					68.5			
Segment Speed		60.7					60.4			
Diverge v/c ratio		0.60					0.75			
Diverge Density		18.5					31.2			
Diverge LOS		B					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				7,340 1,130 7,720 750 8,470	7,720 1,360 6,320 2,760 9,080					7,120 540 4,910 2,750 7,660
On to Off Volume (vph)				*100*	*413*					*194*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				106	440					206
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				1,030	947					346
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,095	1,006					368

Location	1	2	3	4	5	6	7	8	9	10



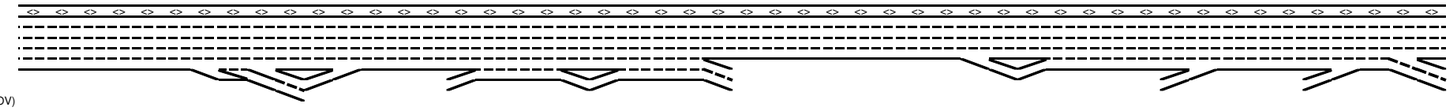
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				650	2,347					2,556
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				691	2,513					2,718
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				6,690	5,373					4,564
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				7,218	5,755					4,888

Location	1	2	3	4	5	6	7	8	9	10



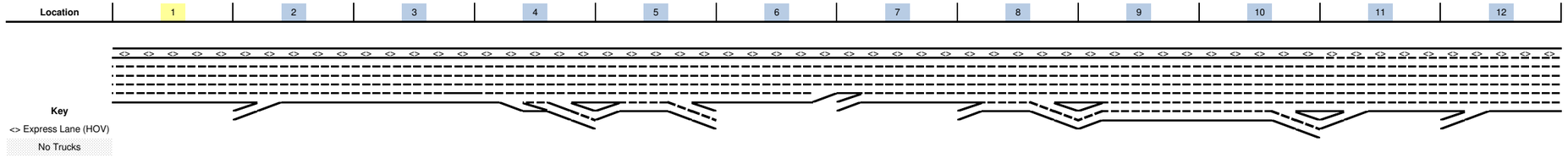
Key

<> Express Lane (HOV)

No Trucks

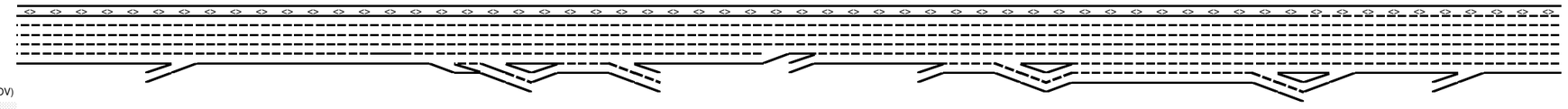
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				1,786	3,520					3,086
Non-Weave Flow				7,325	6,195					5,094
Segment Flow				9,111	9,714					8,180
Max Weave Length				4,496	4,696					6,427
Length Check				OK	OK					OK
Ideal Weave Capacity				2,169	2,157					1,897
f_{HV}				0.979	0.984					0.986
f_P				0.999	0.999					1.000
Capacity Condition 1				10,601	10,601					9,343
Capacity Condition 2				11,967	9,495					6,269
Weave v/c ratio				0.84	1.01					1.29
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				1,786	2,013					368
Weave LC Rate				2,404	2,648					350
Non-Weave LC Rate 1				1,700	1,492					357
Non-Weave LC Rate 2				3,322	3,070					2,825
Non-Weave LC Rate 3				-246	-574					-4,255
Segment LC Rate				4,104	4,140					708
Weave Intensity Factor				0.379	0.376					0.297
Weave Speed				51.3	51.3					53.5
Non-Weave Speed				43.4	41.2					54.5
Segment Speed				44.7	44.4					54.1
Weave Density				40.7	-					-
Weave LOS				E	F					F
Summarize Segment Operations										
Segment v/c ratio	0.70	0.60	0.63	0.84	1.01	0.72	0.75	0.62	0.53	1.29
Segment Density	25.8	18.5	24.0	40.7	-	26.5	31.2	22.5	21.4	-
Segment LOS	C	B	C	E	F	D	D	C	C	F
Over Capacity					Weave					Weave

Project: John Wayne Airport Expansion **Scenario:** 2021 Plus Proposed Project
Freeway Corridor: 405S **Peak Hour:** PM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*6,020*	6,020	7,110	7,110	6,080	6,340	6,340	7,960	8,180		6,125	6,650
On Ramp Volume		*1,090*			*1,170*		*1,620*	*1,420*	*950*		*630*	*1,110*
Off Ramp Volume				*1,030*	*910*			*1,200*	*1,780*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	6,020	7,110	7,110	7,110	7,250	6,340	7,960	9,380	9,130		6,755	7,760
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	6,448	7,615	7,615	7,615	7,765	6,790	8,526	10,046	9,851		7,310	8,397
GP Flow (pcphpl)	1,290	1,523	1,523	1,523	1,294	1,698	1,705	1,674	1,407		1,462	1,679
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*67.6*	*67.6*	*67.6*	*67.6*	*70.8*	*70.8*	*70.8*	*50.3*	*50.3*		*23.7*	*23.7*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.55	0.65	0.65	0.65	0.55	0.72	0.73	0.71	0.60		0.62	0.71
Speed (mph)	65.0	64.8	64.8	64.8	65.0	63.7	63.7	63.9	65.0		64.9	63.9
Density (pcphpl)	19.8	23.5	23.5	23.5	19.9	26.6	26.8	26.2	21.7		22.5	26.3
LOS	C	C	C	C	C	D	D	D	C		C	D
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		6,456			6,521		6,790	8,526	8,841		6,640	7,217
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.55			0.55		0.72	0.73	0.75		0.57	0.61
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				6,520	6,790	6,790		8,771	7,958			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.55	0.58	0.72		0.75	0.68			

Location	1	2	3	4	5	6	7	8	9	10	11	12



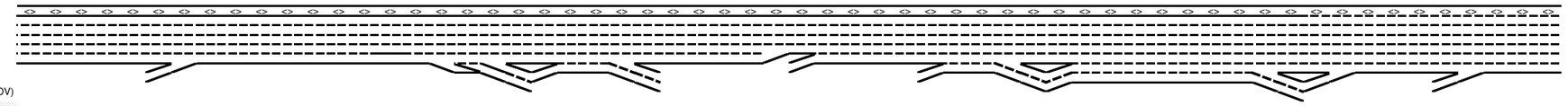
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12



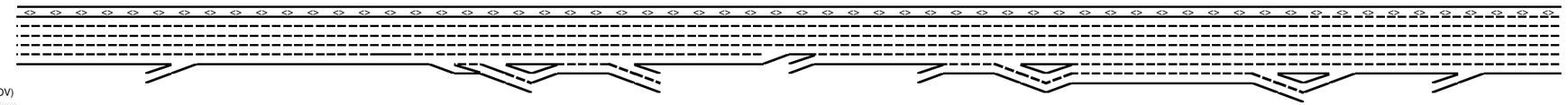
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,090			1,170		1,620	1,420	950		630	1,110
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,159			1,244		1,735	1,521	1,010		670	1,180
On Flow (pcphpl)		1,159			1,244		1,735	1,521	505		670	1,180
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.58			0.62		0.77	0.68	0.25		0.33	0.59

Location	1	2	3	4	5	6	7	8	9	10	11	12



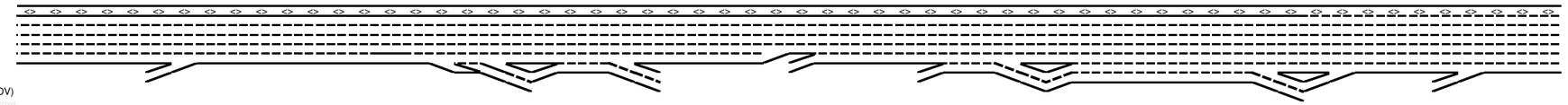
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,030	910			1,200	1,780			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,095	975			1,276	1,892			
Off Flow (pcphpl)				548	487			638	946			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.27	0.22			0.32	0.47			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		4,907									4,847	5,268
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.073									0.134	0.070
v_{12} (pcph)		358									650	370
v_3 (pcph)												
v_{34} (pcph)		4,549									4,197	4,898
v_{12a} (pcph)		1,963									1,939	2,107
v_{R12a} (pcph)		3,122									2,609	3,287
Merge Speed Index		0.37									0.34	0.34
Merge Area Speed		56.5									57.2	57.1
Outer Lanes Volume		1,472									1,454	1,581
Outer Lanes Speed		61.5									61.6	61.1
Segment Speed		58.8									59.4	59.0
Merge v/c ratio		0.68									0.57	0.71
Merge Density		25.8									22.2	23.2
Merge LOS		C									C	C

Location	1	2	3	4	5	6	7	8	9	10	11	12



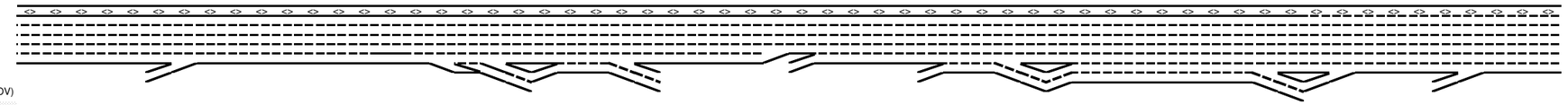
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				6,092								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.557								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				2,394								
v_3 (pcph)												
v_{34} (pcph)				3,698								
v_{12a} (pcph)				2,437								
Diverge Speed Index				0.53								
Diverge Area Speed				52.9								
Outer Lanes Volume				1,828								
Outer Lanes Speed				68.1								
Segment Speed				61.1								
Diverge v/c ratio				0.55								
Diverge Density				18.2								
Diverge LOS				B								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					6,080 1,170 6,340 910 7,250			7,960 1,420 8,180 1,200 9,380	8,180 950 7,350 1,780 9,130			
On to Off Volume (vph)					*147*			*182*	*185*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					156			193	197			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					1,023			1,238	765			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					1,088			1,326	813			

Location	1	2	3	4	5	6	7	8	9	10	11	12



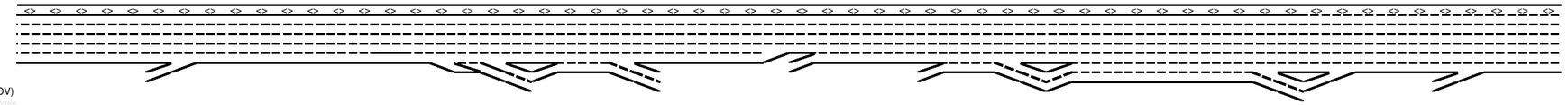
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					763			1,018	1,595			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					817			1,083	1,696			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					5,317			6,942	6,585			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					5,695			7,435	7,105			

Location	1	2	3	4	5	6	7	8	9	10	11	12



Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					1,905			2,409	2,509			
Non-Weave Flow					5,851			7,628	7,302			
Segment Flow					7,756			10,037	9,811			
Max Weave Length					5,008			4,949	3,548			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,087			2,010	2,117			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	0.999			
Capacity Condition 1					10,255			9,862	10,360			
Capacity Condition 2					9,601			9,815	13,398			
Weave v/c ratio					0.79			1.00	0.93			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					1,088			1,326	1,696			
Weave LC Rate					1,489			1,309	1,678			
Non-Weave LC Rate 1					1,096			879	812			
Non-Weave LC Rate 2					2,994			3,390	3,317			
Non-Weave LC Rate 3					-1,803			-3,651	-3,729			
Segment LC Rate					2,585			2,188	2,490			
Weave Intensity Factor					0.334			0.724	0.802			
Weave Speed					52.5			44.0	42.7			
Non-Weave Speed					49.7			45.8	43.4			
Segment Speed					50.4			45.4	43.2			
Weave Density					30.8			-	45.4			
Weave LOS					D			F	E			
Summarize Segment Operations												
Segment v/c ratio	0.55	0.68	0.65	0.55	0.79	0.72	0.73	1.00	0.93		0.57	0.71
Segment Density	19.8	25.8	23.5	18.2	30.8	26.6	26.8	-	45.4		22.2	23.2
Segment LOS	C	C	C	B	D	D	D	F	E		C	C
Over Capacity								Weave				

Project: John Wayne Airport Expansion **Scenario:** 2026 Plus Proposed Project
Freeway Corridor: 73N **Peak Hour:** AM

Location	1	2	3	4	5	6	7	8	9	10

Key
<> Express Lane (HOV)
No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*6,310*	6,310	7,990	8,710	8,710	7,710	6,500	5,740		5,380
On Ramp Volume		*1,680*	*720*			*780*		*630*		
Off Ramp Volume					*1,000*	*1,990*	*760*	*990*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	6,310	7,990	8,710	8,710	8,710	8,490	6,500	6,370		5,380
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	6,720	8,509	9,276	9,276	9,276	9,042	6,923	6,784		5,730
GP Flow (pcphpl)	2,240	2,127	2,319	2,319	2,319	1,808	1,731	1,357		1,432
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*62.3*	*62.3*	*62.3*	*66.1*	*66.1*	*66.1*	*66.1*	*65.5*		*65.5*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.95	0.91	0.99	0.99	0.99	0.77	0.74	0.58		0.61
Speed (mph)	55.0	57.5	53.0	53.0	53.0	62.6	63.4	65.0		65.0
Density (pcphpl)	40.7	37.0	43.7	43.7	43.7	28.9	27.3	20.9		22.0
LOS	E	E	E	E	E	D	D	C		C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		6,723	8,511			8,213		6,113		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.95	0.91			0.87		0.87		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					8,213	6,923	6,113	5,732		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.87	0.74	0.87	0.81		

Location	1	2	3	4	5	6	7	8	9	10

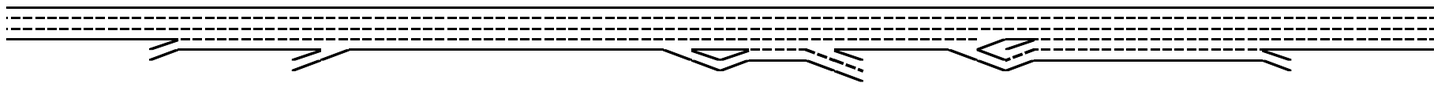
Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,680	720			780		630		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,786	765			829		671		
On Flow (pcphpl)		1,786	765			829		335		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.89	0.38			0.41		0.15		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					1,000	1,990	760	990		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					1,063	2,119	809	1,053		
Off Flow (pcphpl)					1,063	1,060	809	1,053		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.53	0.47	0.37	0.47		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			8,511							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.122							
v_{12} (pcph)			1,039							
v_3 (pcph)										
v_{34} (pcph)			7,471							
v_{12a} (pcph)			3,404							
v_{R12a} (pcph)			4,170							
Merge Speed Index			0.55							
Merge Area Speed			52.5							
Outer Lanes Volume			2,553							
Outer Lanes Speed			57.0							
Segment Speed			54.8							
Merge v/c ratio			0.91							
Merge Density			35.1							
Merge LOS			E							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					9,276		6,923			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.479		0.550			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					4,644		3,475			
v_3 (pcph)										
v_{34} (pcph)					4,632		3,448			
v_{12a} (pcph)					4,644		3,475			
Diverge Speed Index					0.52		0.24			
Diverge Area Speed					53.0		59.5			
Outer Lanes Volume					2,316		1,724			
Outer Lanes Speed					66.2		68.5			
Segment Speed					58.8		63.6			
Diverge v/c ratio					1.06		0.79			
Diverge Density					42.4		32.3			
Diverge LOS					F		D			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,710 780 6,500 1,990 8,490		5,740 630 5,380 990 6,370		
On to Off Volume (vph)						*183*		*98*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						194		104		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						597		532		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						635		567		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,807		892		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,925		950		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						5,903		4,848		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,287		5,163		

Location	1	2	3	4	5	6	7	8	9	10

Key

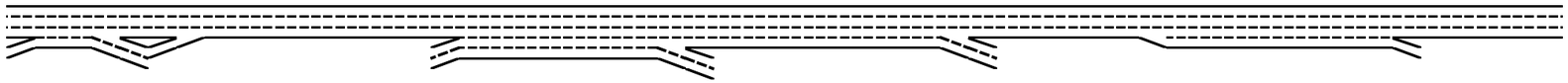
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Part Of Previous	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						2,560		1,517		
Non-Weave Flow						6,481		5,267		
Segment Flow						9,040		6,784		
Max Weave Length						5,404		3,213		
Length Check						OK		OK		
Ideal Weave Capacity						2,065		2,219		
f_{HV}						0.989		0.988		
f_P						0.999		0.999		
Capacity Condition 1						8,159		6,573		
Capacity Condition 2						8,374		15,458		
Weave v/c ratio						1.09		1.02		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						635		1,900		
Weave LC Rate						1,152		2,409		
Non-Weave LC Rate 1						1,473		1,320		
Non-Weave LC Rate 2						3,134		2,864		
Non-Weave LC Rate 3						-926		-1,141		
Segment LC Rate						2,625		3,729		
Weave Intensity Factor						0.322		0.464		
Weave Speed						52.8		49.2		
Non-Weave Speed						49.6		40.5		
Segment Speed						50.5		42.1		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.95	0.91	0.91	0.99	1.06	1.09	0.79	1.02		0.61
Segment Density	40.7	37.0	35.1	43.7	-	-	32.3	-		22.0
Segment LOS	E	E	E	E	F	F	D	F		C
Over Capacity					Diverge	Weave		Weave		

Project: John Wayne Airport Expansion **Scenario:** 2026 Plus Proposed Project
Freeway Corridor: 73S **Peak Hour:** AM

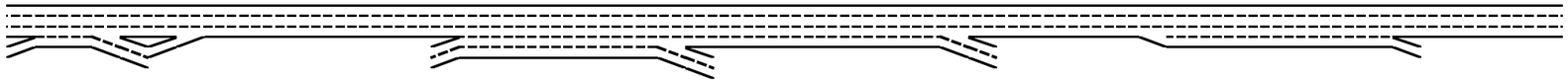
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,850	4,720	5,460	5,460		5,530	5,530	3,780	3,780		2,810
On Ramp Volume	*800*	*740*		*2,430*							
Off Ramp Volume	*930*			*2,360*			*1,750*		*970*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	5,650	5,460	5,460	7,890		5,530	5,530	3,780	3,780		2,810
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	6,017	5,815	5,815	8,403		5,889	5,889	4,026	4,026		2,993
GP Flow (pcphpl)	1,504	1,938	1,938	1,681		1,472	1,472	1,342	805		998
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*62.8*	*62.8*	*52.5*	*52.5*		*63.4*	*63.4*	*63.4*	*63.4*		*63.4*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.64	0.82	0.82	0.72		0.63	0.63	0.57	0.34		0.42
Speed (mph)	64.8	60.9	60.9	63.9		64.9	64.9	65.0	65.0		65.0
Density (pcphpl)	23.2	31.8	31.8	26.3		22.7	22.7	20.6	12.4		15.3
LOS	C	D	D	D		C	C	C	B		B
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	5,167	5,027		5,815					4,026		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.73	0.71		0.82					0.57		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	5,027			5,894			4,029		2,994		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.71			0.84			0.57		0.32		

Location	2	3	4	5	6	7	8	9	10	11	12



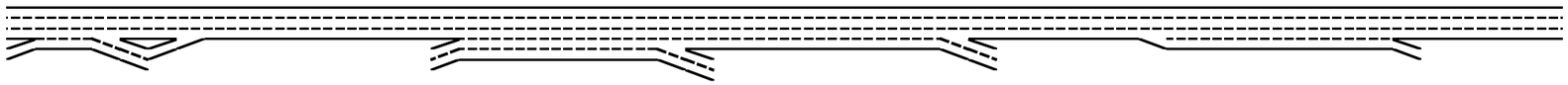
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On

Location	2	3	4	5	6	7	8	9	10	11	12



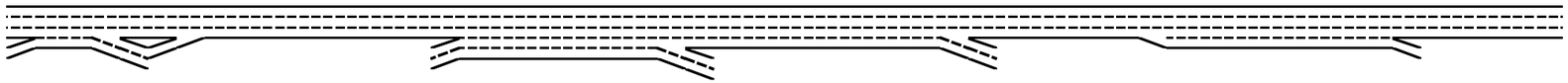
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	800	740		2,430							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	851	788		2,588							
On Flow (pcphpl)	851	788		1,294							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.43	0.36		0.58							

Location	2	3	4	5	6	7	8	9	10	11	12



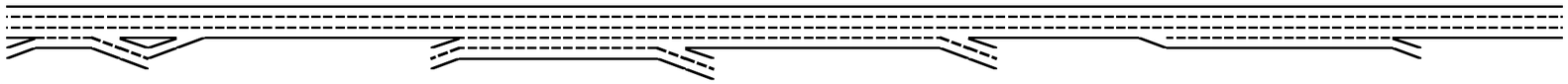
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	930			2,360			1,750		970		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	990			2,509			1,861		1,031		
Off Flow (pcphpl)	495			1,255			930		1,031		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.22			0.63			0.47		0.52		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		5,027									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,990									
v_3 (pcph)		2,037									
v_{34} (pcph)											
v_{12a} (pcph)		2,990									
v_{R12a} (pcph)		3,778									
Merge Speed Index		0.42									
Merge Area Speed		55.3									
Outer Lanes Volume		2,037									
Outer Lanes Speed		59.5									
Segment Speed		56.7									
Merge v/c ratio		0.82									
Merge Density		30.7									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



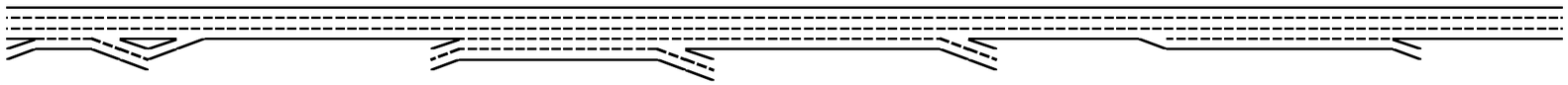
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							5,889				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.527				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,908				
v_3 (pcph)											
v_{34} (pcph)							2,981				
v_{12a} (pcph)							2,908				
Diverge Speed Index							0.60				
Diverge Area Speed							51.3				
Outer Lanes Volume							1,491				
Outer Lanes Speed							69.4				
Segment Speed							59.1				
Diverge v/c ratio							0.66				
Diverge Density							28.0				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,850 800 4,720 930 5,650			5,460 2,430 5,530 2,360 7,890							
On to Off Volume (vph)	*132*			*727*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	140			773							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	668			1,703							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	711			1,814							

Location	2	3	4	5	6	7	8	9	10	11	12



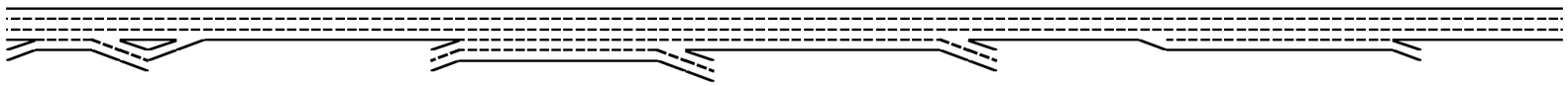
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	798			1,633							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	850			1,736							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	4,052			3,827							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	4,315			4,076							

Location	2	3	4	5	6	7	8	9	10	11	12



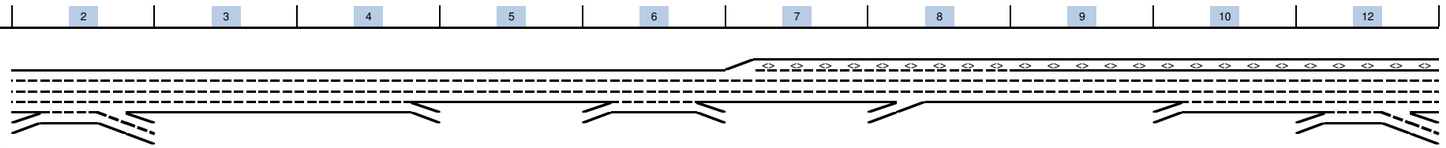
Key

<> Express Lane (HOV)

No Trucks

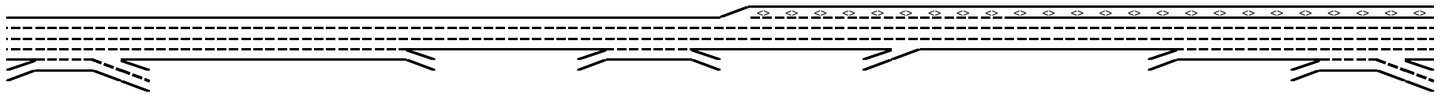
Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane	University Dr Off Ramp	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,561			3,550							
Non-Weave Flow	4,455			4,848							
Segment Flow	6,016			8,399							
Max Weave Length	5,153			5,371							
Length Check	OK			OK							
Ideal Weave Capacity	2,086			2,028							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,179			6,001							
Capacity Condition 2	9,135			8,167							
Weave v/c ratio	0.96			1.38							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	711			1,736							
Weave LC Rate	1,297			2,112							
Non-Weave LC Rate 1	1,261			1,050							
Non-Weave LC Rate 2	2,682			2,770							
Non-Weave LC Rate 3	-1,029			-1,895							
Segment LC Rate	2,558			3,162							
Weave Intensity Factor	0.312			0.499							
Weave Speed	53.1			48.4							
Non-Weave Speed	50.3			39.1							
Segment Speed	51.0			42.5							
Weave Density	39.3			-							
Weave LOS	E			F							
Summarize Segment Operations											
Segment v/c ratio	0.96	0.82	0.82	1.38		0.63	0.66	0.57	0.34		0.42
Segment Density	39.3	30.7	31.8	-		22.7	28.0	20.6	12.4		15.3
Segment LOS	E	D	D	F		C	C	C	B		B
Over Capacity				Weave							

Project: John Wayne Airport Expansion **Scenario:** 2026 Plus Proposed Project
Freeway Corridor: 55N **Peak Hour:** AM



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	6,290	6,800	6,800	6,070	6,070	6,590	6,590	7,320	7,320	9,900
On Ramp Volume	*1,860*				*1,990*		*730*		*2,580*	*1,340*
Off Ramp Volume	*1,350*		*730*		*1,470*					*1,780*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	8,150	6,800	6,800	6,070	8,060	6,590	7,320	7,320	9,900	11,240
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,729	7,283	7,283	6,501	8,633	7,058	7,840	7,840	10,530	11,956
GP Flow (pcphpl)	1,746	1,821	1,821	2,167	2,158	2,353	2,613	2,613	2,633	2,391
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*53.0*	*53.0*	*53.0*	*29.2*	*32.9*	*32.9*	*43.6*	*43.6*	*43.6*	*64.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

Location	2	3	4	5	6	7	8	9	10	12

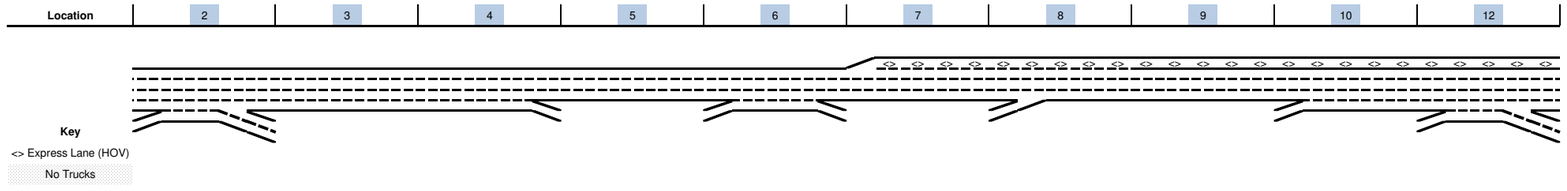


Key

<> Express Lane (HOV)

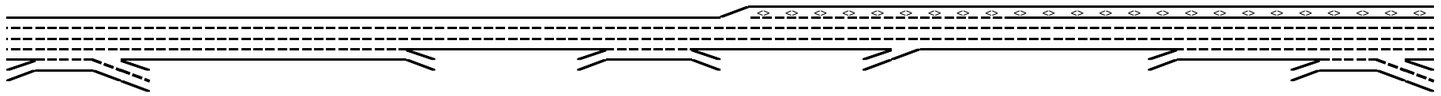
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	1,860				1,990		730		2,580	1,340
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,977				2,131		776		2,744	1,425
On Flow (pcphpl)	1,977				2,131		776		2,744	1,425
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.99				0.95		0.39		1.37	0.63



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	1,350		730		1,470					1,340
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	1,446		776		1,574					1,425
Off Flow (pcphpl)	723		776		1,574					713
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.32		0.39		0.70					0.36
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							7,064			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							4,293			
v_3 (pcph)							2,771			
v_{34} (pcph)										
v_{12a} (pcph)							4,364			
v_{R12a} (pcph)							5,140			
Merge Speed Index							-			
Merge Area Speed							-			
Outer Lanes Volume										
Outer Lanes Speed										
Segment Speed										
Merge v/c ratio							1.12			
Merge Density							-			
Merge LOS							F			

Location	2	3	4	5	6	7	8	9	10	12



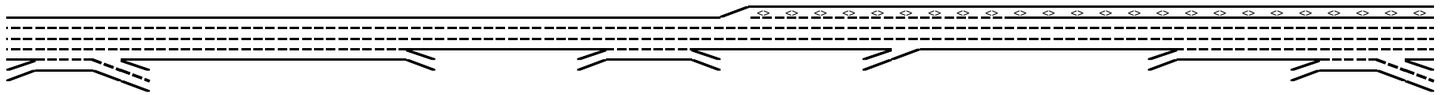
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			7,283							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.542							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			3,613							
v_3 (pcph)										
v_{34} (pcph)			3,670							
v_{12a} (pcph)			3,613							
Diverge Speed Index			0.50							
Diverge Area Speed			53.5							
Outer Lanes Volume			1,835							
Outer Lanes Speed			68.0							
Segment Speed			60.0							
Diverge v/c ratio			0.82							
Diverge Density			21.8							
Diverge LOS			C							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	6,290 1,860 6,800 1,350 8,150				6,070 1,990 6,590 1,470 8,060					9,900 1,340 9,460 1,780 11,240
On to Off Volume (vph)	*308*				*363*					*212*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	328				386					226
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	1,552				1,627					1,128
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	1,650				1,743					1,200

Location	2	3	4	5	6	7	8	9	10	12



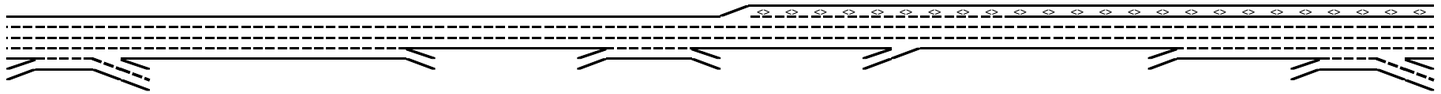
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,042				1,107					1,128
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	1,116				1,186					1,200
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	5,248				4,963					8,772
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	5,621				5,316					9,331

Location	2	3	4	5	6	7	8	9	10	12



Key

<> Express Lane (HOV)

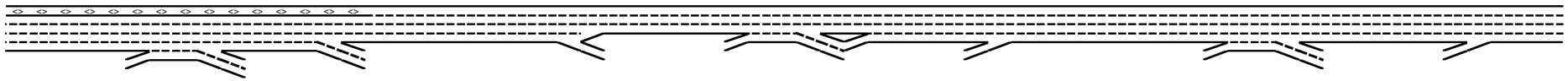
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,766				2,928					2,399
Non-Weave Flow	5,949				5,701					9,556
Segment Flow	8,714				8,630					11,956
Max Weave Length	5,771				6,010					4,543
Length Check	OK				OK					OK
Ideal Weave Capacity	1,969				1,921					2,153
f_{HV}	0.984				0.983					0.990
f_P	0.998				0.997					0.999
Capacity Condition 1	7,737				5,646					8,513
Capacity Condition 2	7,430				6,929					11,823
Weave v/c ratio	1.15				1.50					1.39
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	1,650				2,928					1,200
Weave LC Rate	1,820				3,008					1,830
Non-Weave LC Rate 1	880				813					2,263
Non-Weave LC Rate 2	3,016				2,960					3,820
Non-Weave LC Rate 3	-2,878				-3,229					649
Segment LC Rate	2,700				3,821					4,093
Weave Intensity Factor	0.599				1.341					0.403
Weave Speed	46.3				36.4					50.6
Non-Weave Speed	42.7				30.1					42.0
Segment Speed	43.7				32.0					43.5
Weave Density	-				-					-
Weave LOS	F				F					F
Summarize Segment Operations										
Segment v/c ratio	1.15	0.77	0.82	0.92	1.50	1.00	1.12	1.11	1.12	1.39
Segment Density	-	29.1	21.8	38.3	-	-	-	-	-	-
Segment LOS	F	D	C	E	F	F	F	F	F	F
Over Capacity	Weave				Out GP Lanes Weave	Segment GP Lanes	Segment GP Lanes In GP Lanes Merge	Segment GP Lanes	Segment GP Lanes In GP Lanes On Ramp Roadway	Segment GP Lanes In GP Lanes Out GP Lanes Weave

Project: John Wayne Airport Expansion **Scenario:** 2026 Plus Proposed Project

Freeway Corridor: 55S **Peak Hour:** AM

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



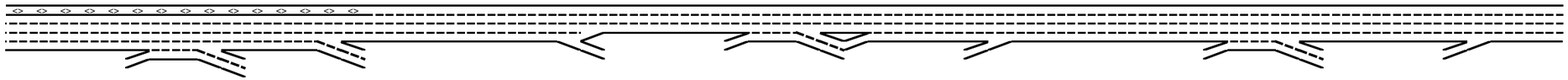
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*7,700*	7,700	6,170	5,520	5,520	4,880	4,880	3,720	4,030	4,790	4,790	4,950	4,950
On Ramp Volume		*880*					*1,270*	*310*	*760*		*930*		*290*
Off Ramp Volume		*2,410*	*650*		*640*		*2,430*				*770*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	7,700	8,580	6,170	5,520	5,520	4,880	6,150	4,030	4,790	4,790	5,720	4,950	5,240
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,190	9,126	6,563	5,912	5,912	5,227	6,587	4,316	5,130	5,130	6,126	5,302	5,612
GP Flow (pcphpl)	2,048	1,825	1,641	1,478	1,478	1,742	1,647	1,079	1,283	1,283	1,225	1,325	1,403
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*64.0*	*64.0*	*65.9*	*65.9*	*65.9*	*65.9*	*62.2*	*52.4*	*52.4*	*52.4*	*52.4*	*68.0*	*68.0*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.87	0.78	0.70	0.63	0.63	0.74	0.70	0.46	0.55	0.55	0.52	0.56	0.60
Speed (mph)	59.1	62.4	64.2	64.9	64.9	63.3	64.1	65.0	65.0	65.0	65.0	65.0	65.0
Density (pcphpl)	34.7	29.2	25.6	22.8	22.8	27.5	25.7	16.6	19.7	19.7	18.9	20.4	21.6
LOS	D	D	C	C	C	D	C	B	C	C	C	C	C
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,191					5,227	3,987	4,316		5,130		5,304
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.87					0.74	0.57	0.46		0.55		0.56
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		6,563	5,872		5,232		3,984				5,308		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.70	0.83		0.74		0.57				0.56		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



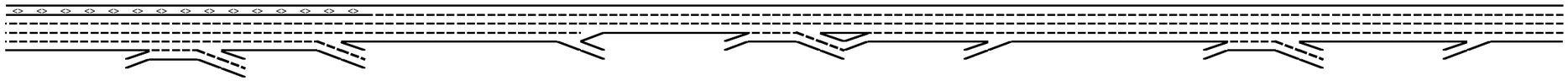
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



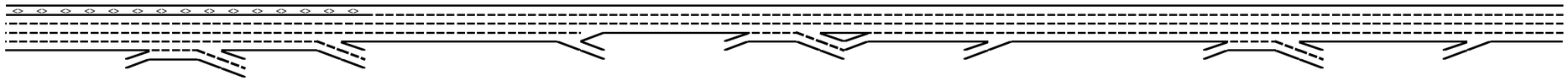
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		880					1,270	310	760		930		290
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		936					1,360	330	814		996		308
On Flow (pcphpl)		936					1,360	330	814		996		308
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.47					0.60	0.16	0.37		0.44		0.15

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



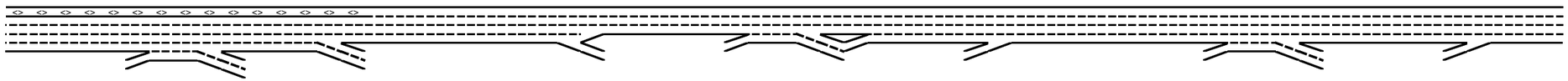
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		2,410	650		640		2,430				770		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		2,563	691		680		2,603				819		
Off Flow (pcphpl)		1,282	346		680		1,301				409		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.57	0.15		0.34		0.58				0.20		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									4,316				5,304
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.116				0.179
v_{12} (pcph)									501				951
v_3 (pcph)													
v_{34} (pcph)									3,815				4,353
v_{12a} (pcph)									1,727				2,122
v_{R12a} (pcph)									2,541				2,430
Merge Speed Index									0.30				0.33
Merge Area Speed									58.1				57.5
Outer Lanes Volume									1,295				1,591
Outer Lanes Speed									62.1				61.1
Segment Speed									60.1				59.5
Merge v/c ratio									0.55				0.53
Merge Density									20.8				20.8
Merge LOS									C				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



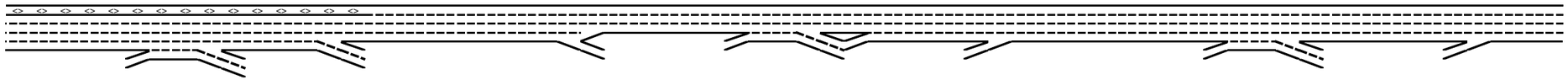
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			6,563		5,912								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.564		0.581								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,218		2,961								
v_3 (pcph)													
v_{34} (pcph)			4,345		2,951								
v_{12a} (pcph)			2,625		2,961								
Diverge Speed Index			0.23		0.49								
Diverge Area Speed			59.7		53.7								
Outer Lanes Volume			1,969		1,475								
Outer Lanes Speed			67.5		69.5								
Segment Speed			64.2		60.6								
Diverge v/c ratio			0.60		0.67								
Diverge Density			28.7		28.1								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		7,700 880 6,170 2,410 8,580					4,880 1,270 3,720 2,430 6,150				4,790 930 4,950 770 5,720		
On to Off Volume (vph)		*247*					*502*				*125*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		263					533				133		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		633					768				805		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		673					823				862		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



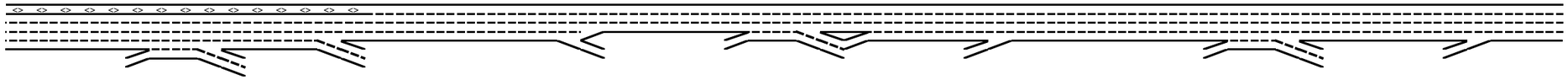
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		2,163					1,928				645		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		2,301					2,065				686		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		5,537					2,952				4,145		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		5,890					3,162				4,440		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



Key

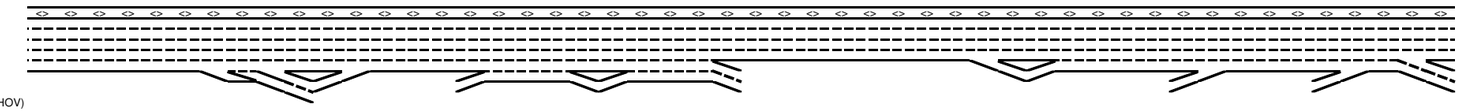
<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,973					2,888				1,548		
Non-Weave Flow		6,153					3,695				4,573		
Segment Flow		9,126					6,583				6,120		
Max Weave Length		5,862					7,119				5,084		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,050					1,979				2,041		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.998				0.998		
Capacity Condition 1		8,107					5,825				8,011		
Capacity Condition 2		7,285					5,368				9,315		
Weave v/c ratio		1.24					1.20				0.75		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		673					823				862		
Weave LC Rate		1,291					1,630				1,132		
Non-Weave LC Rate 1		1,546					1,411				735		
Non-Weave LC Rate 2		3,061					2,513				2,709		
Non-Weave LC Rate 3		-560					-320				-2,730		
Segment LC Rate		2,837					3,041				1,867		
Weave Intensity Factor		0.306					0.285				0.359		
Weave Speed		53.3					53.9				51.8		
Non-Weave Speed		49.2					48.5				51.4		
Segment Speed		50.5					50.8				51.5		
Weave Density		-					-				29.7		
Weave LOS		F					F				D		
Summarize Segment Operations													
Segment v/c ratio	0.87	1.24	0.60	0.63	0.67	0.74	1.20	0.46	0.55	0.55	0.75	0.56	0.53
Segment Density	34.7	-	28.7	22.8	28.1	27.5	-	16.6	20.8	19.7	29.7	20.4	20.8
Segment LOS	D	F	D	C	D	D	F	B	C	C	D	C	C
Over Capacity		Weave					Weave						

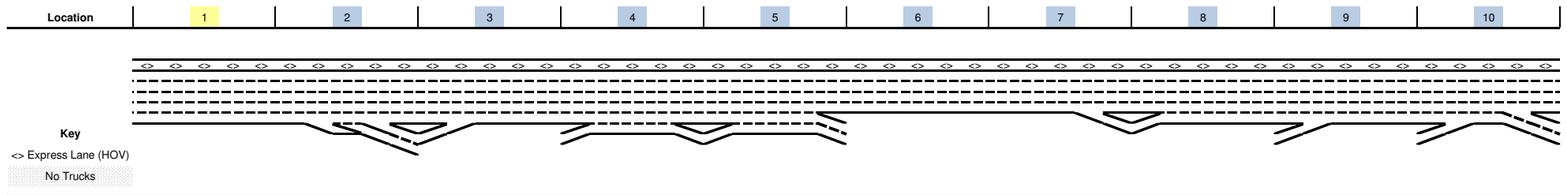
Project: John Wayne Airport Expansion **Scenario:** 2026 Plus Proposed Project
Freeway Corridor: 405N **Peak Hour:** AM

Location	1	2	3	4	5	6	7	8	9	10



Key
<> Express Lane (HOV)
No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*10,680*	10,680	8,820	9,260	8,620	6,560	6,560	5,930	7,370	7,550
On Ramp Volume			*440*	*1,200*	*460*			*1,440*	*180*	*290*
Off Ramp Volume		*1,860*		*1,840*	*2,520*		*630*			*2,660*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	10,680	10,680	9,260	10,460	9,080	6,560	6,560	7,370	7,550	7,840
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	11,557	11,557	9,991	11,286	9,725	7,026	7,026	7,894	8,086	8,397
GP Flow (pcphpl)	2,311	2,311	1,998	1,881	1,621	1,757	1,757	1,579	1,617	1,400
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*47.1*	*47.1*	*65.4*	*61.3*	*66.2*	*66.2*	*66.2*	*66.2*	*64.9*	*66.2*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.98	0.98	0.85	0.80	0.69	0.75	0.75	0.67	0.69	0.60
Speed (mph)	53.2	53.2	59.9	61.7	64.3	63.2	63.2	64.5	64.3	65.0
Density (pcphpl)	43.4	43.4	33.3	30.5	25.2	27.8	27.8	24.5	25.1	21.5
LOS	E	E	D	D	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			9,523	10,010	9,236			6,351	7,895	8,089
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.81	0.85	0.79			0.68	0.67	0.69
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		9,579		9,330	7,026		6,356			5,569
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.82		0.79	0.75		0.68			0.59


Location
1
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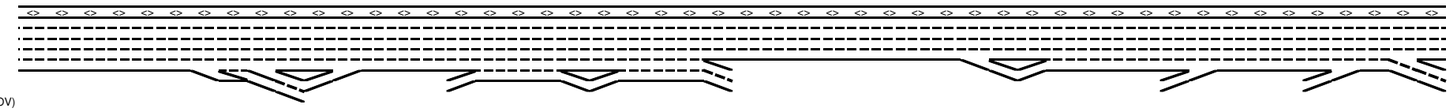
Key
<> Express Lane (HOV)
No Trucks
Name
Culver On to Jamboree Off
Jamboree Off Ramp
Jamboree N On Ramp
Jamboree S On to McArthur Off
McArthur On to 55 N&S Off
55 Off to Bristol Off
Bristol/Ave Arts Off Ramp
On Ramp from 55 S
Bristol N On Ramp
Bristol S On Ramp to S Coast Off

Location	1	2	3	4	5	6	7	8	9	10



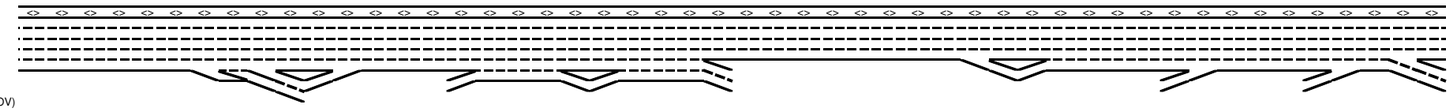
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			440	1,200	460			1,440	180	290
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			468	1,276	489			1,542	191	308
On Flow (pcphpl)			468	1,276	489			1,542	191	308
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.23	0.64	0.24			0.69	0.10	0.15

Location	1	2	3	4	5	6	7	8	9	10



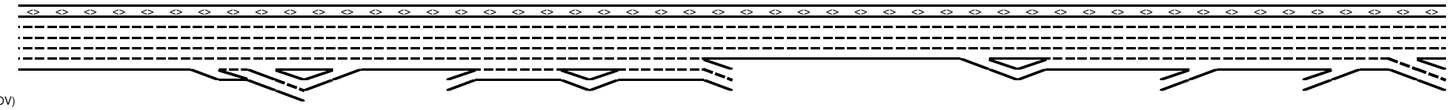
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,860		1,840	2,520		630			2,660
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,977		1,956	2,699		670			2,828
Off Flow (pcphpl)		989		1,956	1,350		670			1,414
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.49		0.98	0.60		0.33			0.71
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			7,023						5,645	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.159						0.194	
v_{12} (pcph)			1,119						1,094	
v_3 (pcph)										
v_{34} (pcph)			5,904						4,551	
v_{12a} (pcph)			2,809						2,258	
v_{R12a} (pcph)			3,277						2,449	
Merge Speed Index			0.39						0.33	
Merge Area Speed			56.1						57.3	
Outer Lanes Volume			2,107						1,693	
Outer Lanes Speed			59.2						60.7	
Segment Speed			57.8						59.2	
Merge v/c ratio			0.71						0.53	
Merge Density			27.3						21.5	
Merge LOS			C						C	

Location	1	2	3	4	5	6	7	8	9	10



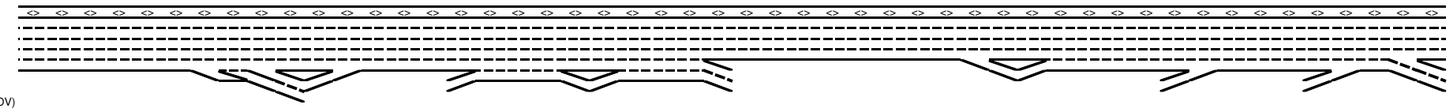
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		9,246					7,026			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.438					0.554			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		3,867					3,441			
v_3 (pcph)										
v_{34} (pcph)		5,378					3,585			
v_{12a} (pcph)		3,867					3,441			
Diverge Speed Index		0.61					0.49			
Diverge Area Speed		51.1					53.8			
Outer Lanes Volume		2,689					1,792			
Outer Lanes Speed		64.7					68.2			
Segment Speed		58.2					60.3			
Diverge v/c ratio		0.88					0.78			
Diverge Density		29.0					32.3			
Diverge LOS		D					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				9,260 1,200 8,620 1,840 10,460	8,620 460 6,560 2,520 9,080					7,550 290 5,180 2,660 7,840
On to Off Volume (vph)				*211*	*128*					*98*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				224	136					105
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				989	332					192
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,051	353					204

Location	1	2	3	4	5	6	7	8	9	10



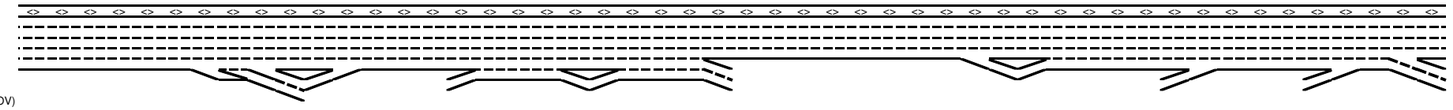
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				1,629	2,392					2,562
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				1,732	2,562					2,723
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				7,631	6,228					4,988
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				8,234	6,670					5,343

Location	1	2	3	4	5	6	7	8	9	10



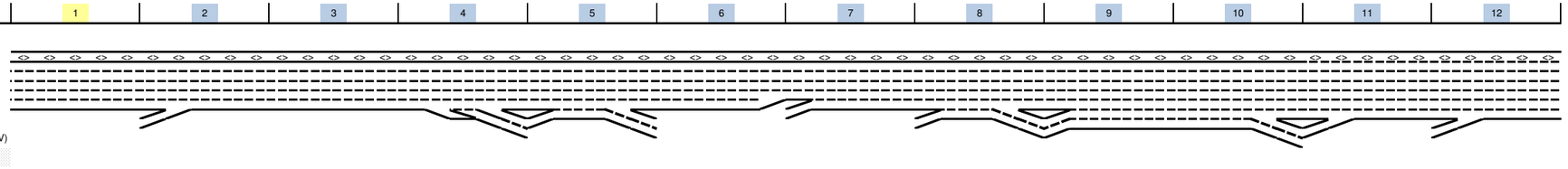
Key

<> Express Lane (HOV)

No Trucks

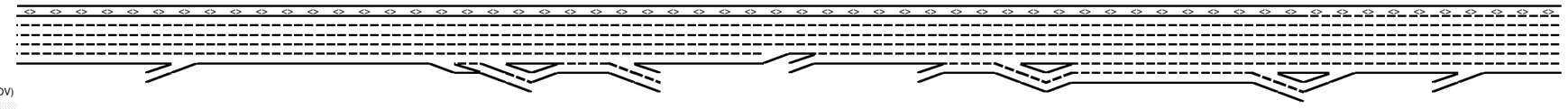
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				2,783	2,916					2,927
Non-Weave Flow				8,458	6,806					5,447
Segment Flow				11,241	9,722					8,375
Max Weave Length				5,028	4,017					6,121
Length Check				OK	OK					OK
Ideal Weave Capacity				2,128	2,209					1,920
f_{HV}				0.979	0.983					0.985
f_P				0.999	1.000					1.000
Capacity Condition 1				10,413	10,856					9,458
Capacity Condition 2				9,486	11,469					6,765
Weave v/c ratio				1.16	0.88					1.22
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				2,783	707					204
Weave LC Rate				3,401	1,342					186
Non-Weave LC Rate 1				1,934	1,618					430
Non-Weave LC Rate 2				3,575	3,207					2,904
Non-Weave LC Rate 3				168	-354					-4,172
Segment LC Rate				5,335	2,960					616
Weave Intensity Factor				0.466	0.288					0.267
Weave Speed				49.1	53.8					54.5
Non-Weave Speed				34.2	50.6					55.5
Segment Speed				37.0	51.5					55.1
Weave Density				-	37.7					-
Weave LOS				F	E					F
Summarize Segment Operations										
Segment v/c ratio	0.98	0.88	0.71	1.16	0.88	0.75	0.78	0.67	0.53	1.22
Segment Density	43.4	29.0	27.3	-	37.7	27.8	32.3	24.5	21.5	-
Segment LOS	E	D	C	F	E	D	D	C	C	F
Over Capacity				Weave						Weave

Project: John Wayne Airport Expansion **Scenario:** 2026 Plus Proposed Project
Freeway Corridor: 405S **Peak Hour:** AM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*8,940*	8,940	10,280	10,280	9,140	7,680	7,680	9,710	9,390		6,017	6,217
On Ramp Volume		*1,340*			*1,120*		*2,030*	*2,060*	*530*		*240*	*550*
Off Ramp Volume				*1,140*	*2,580*			*2,380*	*2,700*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	8,940	10,280	10,280	10,280	10,260	7,680	9,710	11,770	9,920		6,257	6,767
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	9,575	11,010	11,010	11,010	10,989	8,226	10,400	12,606	10,703		6,770	7,322
GP Flow (pcphpl)	1,915	2,202	2,202	2,202	1,832	2,056	2,080	2,101	1,529		1,354	1,464
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*35.7*	*35.7*	*35.7*	*35.7*	*44.8*	*44.8*	*44.8*	*50.1*	*50.1*		*54.0*	*54.0*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.81	0.94	0.94	0.94	0.78	0.88	0.89	0.89	0.65		0.58	0.62
Speed (mph)	61.2	55.9	55.9	55.9	62.4	58.9	58.4	58.0	64.8		65.0	64.9
Density (pcphpl)	31.3	39.4	39.4	39.4	29.4	34.9	35.6	36.2	23.6		20.8	22.6
LOS	D	E	E	E	D	D	E	E	C		C	C
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		9,586			9,798		8,226	10,400	10,140		6,515	6,738
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.82			0.83		0.88	0.89	0.86		0.55	0.57
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				9,798	8,226	8,226		10,076	7,833			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.83	0.70	0.88		0.86	0.67			

Location	1	2	3	4	5	6	7	8	9	10	11	12



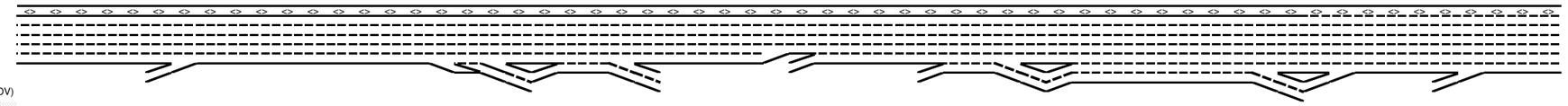
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12



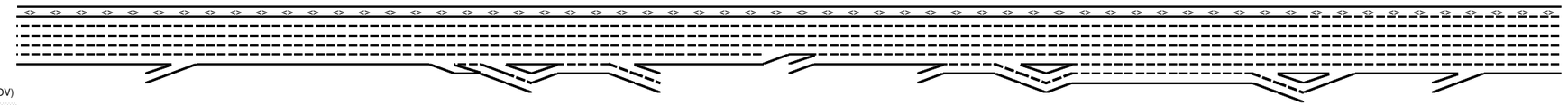
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,340			1,120		2,030	2,060	530		240	550
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,425			1,191		2,174	2,206	563		255	585
On Flow (pcphpl)		1,425			1,191		2,174	2,206	282		255	585
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.71			0.60		0.97	0.98	0.14		0.13	0.29

Location	1	2	3	4	5	6	7	8	9	10	11	12



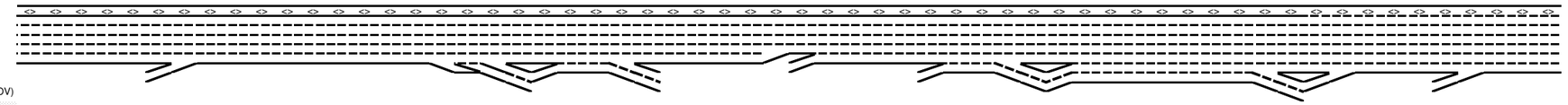
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,140	2,580			2,380	2,700			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,212	2,763			2,530	2,871			
Off Flow (pcphpl)				606	1,382			1,265	1,435			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.30	0.61			0.63	0.72			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		7,086									4,756	4,918
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.040									0.186	0.145
v_{12} (pcph)		281									884	712
v_3 (pcph)												
v_{34} (pcph)		6,804									3,872	4,207
v_{12a} (pcph)		2,834									1,902	1,967
v_{R12a} (pcph)		4,259									2,158	2,552
Merge Speed Index		0.56									0.32	0.29
Merge Area Speed		52.2									57.7	58.4
Outer Lanes Volume		2,126									1,427	1,476
Outer Lanes Speed		59.1									61.7	61.5
Segment Speed		55.4									59.9	60.0
Merge v/c ratio		0.93									0.47	0.55
Merge Density		34.6									18.9	17.7
Merge LOS		D									B	B

Location	1	2	3	4	5	6	7	8	9	10	11	12



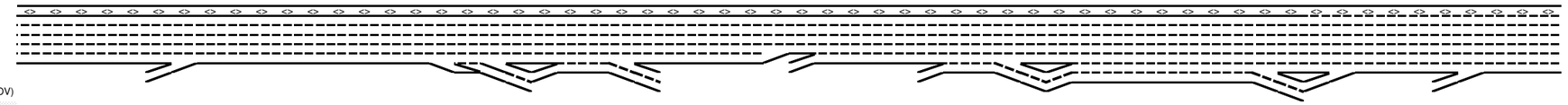
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				8,808								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.484								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				3,187								
v_3 (pcph)												
v_{34} (pcph)				5,621								
v_{12a} (pcph)				3,523								
Diverge Speed Index				0.54								
Diverge Area Speed				52.6								
Outer Lanes Volume				2,643								
Outer Lanes Speed				64.9								
Segment Speed				59.4								
Diverge v/c ratio				0.80								
Diverge Density				27.6								
Diverge LOS				C								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					9,140 1,120 7,680 2,580 10,260			9,710 2,060 9,390 2,380 11,770	9,390 530 7,220 2,700 9,920			
On to Off Volume (vph)					*282*			*417*	*144*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					299			443	153			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					838			1,643	386			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					891			1,760	410			

Location	1	2	3	4	5	6	7	8	9	10	11	12



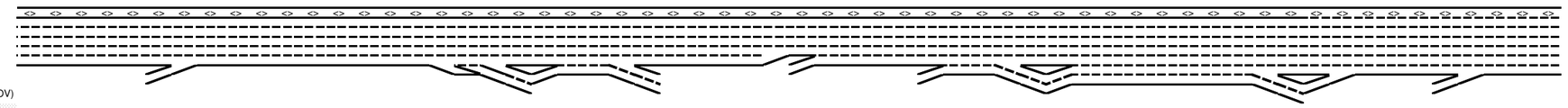
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					2,298			1,963	2,556			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					2,462			2,087	2,717			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					6,842			7,747	6,834			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					7,328			8,297	7,374			

Location	1	2	3	4	5	6	7	8	9	10	11	12



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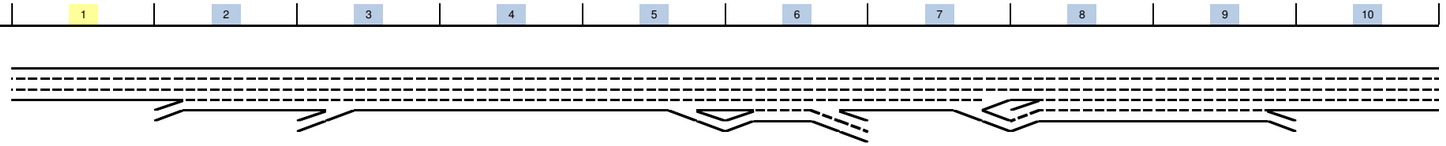
<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					3,353			3,848	3,127			
Non-Weave Flow					7,627			8,740	7,527			
Segment Flow					10,980			12,588	10,654			
Max Weave Length					5,642			5,645	3,948			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,039			1,956	2,086			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	1.000			
Capacity Condition 1					10,019			9,605	10,219			
Capacity Condition 2					7,724			7,709	11,682			
Weave v/c ratio					1.40			1.60	1.02			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					891			1,760	2,717			
Weave LC Rate					1,293			1,743	2,700			
Non-Weave LC Rate 1					1,462			1,108	859			
Non-Weave LC Rate 2					3,390			3,638	3,368			
Non-Weave LC Rate 3					-1,206			-3,384	-3,675			
Segment LC Rate					2,755			2,851	3,558			
Weave Intensity Factor					0.351			0.893	1.063			
Weave Speed					52.0			41.4	39.2			
Non-Weave Speed					48.0			40.2	35.2			
Segment Speed					49.2			40.6	36.3			
Weave Density					-			-	-			
Weave LOS					F			F	F			
Summarize Segment Operations												
Segment v/c ratio	0.81	0.93	0.94	0.80	1.40	0.88	0.89	1.60	1.02		0.47	0.55
Segment Density	31.3	34.6	39.4	27.6	-	34.9	35.6	-	-		18.9	17.7
Segment LOS	D	D	E	C	F	D	E	F	F		B	B
Over Capacity					Weave			Weave	Weave			

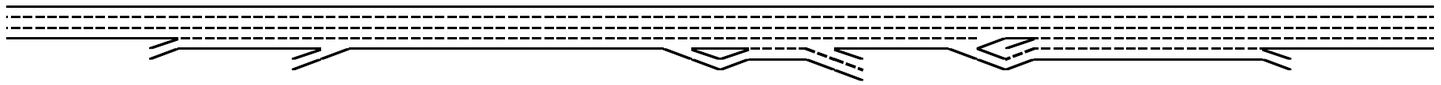
Project: John Wayne Airport Expansion **Scenario:** 2026 Plus Proposed Project
Freeway Corridor: 73N **Peak Hour:** PM



Key
<> Express Lane (HOV)
No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Define Freeway Segment										
Type	Basic	Basic	Merge	Basic	Diverge	Weave	Diverge	Weave		Basic
Length (ft)	2,645	1,500	1,500	1,300	1,500	2,675	1,500	2,500		
Accel Length			400							
Decel Length					200		200			
Mainline Volume	*4,960*	4,960	6,800	7,710	7,710	7,140	8,200	6,960		7,620
On Ramp Volume		*1,840*	*910*			*2,470*		*1,220*		
Off Ramp Volume					*570*	*1,410*	*1,240*	*560*		
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	4,960	6,800	7,710	7,710	7,710	9,610	8,200	8,180		7,620
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95
GP Lanes	3	4	4	4	4	5	4	5		4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,282	7,242	8,211	8,211	8,211	10,235	8,733	8,712		8,115
GP Flow (pcphpl)	1,761	1,811	2,053	2,053	2,053	2,047	2,183	1,742		2,029
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12		12
Shoulder Width	6	6	6	6	6	6	6	6		6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1
Measured FFS	*57.9*	*57.9*	*57.9*	*65.1*	*65.1*	*64.5*	*64.5*	*60.4*		*60.4*
FFS	65	65	65	65	65	65	65	65		65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.75	0.77	0.87	0.87	0.87	0.87	0.93	0.74		0.86
Speed (mph)	63.2	62.6	59.0	59.0	59.0	59.1	56.3	63.3		59.4
Density (pcphpl)	27.9	28.9	34.8	34.8	34.8	34.7	38.8	27.5		34.2
LOS	D	D	D	D	D	D	E	D		D
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)		5,286	7,244			7,609		7,412		
GP_{IN} Cap (pcph)		7,050	9,400			9,400		7,050		
GP_{IN} v/c ratio		0.75	0.77			0.81		1.05		
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)					7,605	8,733	7,412	8,116		
GP_{OUT} Cap (pcph)					9,400	9,400	7,050	7,050		
GP_{OUT} v/c ratio					0.81	0.93	1.05	1.15		

Location	1	2	3	4	5	6	7	8	9	10



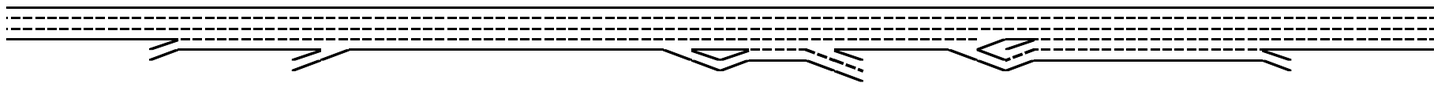
Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On

Location	1	2	3	4	5	6	7	8	9	10



Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)		1,840	910			2,470		1,220		
PHF		0.95	0.95			0.95		0.95	0.95	
Total Lanes		1	1			1		2		
Terrain		Level	Level			Level		Level	Level	
Grade %		0.0%	0.0%			0.0%		0.0%	0.0%	
Grade Length (mi)		0.00	0.00			0.00		0.00	0.00	
Truck & Bus %		2.0%	2.0%			2.0%		2.4%	3.0%	
RV %		0.0%	0.0%			0.0%		0.0%	0.0%	
E_T		1.5	1.5			1.5		1.5		
E_R		1.2	1.2			1.2		1.2		
f_{HV}		0.990	0.990			0.990		0.988		
f_P		1.00	1.00			1.00		1.00	1.00	
On Flow (pcph)		1,956	967			2,626		1,299		
On Flow (pcphpl)		1,956	967			2,626		650		
Calculate On Ramp Roadway Operations										
On Ramp Type		Right	Right			Right		Major		
On Ramp Speed (mph)		35	35			35		55		
On Ramp Cap (pcph)		2,000	2,000			2,000		4,500		
On Ramp v/c ratio		0.98	0.48			1.31		0.29		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Off Ramp Flow Rate										
Off Volume (vph)					570	1,410	1,240	560		
PHF					0.95	0.95	0.95	0.95	0.95	
Total Lanes					1	2	1	1		
Terrain					Level	Level	Level	Level	Level	
Grade %					0.0%	0.0%	0.0%	0.0%	0.0%	
Grade Length (mi)					0.00	0.00	0.00	0.00	0.00	
Truck & Bus %					2.0%	2.4%	2.4%	2.0%	3.0%	
RV %					0.0%	0.0%	0.0%	0.0%	0.0%	
E_T					1.5	1.5	1.5	1.5	1.5	
E_R					1.2	1.2	1.2	1.2	1.2	
f_{HV}					0.990	0.988	0.988	0.990	0.985	
f_P					1.00	1.00	1.00	1.00	1.00	
Off Flow (pcph)					606	1,502	1,321	595		
Off Flow (pcphpl)					606	751	1,321	595		
Calculate Off Ramp Roadway Operations										
Off Ramp Type					Right	Major	Right	Major		
Off Ramp Speed					35	55	55	55		
Off Ramp Cap (pcph)					2,000	4,500	2,200	2,250		
Off Ramp v/c ratio					0.30	0.33	0.60	0.26		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			7,244							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.589							
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.097							
v_{12} (pcph)			702							
v_3 (pcph)										
v_{34} (pcph)			6,542							
v_{12s} (pcph)			2,897							
v_{R12s} (pcph)			3,865							
Merge Speed Index			0.48							
Merge Area Speed			54.0							
Outer Lanes Volume			2,173							
Outer Lanes Speed			59.0							
Segment Speed			56.5							
Merge v/c ratio			0.84							
Merge Density			32.7							
Merge LOS			D							

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)					8,211		8,733			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)					0.527		0.481			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}					0.436		0.436			
v_{12} (pcph)					3,922		4,552			
v_3 (pcph)										
v_{34} (pcph)					4,289		4,181			
v_{12a} (pcph)					3,922		4,552			
Diverge Speed Index					0.48		-			
Diverge Area Speed					53.9		-			
Outer Lanes Volume					2,145					
Outer Lanes Speed					66.8					
Segment Speed					60.0					
Diverge v/c ratio					0.89		1.03			
Diverge Density					36.2		-			
Diverge LOS					E		F			
						A B C D A+B		A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						7,140 2,470 8,200 1,410 9,610		6,960 1,220 7,620 560 8,180		
On to Off Volume (vph)						*362*		*84*		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.0%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.990	0.985	
f_P						1.00		1.00	1.00	
On to Off Flow (pcph)						385		89		
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)						2,108		1,136		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.0%		2.4%	3.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.990		0.988	0.985	
f_P						1.00		1.00	1.00	
On to ML Flow (pcph)						2,241		1,210		

Location	1	2	3	4	5	6	7	8	9	10

Key

<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)						1,048		476		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
ML to Off Flow (pcph)						1,116		507		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)						6,092		6,484		
PHF						0.95		0.95	0.95	
Terrain						Level		Level	Level	
Grade %						0.0%		0.0%	0.0%	
Grade Length (mi)						0.00		0.00	0.00	
Truck & Bus %						2.4%		2.4%	6.0%	
RV %						0.0%		0.0%	0.0%	
E_T						1.5		1.5	1.5	
E_R						1.2		1.2	1.2	
f_{HV}						0.988		0.988	0.971	
f_P						1.00		1.00	1.00	
GP to GP Flow (pcph)						6,488		6,905		

Location	1	2	3	4	5	6	7	8	9	10

Key

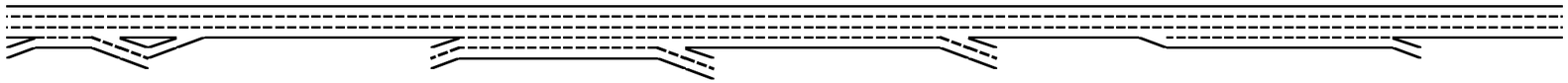
<> Express Lane (HOV)

No Trucks

Name	Lane Drop to McArthur On	McArthur On Ramp	Jamboree On Ramp	Jamboree On to Bristol N Off	Bristol N Off Ramp	Bristol N On to 55 N Off	Off Ramp to 55 S	On Ramp from 55 N to Bear Off	Bear St Off Ramp	Bear Off to Bear On
Calculate Weave Segment Operations										
Weave Type						One-sided		One-sided		
Weave Length						1,675		1,500		
Segment Lanes						4		3		
Weave Lanes						2		3		
Weave Flow (pcph)						3,356		1,718		
Non-Weave Flow						6,874		6,994		
Segment Flow						10,230		8,712		
Max Weave Length						5,887		2,941		
Length Check						OK		OK		
Ideal Weave Capacity						2,028		2,240		
f_{HV}						0.989		0.988		
f_P						0.998		0.998		
Capacity Condition 1						8,003		6,631		
Capacity Condition 2						7,218		17,516		
Weave v/c ratio						1.40		1.30		
Interchange Density						0.33		0.33		
Lane Changes On to ML						1		0		
Lane Changes ML to Off						0		2		
Lane Changes On to Off						0		0		
Min Lane Change Rate						2,241		1,015		
Weave LC Rate						2,758		1,523		
Non-Weave LC Rate 1						1,553		1,676		
Non-Weave LC Rate 2						3,222		3,249		
Non-Weave LC Rate 3						-798		-623		
Segment LC Rate						4,311		3,199		
Weave Intensity Factor						0.477		0.411		
Weave Speed						48.9		50.4		
Non-Weave Speed						36.6		43.8		
Segment Speed						39.9		44.9		
Weave Density						-		-		
Weave LOS						F		F		
Summarize Segment Operations										
Segment v/c ratio	0.75	0.77	0.84	0.87	0.89	1.40	1.03	1.30		0.86
Segment Density	27.9	28.9	32.7	34.8	36.2	-	-	-		34.2
Segment LOS	D	D	D	D	E	F	F	F		D
Over Capacity						On Ramp Roadway Weave	Out GP Lanes Diverge	In GP Lanes Out GP Lanes Weave		

Project: John Wayne Airport Expansion **Scenario:** 2026 Plus Proposed Project
Freeway Corridor: 73S **Peak Hour:** PM

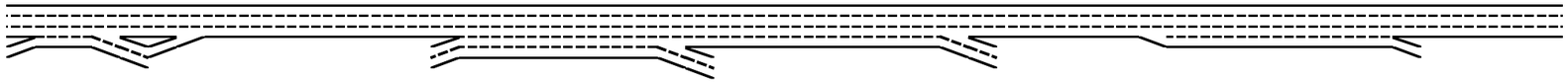
Location	2	3	4	5	6	7	8	9	10	11	12



Key
<> Express Lane (HOV)
No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Define Freeway Segment											
Type	Weave	Merge	Basic	Weave		Basic	Diverge	Basic	Basic		Basic
Length (ft)	2,700	1,500	275	2,160		2,600	1,500	1,275	1,690		
Accel Length		615									
Decel Length							145				
Mainline Volume	4,240	3,700	4,950	4,950		6,040	6,040	5,110	5,110		4,540
On Ramp Volume	*670*	*1,250*		*2,100*							
Off Ramp Volume	*1,210*			*1,010*			*930*		*570*		
Express Lane Volume											
EL On Ramp Volume											
EL Off Ramp Volume											
Calculate Flow Rate in General Purpose Lanes (GP)											
GP Volume (vph)	4,910	4,950	4,950	7,050		6,040	6,040	5,110	5,110		4,540
PHF	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95		0.95
GP Lanes	4	3	3	5		4	4	3	5		3
Terrain	Level	Level	Level	Level		Level	Level	Level	Level		Level
Grade %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00
Truck & Bus %	2.4%	2.4%	2.4%	2.4%		2.4%	2.4%	2.4%	2.4%		2.4%
RV %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
E_T	1.5	1.5	1.5	1.5		1.5	1.5	1.5	1.5		1.5
E_R	1.2	1.2	1.2	1.2		1.2	1.2	1.2	1.2		1.2
f_{HV}	0.988	0.988	0.988	0.988		0.988	0.988	0.988	0.988		0.988
f_P	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00
GP Flow (pcph)	5,229	5,272	5,272	7,508		6,433	6,433	5,442	5,442		4,835
GP Flow (pcphpl)	1,307	1,757	1,757	1,502		1,608	1,608	1,814	1,088		1,612
Calculate Speed in General Purpose Lanes											
Lane Width (ft)	12	12	12	12		12	12	12	12		12
Shoulder Width	6	6	6	6		6	6	6	6		6
TRD	2.8	2.8	2.8	2.8		2.8	2.8	2.8	2.8		2.8
f_{LW}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
f_{LC}	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0
Calc'd FFS	67.7	67.7	67.7	67.7		67.7	67.7	67.7	67.7		67.7
Measured FFS	*63.8*	*63.8*	*63.9*	*63.9*		*72.7*	*72.7*	*72.7*	*72.7*		*72.7*
FFS	65	65	65	65		65	65	65	65		65
Calculate Operations in General Purpose Lanes											
v/c ratio	0.56	0.75	0.75	0.64		0.68	0.68	0.77	0.46		0.69
Speed (mph)	65.0	63.2	63.2	64.9		64.4	64.4	62.6	65.0		64.4
Density (pcphpl)	20.1	27.8	27.8	23.2		25.0	25.0	29.0	16.7		25.0
LOS	C	D	D	C		C	C	D	B		C
Calculate Operations for Entering GP Lanes											
GP_{IN} Vol (pcph)	4,517	3,941		5,272					5,442		
GP_{IN} Cap (pcph)	7,050	7,050		7,050					7,050		
GP_{IN} v/c ratio	0.64	0.56		0.75					0.77		
Calculate Operations for Exiting GP Lanes											
GP_{OUT} Vol (pcph)	3,941			6,434			5,444		4,836		
GP_{OUT} Cap (pcph)	7,050			7,050			7,050		9,400		
GP_{OUT} v/c ratio	0.56			0.91			0.77		0.51		

Location	2	3	4	5	6	7	8	9	10	11	12



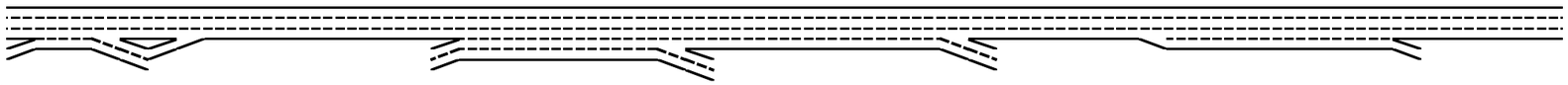
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On

Location	2	3	4	5	6	7	8	9	10	11	12



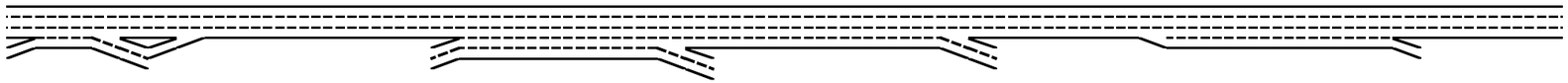
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Flow Rate in Express Lanes (EL)											
Calculate Speed in Express Lanes											
Calculate Operations in Express Lanes											
Calculate On Ramp Flow Rate											
On Volume (vph)	670	1,250		2,100							
PHF	0.95	0.95		0.95	0.95					0.95	
Total Lanes	1	1		2							
Terrain	Level	Level		Level	Level					Level	
Grade %	0.0%	0.0%		0.0%	0.0%					0.0%	
Grade Length (mi)	0.00	0.00		0.00	0.00					0.00	
Truck & Bus %	2.0%	2.4%		2.4%	2.0%					2.0%	
RV %	0.0%	0.0%		0.0%	0.0%					0.0%	
E_T	1.5	1.5		1.5							
E_R	1.2	1.2		1.2							
f_{HV}	0.990	0.988		0.988							
f_P	1.00	1.00		1.00	1.00					1.00	
On Flow (pcph)	712	1,331		2,237							
On Flow (pcphpl)	712	1,331		1,118							
Calculate On Ramp Roadway Operations											
On Ramp Type	Right	Right		Major							
On Ramp Speed (mph)	35	55		55							
On Ramp Cap (pcph)	2,000	2,200		4,500							
On Ramp v/c ratio	0.36	0.61		0.50							

Location	2	3	4	5	6	7	8	9	10	11	12



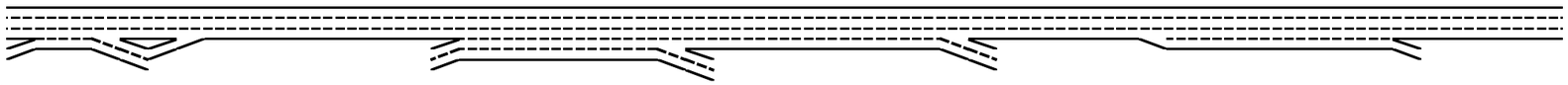
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Off Ramp Flow Rate											
Off Volume (vph)	1,210			1,010			930		570		
PHF	0.95			0.95	0.95		0.95		0.95	0.95	
Total Lanes	2			2			2		1		
Terrain	Level			Level	Level		Level		Level	Level	
Grade %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
Grade Length (mi)	0.00			0.00	0.00		0.00		0.00	0.00	
Truck & Bus %	2.4%			2.0%	2.0%		2.0%		2.0%	2.0%	
RV %	0.0%			0.0%	0.0%		0.0%		0.0%	0.0%	
E_T	1.5			1.5	1.5		1.5		1.5	1.5	
E_R	1.2			1.2	1.2		1.2		1.2	1.2	
f_{HV}	0.988			0.990	0.990		0.990		0.990	0.990	
f_P	1.00			1.00	1.00		1.00		1.00	1.00	
Off Flow (pcph)	1,289			1,074			989		606		
Off Flow (pcphpl)	644			537			494		606		
Calculate Off Ramp Roadway Operations											
Off Ramp Type	Major			Right			Right		Right		
Off Ramp Speed	55			35			35		35		
Off Ramp Cap (pcph)	4,500			4,000			4,000		2,000		
Off Ramp v/c ratio	0.29			0.27			0.25		0.30		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps											
Up Type		No									
Up Distance											
Up Flow (pcph)											
Down Type		No									
Down Distance											
Down Flow (pcph)											
Calculate Merge Influence Area Operations											
Effective v_P (pcph)		3,941									
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FM} (Eqn 13-3)		0.595									
P_{FM} (Eqn 13-4)											
P_{FM} (Eqn 13-5)											
P_{FM}		0.595									
v_{12} (pcph)		2,343									
v_3 (pcph)		1,597									
v_{34} (pcph)											
v_{12a} (pcph)		2,343									
v_{R12a} (pcph)		3,675									
Merge Speed Index		0.41									
Merge Area Speed		55.6									
Outer Lanes Volume		1,597									
Outer Lanes Speed		61.1									
Segment Speed		57.2									
Merge v/c ratio		0.80									
Merge Density		29.7									
Merge LOS		D									

Location	2	3	4	5	6	7	8	9	10	11	12



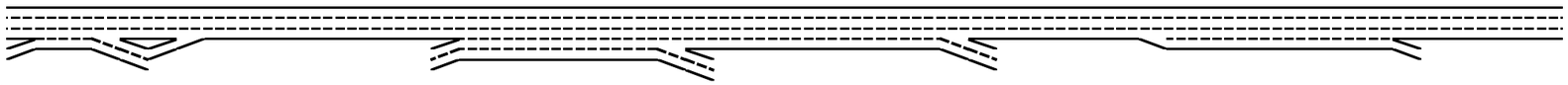
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Diverge Influence Area Operations											
Effective v_P (pcph)							6,433				
Up Ramp L_{EQ}											
Down Ramp L_{EQ}											
P_{FD} (Eqn 13-9)							0.554				
P_{FD} (Eqn 13-10)											
P_{FD} (Eqn 13-11)											
P_{FD}							0.260				
v_{12} (pcph)							2,404				
v_3 (pcph)											
v_{34} (pcph)							4,028				
v_{12a} (pcph)							2,573				
Diverge Speed Index							0.52				
Diverge Area Speed							53.1				
Outer Lanes Volume							1,930				
Outer Lanes Speed							67.7				
Segment Speed							61.0				
Diverge v/c ratio							0.58				
Diverge Density							25.1				
Diverge LOS							C				
	A B C D A+B			A B C D A+B							
Calculate On Ramp to C	4,240 670 3,700 1,210 4,910			4,950 2,100 6,040 1,010 7,050							
On to Off Volume (vph)	*165*			*301*							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to Off Flow (pcph)	176			320							
Calculate On Ramp to Mainline Flow Rate for Weave Segments											
On to ML Volume (vph)	505			1,799							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.0%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.990			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
On to ML Flow (pcph)	537			1,916							

Location	2	3	4	5	6	7	8	9	10	11	12



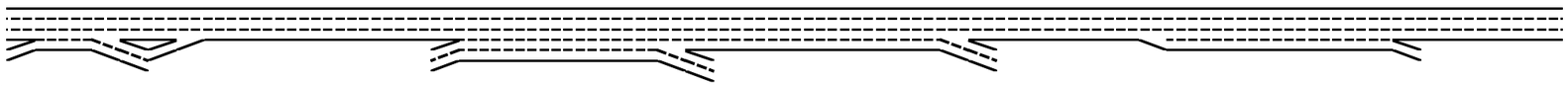
Key

<> Express Lane (HOV)

No Trucks

Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Mainline to Off Ramp Flow Rate for Weave Segments											
ML to Off Volume (vph)	1,045			709							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.0%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.990	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
ML to Off Flow (pcph)	1,113			754							
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments											
GP to GP Volume (vph)	3,195			4,241							
PHF	0.95			0.95	0.95					0.95	
Terrain	Level			Level	Level					Level	
Grade %	0.0%			0.0%	0.0%					0.0%	
Grade Length (mi)	0.00			0.00	0.00					0.00	
Truck & Bus %	2.4%			2.4%	2.0%					2.0%	
RV %	0.0%			0.0%	0.0%					0.0%	
E_T	1.5			1.5	1.5					1.5	
E_R	1.2			1.2	1.2					1.2	
f_{HV}	0.988			0.988	0.990					0.990	
f_P	1.00			1.00	1.00					1.00	
GP to GP Flow (pcph)	3,403			4,517							

Location	2	3	4	5	6	7	8	9	10	11	12



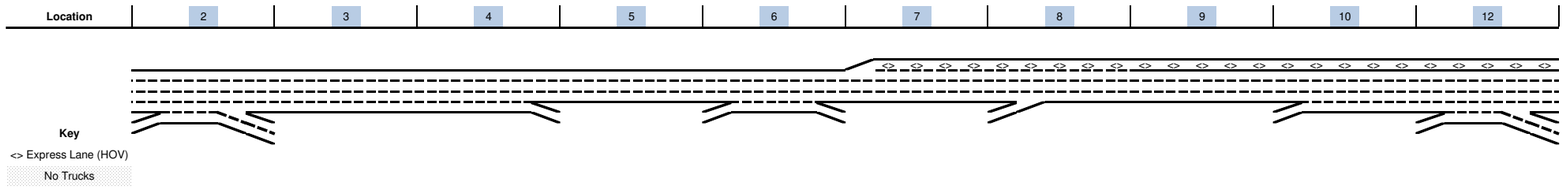
Key

<> Express Lane (HOV)

No Trucks

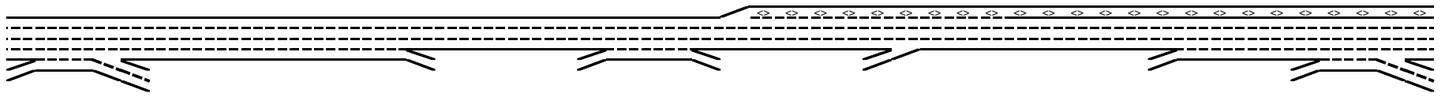
Name	Bear St On Ramp to 55 S Off	On Ramp from 55 N	55 N On to 55 S On	On Ramp from 55 S to Campus Off	Part of Previous	Campus/Bristol S Off to Jamboree Off	Jamboree/Bristol S Off Ramp	Jamboree Off to Lane Add	Add Lane/ University Off	Part of Previous	University Off to Jamboree On
Calculate Weave Segment Operations											
Weave Type	One-sided			One-Sided							
Weave Length	1,700			1,160							
Segment Lanes	3			3							
Weave Lanes	2			3							
Weave Flow (pcph)	1,650			2,670							
Non-Weave Flow	3,578			4,836							
Segment Flow	5,228			7,506							
Max Weave Length	5,751			4,623							
Length Check	OK			OK							
Ideal Weave Capacity	2,040			2,085							
f_{HV}	0.989			0.989							
f_P	0.999			0.997							
Capacity Condition 1	6,044			6,166							
Capacity Condition 2	7,512			9,699							
Weave v/c ratio	0.85			1.20							
Interchange Density	0.33			0.333333333							
Lane Changes On to ML	1			0							
Lane Changes ML to Off	0			1							
Lane Changes On to Off	0			0							
Min Lane Change Rate	537			754							
Weave LC Rate	1,123			1,130							
Non-Weave LC Rate 1	1,081			1,047							
Non-Weave LC Rate 2	2,487			2,768							
Non-Weave LC Rate 3	-1,293			-1,898							
Segment LC Rate	2,204			2,177							
Weave Intensity Factor	0.277			0.371							
Weave Speed	54.1			51.5							
Non-Weave Speed	52.8			47.6							
Segment Speed	53.2			48.9							
Weave Density	32.8			-							
Weave LOS	D			F							
Summarize Segment Operations											
Segment v/c ratio	0.85	0.80	0.75	1.20		0.68	0.58	0.77	0.46		0.69
Segment Density	32.8	29.7	27.8	-		25.0	25.1	29.0	16.7		25.0
Segment LOS	D	D	D	F		C	C	D	B		C
Over Capacity				Weave							

Project: John Wayne Airport Expansion **Scenario:** 2026 Plus Proposed Project
Freeway Corridor: 55N **Peak Hour:** PM



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Define Freeway Segment										
Type	Weave	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Basic	Weave
Length (ft)	1,785	630	1,500	600	1,400	2,000	1,500	2,880	1,500	2,965
Accel Length							1,080			
Decel Length			1,500							
Mainline Volume	4,100	2,640	2,640	2,210	2,210	2,490	2,490	3,070	3,070	3,980
On Ramp Volume	*980*				*1,410*		*580*		*910*	*1,210*
Off Ramp Volume	*2,440*		*430*		*1,130*					*1,060*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	5,080	2,640	2,640	2,210	3,620	2,490	3,070	3,070	3,980	5,190
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	4	4	3	4	3	3	3	4	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	2.1%	2.1%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.990	0.990
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	5,441	2,828	2,828	2,367	3,877	2,667	3,288	3,288	4,233	5,521
GP Flow (pcphpl)	1,088	707	707	789	969	889	1,096	1,096	1,058	1,104
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
Measured FFS	*63.2*	*63.2*	*63.2*	*62.3*	*60.5*	*60.5*	*13.5*	*13.5*	*13.5*	*14.0*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										

Location	2	3	4	5	6	7	8	9	10	12

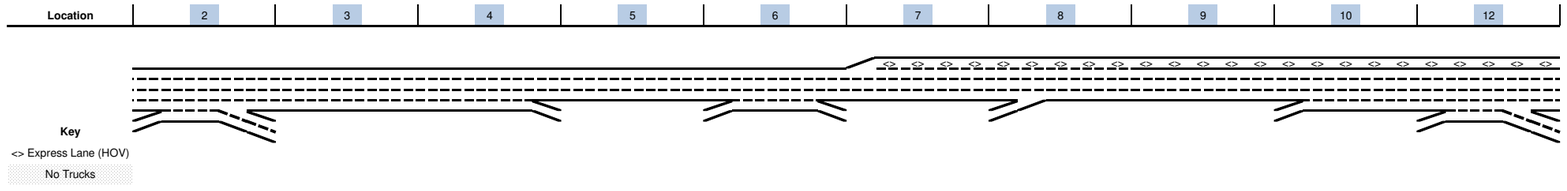


Key

<> Express Lane (HOV)

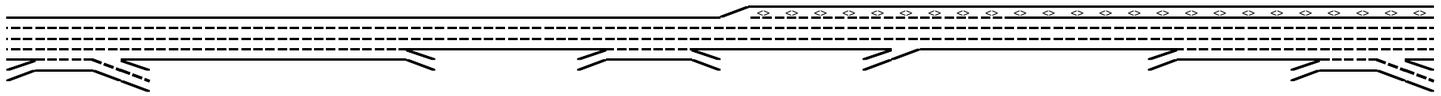
No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)	980				1,410		580		910	1,210
PHF	0.95				0.95		0.95		0.95	0.95
Total Lanes	1				1		1		1	1
Terrain	Level				Level		Level		Level	Level
Grade %	0.0%				0.0%		0.0%		0.0%	0.0%
Grade Length (mi)	0.00				0.00		0.00		0.00	0.00
Truck & Bus %	2.0%				3.5%		2.0%		2.1%	2.1%
RV %	0.0%				0.0%		0.0%		0.0%	0.0%
E_T	1.5				1.5		1.5		1.5	1.5
E_R	1.2				1.2		1.2		1.2	1.2
f_{HV}	0.990				0.983		0.990		0.990	0.990
f_P	1.00				1.00		1.00		1.00	1.00
On Flow (pcph)	1,042				1,510		617		968	1,287
On Flow (pcphpl)	1,042				1,510		617		968	1,287
Calculate On Ramp Roadway Operations										
On Ramp Type	Right				Major		Right		Right	Major
On Ramp Speed (mph)	35				55		35		35	55
On Ramp Cap (pcph)	2,000				2,250		2,000		2,000	2,250
On Ramp v/c ratio	0.52				0.67		0.31		0.48	0.57



Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)	2,440		430		1,130					1,210
PHF	0.95		0.95		0.95					0.95
Total Lanes	2		1		1					2
Terrain	Level		Level		Level					Level
Grade %	0.0%		0.0%		0.0%					0.0%
Grade Length (mi)	0.00		0.00		0.00					0.00
Truck & Bus %	3.5%		2.0%		3.5%					2.1%
RV %	0.0%		0.0%		0.0%					0.0%
E_T	1.5		1.5		1.5					1.5
E_R	1.2		1.2		1.2					1.2
f_{HV}	0.983		0.990		0.983					0.990
f_P	1.00		1.00		1.00					1.00
Off Flow (pcph)	2,613		457		1,210					1,287
Off Flow (pcphpl)	1,307		457		1,210					644
Calculate Off Ramp Roadway Operations										
Off Ramp Type	Major		Right		Major					Right
Off Ramp Speed	55		35		55					35
Off Ramp Cap (pcph)	4,500		2,000		2,250					4,000
Off Ramp v/c ratio	0.58		0.23		0.54					0.32
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type							No			
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)							2,672			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)							0.608			
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}							0.608			
v_{12} (pcph)							1,624			
v_3 (pcph)							1,048			
v_{34} (pcph)										
v_{12a} (pcph)							1,624			
v_{R12a} (pcph)							2,240			
Merge Speed Index							0.28			
Merge Area Speed							58.5			
Outer Lanes Volume							1,048			
Outer Lanes Speed							63.0			
Segment Speed							59.9			
Merge v/c ratio							0.49			
Merge Density							15.9			
Merge LOS							B			

Location	2	3	4	5	6	7	8	9	10	12



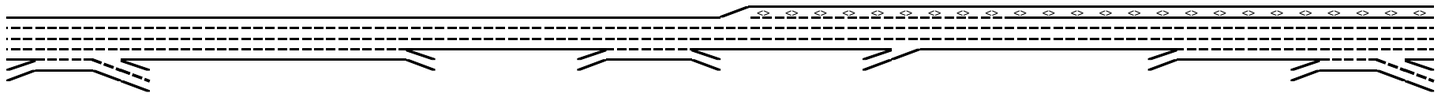
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)			2,828							
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)			0.668							
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}			0.436							
v_{12} (pcph)			1,491							
v_3 (pcph)										
v_{34} (pcph)			1,337							
v_{12a} (pcph)			1,491							
Diverge Speed Index			0.47							
Diverge Area Speed			54.2							
Outer Lanes Volume			668							
Outer Lanes Speed			71.3							
Segment Speed			61.1							
Diverge v/c ratio			0.34							
Diverge Density			3.6							
Diverge LOS			A							
	A B C D A+B				A B C D A+B					A B C D A+B
Calculate On Ramp to C	4,100 980 2,640 2,440 5,080				2,210 1,410 2,490 1,130 3,620					3,980 1,210 4,130 1,060 5,190
On to Off Volume (vph)	*471*				*440*					*247*
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				2.0%					2.0%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.990					0.990
f_P	1.00				1.00					1.00
On to Off Flow (pcph)	500				468					263
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)	509				970					963
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	2.0%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.990				0.983					0.990
f_P	1.00				1.00					1.00
On to ML Flow (pcph)	541				1,039					1,024

Location	2	3	4	5	6	7	8	9	10	12



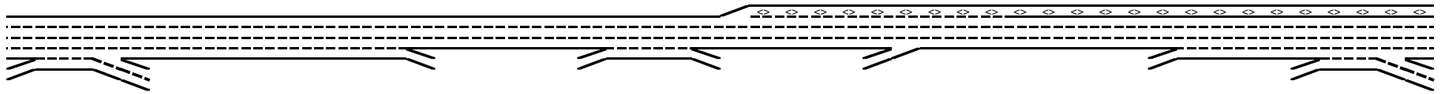
Key

<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)	1,969				690					963
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
ML to Off Flow (pcph)	2,109				739					1,024
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)	2,131				1,520					3,017
PHF	0.95				0.95					0.95
Terrain	Level				Level					Level
Grade %	0.0%				0.0%					0.0%
Grade Length (mi)	0.00				0.00					0.00
Truck & Bus %	3.5%				3.5%					2.1%
RV %	0.0%				0.0%					0.0%
E_T	1.5				1.5					1.5
E_R	1.2				1.2					1.2
f_{HV}	0.983				0.983					0.990
f_P	1.00				1.00					1.00
GP to GP Flow (pcph)	2,282				1,628					3,209

Location	2	3	4	5	6	7	8	9	10	12



Key

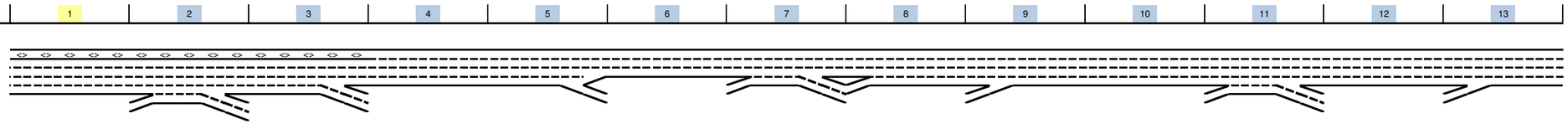
<> Express Lane (HOV)

No Trucks

Name	Fair/Del Mar/Newport On to 73 Off	73 Off to Baker Off	Baker Off Ramp	Baker Off to 73 On	On Ramp from 73 N to Off to 405 S	HOV Add Lane to Paularino On	Paularino On Ramp	Paularino On to 405 S On	On Ramp from 405 S to 405 N On	On Ramp from 405 N to McArthur Off
Calculate Weave Segment Operations										
Weave Type	One-sided				One-sided					One-sided
Weave Length	785				400					1,965
Segment Lanes	4				3					4
Weave Lanes	2				2					2
Weave Flow (pcph)	2,651				1,778					2,048
Non-Weave Flow	2,783				2,096					3,472
Segment Flow	5,433				3,874					5,520
Max Weave Length	7,685				7,350					6,359
Length Check	OK				OK					OK
Ideal Weave Capacity	1,822				1,818					2,014
f_{HV}	0.984				0.984					0.990
f_P	0.999				0.995					0.998
Capacity Condition 1	7,166				5,341					7,957
Capacity Condition 2	4,837				5,121					6,389
Weave v/c ratio	1.10				0.74					0.85
Interchange Density	0.333333333				0.333333333					0.333333333
Lane Changes On to ML	1				1					1
Lane Changes ML to Off	0				1					0
Lane Changes On to Off	0				0					0
Min Lane Change Rate	541				1,778					1,024
Weave LC Rate	712				1,857					1,654
Non-Weave LC Rate 1	228				71					1,010
Non-Weave LC Rate 2	2,310				2,156					2,463
Non-Weave LC Rate 3	-3,701				-4,011					-1,388
Segment LC Rate	940				1,928					2,664
Weave Intensity Factor	0.260				0.782					0.287
Weave Speed	54.7				43.1					53.8
Non-Weave Speed	54.6				46.0					51.0
Segment Speed	54.6				44.6					52.0
Weave Density	-				28.9					26.5
Weave LOS	F				D					C
Summarize Segment Operations										
Segment v/c ratio	1.10	0.30	0.34	0.34	0.74	0.38	0.49	0.47	0.45	0.85
Segment Density	-	10.9	3.6	12.1	28.9	13.7	15.9	16.9	16.3	26.5
Segment LOS	F	A	A	B	D	B	B	B	B	C
Over Capacity	Weave									

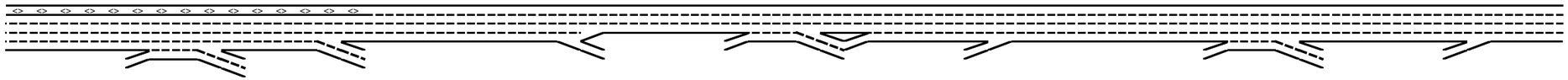
Project: John Wayne Airport Expansion **Scenario:** 2026 Plus Proposed Project

Freeway Corridor: 55S **Peak Hour:** PM



Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Define Freeway Segment													
Type	Basic	Weave	Diverge	Basic	Diverge	Basic	Weave	Basic	Merge	Basic	Weave	Basic	Merge
Length (ft)	200	2,935	1,500	1,600	1,500	1,800	3,265	1,500	1,500	675	2,040	4,310	1,500
Accel Length									650				550
Decel Length			200		185								
Mainline Volume	*8,020*	8,020	7,250	6,180	6,180	5,540	5,540	5,120	5,740	6,980	6,980	6,430	6,430
On Ramp Volume		*910*					*1,680*	*620*	*1,240*		*1,210*		*260*
Off Ramp Volume		*1,680*	*1,070*		*640*		*2,100*				*1,760*		
Express Lane Volume													
EL On Ramp Volume													
EL Off Ramp Volume													
Calculate Flow Rate in General Purpose Lanes (GP)													
GP Volume (vph)	8,020	8,930	7,250	6,180	6,180	5,540	7,220	5,740	6,980	6,980	8,190	6,430	6,690
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	4	5	4	4	4	3	4	4	4	4	5	4	4
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	2.1%	2.1%	2.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.990	0.990	0.990	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,531	9,499	7,712	6,619	6,619	5,934	7,733	6,148	7,476	7,476	8,772	6,887	7,165
GP Flow (pcphpl)	2,133	1,900	1,928	1,655	1,655	1,978	1,933	1,537	1,869	1,869	1,754	1,722	1,791
Calculate Speed in General Purpose Lanes													
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6	6	6	6
TRD	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
Measured FFS	*55.7*	*55.7*	*63.9*	*63.9*	*63.9*	*63.9*	*58.0*	*51.0*	*51.0*	*51.0*	*51.0*	*65.1*	*65.1*
FFS	65	65	65	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes													
v/c ratio	0.91	0.81	0.82	0.70	0.70	0.84	0.82	0.65	0.80	0.80	0.75	0.73	0.76
Speed (mph)	57.4	61.5	61.0	64.1	64.1	60.3	61.0	64.7	61.9	61.9	63.2	63.5	62.8
Density (pcphpl)	37.2	30.9	31.6	25.8	25.8	32.8	31.7	23.7	30.2	30.2	27.8	27.1	28.5
LOS	E	D	D	C	C	D	D	C	D	D	D	D	D
Calculate Operations for Entering GP Lanes													
GP_{IN} Vol (pcph)		8,531					5,934	5,489	6,148		7,476		6,889
GP_{IN} Cap (pcph)		9,400					7,050	7,050	9,400		9,400		9,400
GP_{IN} v/c ratio		0.91					0.84	0.78	0.65		0.80		0.73
Calculate Operations for Exiting GP Lanes													
GP_{OUT} Vol (pcph)		7,712	6,574		5,939		5,484				6,901		
GP_{OUT} Cap (pcph)		9,400	7,050		7,050		7,050				9,400		
GP_{OUT} v/c ratio		0.82	0.93		0.84		0.78				0.73		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



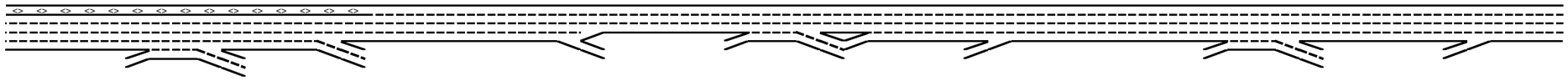
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



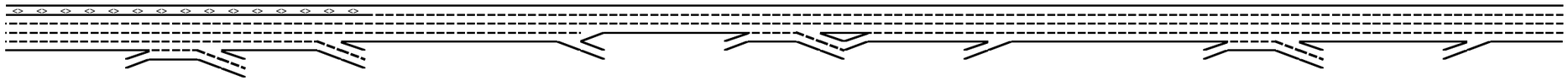
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Flow Rate in Express Lanes (EL)													
Calculate Speed in Express Lanes													
Calculate Operations in Express Lanes													
Calculate On Ramp Flow Rate													
On Volume (vph)		910					1,680	620	1,240		1,210		260
PHF		0.95					0.95	0.95	0.95		0.95		0.95
Total Lanes		1					1	1	1		1		1
Terrain		Level					Level	Level	Level		Level		Level
Grade %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
Grade Length (mi)		0.00					0.00	0.00	0.00		0.00		0.00
Truck & Bus %		2.0%					3.5%	2.0%	3.5%		3.5%		2.0%
RV %		0.0%					0.0%	0.0%	0.0%		0.0%		0.0%
E_T		1.5					1.5	1.5	1.5		1.5		1.5
E_R		1.2					1.2	1.2	1.2		1.2		1.2
f_{HV}		0.990					0.983	0.990	0.983		0.983		0.990
f_P		1.00					1.00	1.00	1.00		1.00		1.00
On Flow (pcph)		967					1,799	659	1,328		1,296		276
On Flow (pcphpl)		967					1,799	659	1,328		1,296		276
Calculate On Ramp Roadway Operations													
On Ramp Type		Right					Major	Right	Right		Major		Right
On Ramp Speed (mph)		35					55	35	55		55		35
On Ramp Cap (pcph)		2,000					2,250	2,000	2,200		2,250		2,000
On Ramp v/c ratio		0.48					0.80	0.33	0.60		0.58		0.14

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



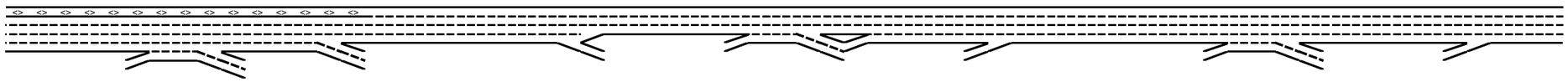
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Off Ramp Flow Rate													
Off Volume (vph)		1,680	1,070		640		2,100				1,760		
PHF		0.95	0.95		0.95		0.95				0.95		
Total Lanes		2	2		1		2				2		
Terrain		Level	Level		Level		Level				Level		
Grade %		0.0%	0.0%		0.0%		0.0%				0.0%		
Grade Length (mi)		0.00	0.00		0.00		0.00				0.00		
Truck & Bus %		2.1%	2.1%		2.0%		3.5%				2.0%		
RV %		0.0%	0.0%		0.0%		0.0%				0.0%		
E_T		1.5	1.5		1.5		1.5				1.5		
E_R		1.2	1.2		1.2		1.2				1.2		
f_{HV}		0.990	0.990		0.990		0.983				0.990		
f_P		1.00	1.00		1.00		1.00				1.00		
Off Flow (pcph)		1,787	1,138		680		2,249				1,871		
Off Flow (pcphpl)		893	569		680		1,125				936		
Calculate Off Ramp Roadway Operations													
Off Ramp Type		Major	Major		Right		Major				Right		
Off Ramp Speed		55	55		35		55				35		
Off Ramp Cap (pcph)		4,500	4,500		2,000		4,500				4,000		
Off Ramp v/c ratio		0.40	0.25		0.34		0.50				0.47		
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps													
Up Type													
Up Distance													
Up Flow (pcph)													
Down Type													
Down Distance													
Down Flow (pcph)													
Calculate Merge Influence Area Operations													
Effective v_P (pcph)									6,148				6,889
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FM} (Eqn 13-3)									0.596				0.593
P_{FM} (Eqn 13-4)													
P_{FM} (Eqn 13-5)													
P_{FM}									0.052				0.183
v_{12} (pcph)									318				1,262
v_3 (pcph)													
v_{34} (pcph)									5,829				5,627
v_{12a} (pcph)									2,459				2,756
v_{R12a} (pcph)									3,787				3,032
Merge Speed Index									0.42				0.36
Merge Area Speed									55.3				56.6
Outer Lanes Volume									1,844				2,067
Outer Lanes Speed									60.2				59.4
Segment Speed									57.6				58.2
Merge v/c ratio									0.82				0.66
Merge Density									30.3				25.5
Merge LOS									D				C

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



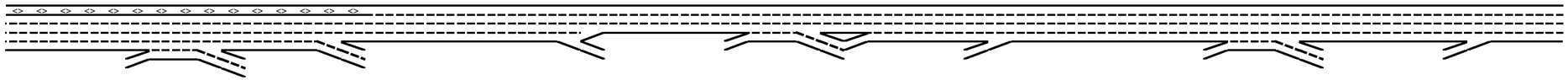
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Diverge Influence Area Operations													
Effective v_P (pcph)			7,712		6,619								
Up Ramp L_{EQ}													
Down Ramp L_{EQ}													
P_{FD} (Eqn 13-9)			0.515		0.563								
P_{FD} (Eqn 13-10)													
P_{FD} (Eqn 13-11)													
P_{FD}			0.260		0.436								
v_{12} (pcph)			2,847		3,270								
v_3 (pcph)													
v_{34} (pcph)			4,864		3,349								
v_{12a} (pcph)			3,085		3,270								
Diverge Speed Index			0.27		0.49								
Diverge Area Speed			58.8		53.7								
Outer Lanes Volume			2,314		1,675								
Outer Lanes Speed			66.2		68.7								
Segment Speed			63.0		60.4								
Diverge v/c ratio			0.70		0.74								
Diverge Density			33.7		30.7								
Diverge LOS			D		D								
		A B C D A+B					A B C D A+B				A B C D A+B		
Calculate On Ramp to Off Ramp Flow Rate for Wea		8,020 910 7,250 1,680 8,930					5,540 1,680 5,120 2,100 7,220				6,980 1,210 6,430 1,760 8,190		
On to Off Volume (vph)		*171*					*489*				*260*		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					2.0%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.990				0.990		
f_P		1.00					1.00				1.00		
On to Off Flow (pcph)		182					520				276		
Calculate On Ramp to Mainline Flow Rate for Weave Segments													
On to ML Volume (vph)		739					1,191				950		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.0%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
On to ML Flow (pcph)		785					1,276				1,017		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



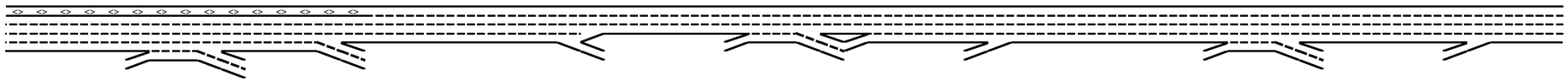
Key

<> Express Lane (HOV)

No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments													
ML to Off Volume (vph)		1,509					1,611				1,500		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				2.0%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.990		
f_P		1.00					1.00				1.00		
ML to Off Flow (pcph)		1,605					1,726				1,595		
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments													
GP to GP Volume (vph)		6,511					3,929				5,480		
PHF		0.95					0.95				0.95		
Terrain		Level					Level				Level		
Grade %		0.0%					0.0%				0.0%		
Grade Length (mi)		0.00					0.00				0.00		
Truck & Bus %		2.1%					3.5%				3.5%		
RV %		0.0%					0.0%				0.0%		
E_T		1.5					1.5				1.5		
E_R		1.2					1.2				1.2		
f_{HV}		0.990					0.983				0.983		
f_P		1.00					1.00				1.00		
GP to GP Flow (pcph)		6,926					4,208				5,869		

Location	1	2	3	4	5	6	7	8	9	10	11	12	13



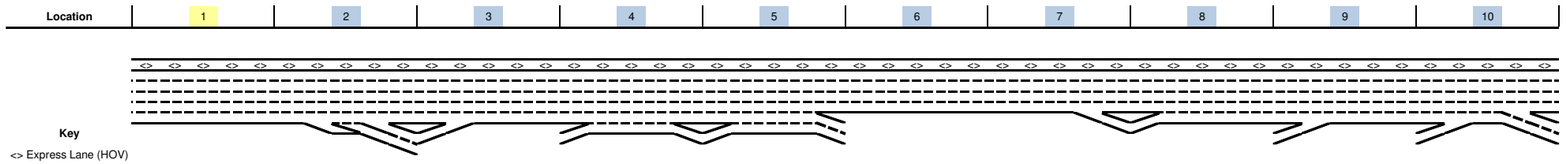
Key

<> Express Lane (HOV)

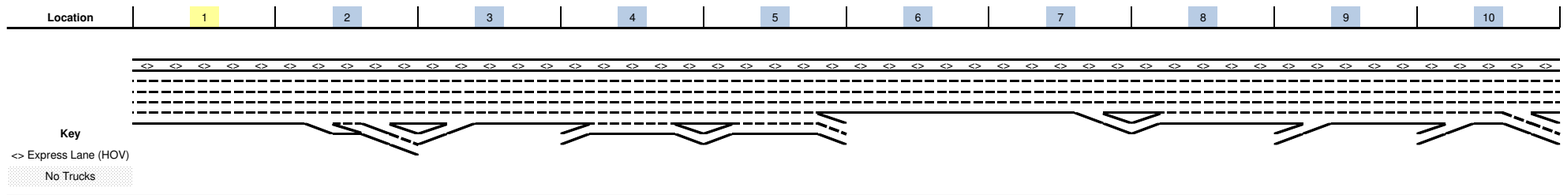
No Trucks

Name	McArthur W On to McArthur E On	McArthur E On to Off to 405 S	Off Ramp to 405 N	405 N Off to Paularino Off	Paularino Off Ramp	Lane Drop	On from 405 N to Off to 73 S	Baker On Ramp	On Ramp from 73 N	73 N On to 73 S On	73 S On to Newport S/Mesa Off	Newport S/Mesa Off to Newport S On	Newport S/Fair On Ramp
Calculate Weave Segment Operations													
Weave Type		One-sided					One-sided				One-sided		
Weave Length		1,935					2,265				1,040		
Segment Lanes		4					3				4		
Weave Lanes		2					2				2		
Weave Flow (pcph)		2,390					3,002				2,612		
Non-Weave Flow		7,108					4,727				6,146		
Segment Flow		9,498					7,729				8,758		
Max Weave Length		5,071					6,551				5,565		
Length Check		OK					OK				OK		
Ideal Weave Capacity		2,110					2,022				2,004		
f_{HV}		0.990					0.983				0.984		
f_P		0.999					0.997				0.998		
Capacity Condition 1		8,346					5,948				7,874		
Capacity Condition 2		9,430					6,059				7,905		
Weave v/c ratio		1.13					1.27				1.09		
Interchange Density		0.333333333					0.333333333				0.333333333		
Lane Changes On to ML		1					1				1		
Lane Changes ML to Off		0					0				0		
Lane Changes On to Off		0					0				0		
Min Lane Change Rate		785					1,276				1,017		
Weave LC Rate		1,404					2,083				1,287		
Non-Weave LC Rate 1		1,743					1,624				1,059		
Non-Weave LC Rate 2		3,274					2,743				3,060		
Non-Weave LC Rate 3		-240					-1				-2,285		
Segment LC Rate		3,147					3,706				2,346		
Weave Intensity Factor		0.332					0.333				0.429		
Weave Speed		52.5					52.5				50.0		
Non-Weave Speed		47.9					43.4				47.2		
Segment Speed		49.0					46.6				48.0		
Weave Density		-					-				-		
Weave LOS		F					F				F		
Summarize Segment Operations													
Segment v/c ratio	0.91	1.13	0.70	0.70	0.74	0.84	1.27	0.65	0.82	0.80	1.09	0.73	0.66
Segment Density	37.2	-	33.7	25.8	30.7	32.8	-	23.7	30.3	30.2	-	27.1	25.5
Segment LOS	E	F	D	C	D	D	F	C	D	D	F	D	C
Over Capacity		Weave					Weave				Weave		

Project: John Wayne Airport Expansion **Scenario:** 2026 Plus Proposed Project
Freeway Corridor: 405N **Peak Hour:** PM



Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Define Freeway Segment										
Type	Basic	Diverge	Merge	Weave	Weave	Basic	Diverge	Basic	Merge	Weave
Length (ft)	2,700	1,500	1,500	3,130	3,175	2,675	1,500	1,500	1,500	1,500
Accel Length			560						475	
Decel Length		945					170			
Mainline Volume	*7,680*	7,680	6,630	7,390	7,750	6,340	6,340	5,740	6,850	7,140
On Ramp Volume			*760*	*1,130*	*1,360*			*1,110*	*290*	*540*
Off Ramp Volume		*1,050*		*770*	*2,770*		*600*			*2,750*
Express Lane Volume										
EL On Ramp Volume										
EL Off Ramp Volume										
Calculate Flow Rate in General Purpose Lanes (GP)										
GP Volume (vph)	7,680	7,680	7,390	8,520	9,110	6,340	6,340	6,850	7,140	7,680
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
GP Lanes	5	5	5	6	6	4	4	5	5	6
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	5.6%	5.6%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
f_{HV}	0.973	0.973	0.976	0.976	0.983	0.983	0.983	0.983	0.983	0.983
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	8,311	8,311	7,973	9,193	9,757	6,790	6,790	7,337	7,647	8,226
GP Flow (pcphpl)	1,662	1,662	1,595	1,532	1,626	1,698	1,698	1,467	1,529	1,371
Calculate Speed in General Purpose Lanes										
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12
Shoulder Width	6	6	6	6	6	6	6	6	6	6
TRD	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calc'd FFS	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
Measured FFS	*23.5*	*23.5*	*22.3*	*20.6*	*26.8*	*26.8*	*26.8*	*26.8*	*11.4*	*11.3*
FFS	65	65	65	65	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes										
v/c ratio	0.71	0.71	0.68	0.65	0.69	0.72	0.72	0.62	0.65	0.58
Speed (mph)	64.0	64.0	64.5	64.8	64.3	63.7	63.7	64.9	64.8	65.0
Density (pcphpl)	26.0	26.0	24.7	23.7	25.3	26.6	26.6	22.6	23.6	21.1
LOS	C	C	C	C	C	D	D	C	C	C
Calculate Operations for Entering GP Lanes										
GP_{IN} Vol (pcph)			7,165	7,991	8,311			6,148	7,339	7,652
GP_{IN} Cap (pcph)			11,750	11,750	11,750			9,400	11,750	11,750
GP_{IN} v/c ratio			0.61	0.68	0.71			0.65	0.62	0.65
Calculate Operations for Exiting GP Lanes										
GP_{OUT} Vol (pcph)		7,194		8,374	6,790		6,153			5,302
GP_{OUT} Cap (pcph)		11,750		11,750	9,400		9,400			9,400
GP_{OUT} v/c ratio		0.61		0.71	0.72		0.65			0.56


Location
1
2
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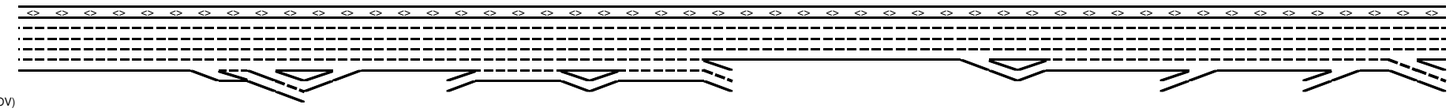
10
Key
<> Express Lane (HOV)
No Trucks
Name
Culver On to Jamboree Off
Jamboree Off Ramp
Jamboree N On Ramp
Jamboree S On to McArthur Off
McArthur On to 55 N&S Off
55 Off to Bristol Off
Bristol/Ave Arts Off Ramp
On Ramp from 55 S
Bristol N On Ramp
Bristol S On Ramp to S Coast Off

Location	1	2	3	4	5	6	7	8	9	10



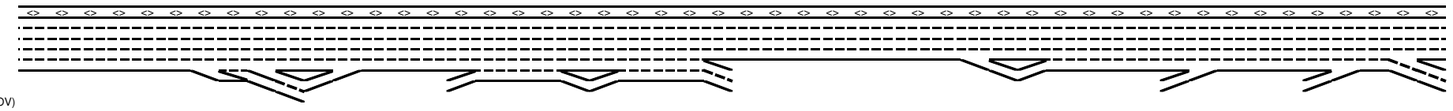
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Flow Rate in Express Lanes (EL)										
Calculate Speed in Express Lanes										
Calculate Operations in Express Lanes										
Calculate On Ramp Flow Rate										
On Volume (vph)			760	1,130	1,360			1,110	290	540
PHF			0.95	0.95	0.95			0.95	0.95	0.95
Total Lanes			1	1	1			1	1	1
Terrain			Level	Level	Level			Level	Level	Level
Grade %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
Grade Length (mi)			0.00	0.00	0.00			0.00	0.00	0.00
Truck & Bus %			2.0%	2.0%	2.0%			3.5%	2.0%	2.0%
RV %			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%
E_T			1.5	1.5	1.5			1.5	1.5	1.5
E_R			1.2	1.2	1.2			1.2	1.2	1.2
f_{HV}			0.990	0.990	0.990			0.983	0.990	0.990
f_P			1.00	1.00	1.00			1.00	1.00	1.00
On Flow (pcph)			808	1,201	1,446			1,189	308	574
On Flow (pcphpl)			808	1,201	1,446			1,189	308	574
Calculate On Ramp Roadway Operations										
On Ramp Type			Right	Right	Right			Major	Right	Right
On Ramp Speed (mph)			35	35	35			55	35	35
On Ramp Cap (pcph)			2,000	2,000	2,000			2,250	2,000	2,000
On Ramp v/c ratio			0.40	0.60	0.72			0.53	0.15	0.29

Location	1	2	3	4	5	6	7	8	9	10



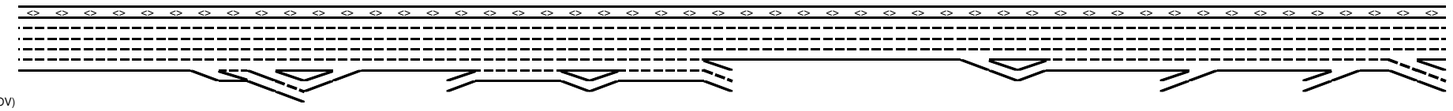
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Off Ramp Flow Rate										
Off Volume (vph)		1,050		770	2,770		600			2,750
PHF		0.95		0.95	0.95		0.95			0.95
Total Lanes		2		1	2		1			2
Terrain		Level		Level	Level		Level			Level
Grade %		0.0%		0.0%	0.0%		0.0%			0.0%
Grade Length (mi)		0.00		0.00	0.00		0.00			0.00
Truck & Bus %		2.0%		2.0%	3.5%		2.0%			2.0%
RV %		0.0%		0.0%	0.0%		0.0%			0.0%
E_T		1.5		1.5	1.5		1.5			1.5
E_R		1.2		1.2	1.2		1.2			1.2
f_{HV}		0.990		0.990	0.983		0.990			0.990
f_P		1.00		1.00	1.00		1.00			1.00
Off Flow (pcph)		1,116		819	2,967		638			2,924
Off Flow (pcphpl)		558		819	1,483		638			1,462
Calculate Off Ramp Roadway Operations										
Off Ramp Type		Right		Right	Major		Right			Right
Off Ramp Speed		35		35	55		35			35
Off Ramp Cap (pcph)		4,000		2,000	4,500		2,000			4,000
Off Ramp v/c ratio		0.28		0.41	0.66		0.32			0.73
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps										
Up Type										
Up Distance										
Up Flow (pcph)										
Down Type										
Down Distance										
Down Flow (pcph)										
Calculate Merge Influence Area Operations										
Effective v_P (pcph)			5,231						5,357	
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FM} (Eqn 13-3)			0.593						0.591	
P_{FM} (Eqn 13-4)										
P_{FM} (Eqn 13-5)										
P_{FM}			0.117						0.179	
v_{12} (pcph)			611						960	
v_3 (pcph)										
v_{34} (pcph)			4,620						4,397	
v_{12a} (pcph)			2,092						2,143	
v_{R12a} (pcph)			2,900						2,451	
Merge Speed Index			0.35						0.33	
Merge Area Speed			56.9						57.3	
Outer Lanes Volume			1,569						1,607	
Outer Lanes Speed			61.2						61.0	
Segment Speed			59.0						59.4	
Merge v/c ratio			0.63						0.53	
Merge Density			24.2						21.5	
Merge LOS			C						C	

Location	1	2	3	4	5	6	7	8	9	10



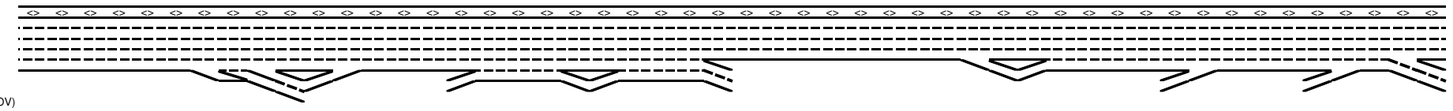
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Diverge Influence Area Operations										
Effective v_P (pcph)		6,648					6,790			
Up Ramp L_{EQ}										
Down Ramp L_{EQ}										
P_{FD} (Eqn 13-9)		0.542					0.561			
P_{FD} (Eqn 13-10)										
P_{FD} (Eqn 13-11)										
P_{FD}		0.260					0.436			
v_{12} (pcph)		2,555					3,320			
v_3 (pcph)										
v_{34} (pcph)		4,094					3,470			
v_{12a} (pcph)		2,659					3,320			
Diverge Speed Index		0.53					0.49			
Diverge Area Speed		52.8					53.8			
Outer Lanes Volume		1,995					1,735			
Outer Lanes Speed		67.4					68.4			
Segment Speed		60.7					60.4			
Diverge v/c ratio		0.60					0.75			
Diverge Density		18.6					31.3			
Diverge LOS		B					D			
				A B C D A+B	A B C D A+B					A B C D A+B
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				7,390 1,130 7,750 770 8,520	7,750 1,360 6,340 2,770 9,110					7,140 540 4,930 2,750 7,680
On to Off Volume (vph)				*102*	*414*					*193*
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to Off Flow (pcph)				109	440					206
Calculate On Ramp to Mainline Flow Rate for Weave Segments										
On to ML Volume (vph)				1,028	946					347
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	2.0%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.990					0.990
f_P				1.00	1.00					1.00
On to ML Flow (pcph)				1,093	1,006					369

Location	1	2	3	4	5	6	7	8	9	10



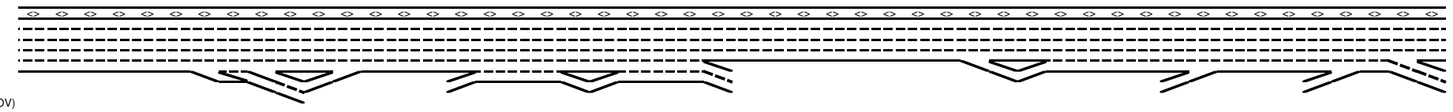
Key

<> Express Lane (HOV)

No Trucks

Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Mainline to Off Ramp Flow Rate for Weave Segments										
ML to Off Volume (vph)				668	2,356					2,557
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				2.0%	3.5%					2.0%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.990	0.983					0.990
f_P				1.00	1.00					1.00
ML to Off Flow (pcph)				710	2,524					2,718
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments										
GP to GP Volume (vph)				6,722	5,394					4,583
PHF				0.95	0.95					0.95
Terrain				Level	Level					Level
Grade %				0.0%	0.0%					0.0%
Grade Length (mi)				0.00	0.00					0.00
Truck & Bus %				5.0%	3.5%					3.5%
RV %				0.0%	0.0%					0.0%
E_T				1.5	1.5					1.5
E_R				1.2	1.2					1.2
f_{HV}				0.976	0.983					0.983
f_P				1.00	1.00					1.00
GP to GP Flow (pcph)				7,253	5,777					4,909

Location	1	2	3	4	5	6	7	8	9	10



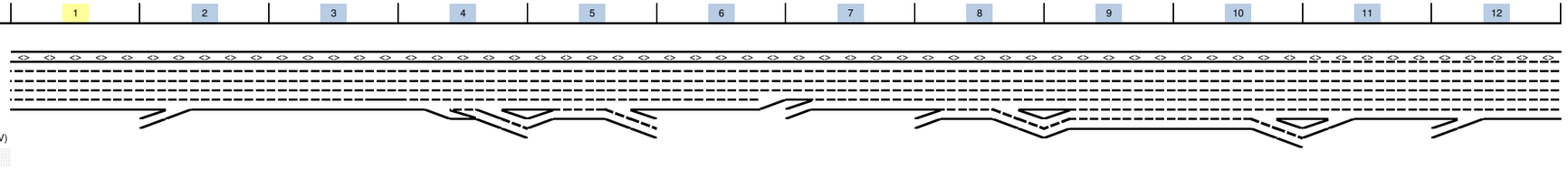
Key

<> Express Lane (HOV)

No Trucks

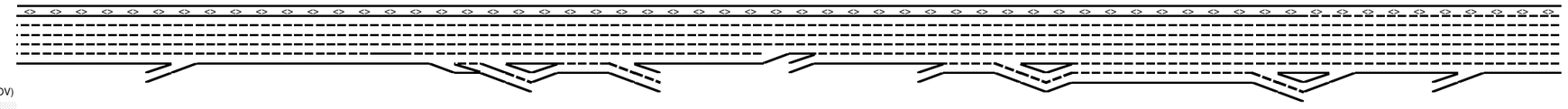
Name	Culver On to Jamboree Off	Jamboree Off Ramp	Jamboree N On Ramp	Jamboree S On to McArthur Off	McArthur On to 55 N&S Off	55 Off to Bristol Off	Bristol/Ave Arts Off Ramp	On Ramp from 55 S	Bristol N On Ramp	Bristol S On Ramp to S Coast Off
Calculate Weave Segment Operations										
Weave Type				One-sided	One-sided					*One-Sided*
Weave Length				2,130	2,175					500
Segment Lanes				5	5					5
Weave Lanes				2	3					2
Weave Flow (pcph)				1,803	3,530					3,087
Non-Weave Flow				7,361	6,216					5,115
Segment Flow				9,164	9,747					8,201
Max Weave Length				4,503	4,695					6,417
Length Check				OK	OK					OK
Ideal Weave Capacity				2,168	2,157					1,897
f_{HV}				0.979	0.984					0.986
f_P				0.999	0.999					1.000
Capacity Condition 1				10,598	10,602					9,347
Capacity Condition 2				11,925	9,498					6,283
Weave v/c ratio				0.85	1.01					1.29
Interchange Density				0.333333333	0.333333333					0.333333333
Lane Changes On to ML				1	2					1
Lane Changes ML to Off				1	0					0
Lane Changes On to Off				0	0					0
Min Lane Change Rate				1,803	2,013					369
Weave LC Rate				2,421	2,648					351
Non-Weave LC Rate 1				1,708	1,496					362
Non-Weave LC Rate 2				3,331	3,075					2,830
Non-Weave LC Rate 3				-233	-567					-4,251
Segment LC Rate				4,129	4,145					713
Weave Intensity Factor				0.381	0.376					0.299
Weave Speed				51.2	51.3					53.5
Non-Weave Speed				43.2	41.2					54.5
Segment Speed				44.6	44.3					54.1
Weave Density				41.1	-					-
Weave LOS				E	F					F
Summarize Segment Operations										
Segment v/c ratio	0.71	0.60	0.63	0.85	1.01	0.72	0.75	0.62	0.53	1.29
Segment Density	26.0	18.6	24.2	41.1	-	26.6	31.3	22.6	21.5	-
Segment LOS	C	B	C	E	F	D	D	C	C	F
Over Capacity					Weave					Weave

Project: John Wayne Airport Expansion **Scenario:** 2026 Plus Proposed Project
Freeway Corridor: 405S **Peak Hour:** PM



Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Define Freeway Segment												
Type	Basic	Merge	Basic	Diverge	Weave	Basic	Basic	Weave	Weave		Merge	Merge
Length (ft)	2,700	1,500	650	1,500	2,575	2,990	1,500	1,500	1,500		1,500	1,500
Accel Length		550									525	1,175
Decel Length				775								
Mainline Volume	*6,040*	6,040	7,130	7,130	6,100	6,360	6,360	7,980	8,190		6,142	6,667
On Ramp Volume		*1,090*			*1,170*		*1,620*	*1,420*	*960*		*630*	*1,130*
Off Ramp Volume				*1,030*	*910*			*1,210*	*1,780*			
Express Lane Volume												
EL On Ramp Volume												
EL Off Ramp Volume												
Calculate Flow Rate in General Purpose Lanes (GP)												
GP Volume (vph)	6,040	7,130	7,130	7,130	7,270	6,360	7,980	9,400	9,150		6,772	7,797
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95
GP Lanes	5	5	5	5	6	4	5	6	7		5	5
Terrain	Level	Level	Level	Level	Level	Level	Level	Level	Level		Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Truck & Bus %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	5.0%		5.6%	5.6%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E_T	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5
E_R	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		1.2	1.2
f_{HV}	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.976		0.973	0.973
f_P	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
GP Flow (pcph)	6,469	7,637	7,637	7,637	7,787	6,812	8,547	10,068	9,872		7,328	8,437
GP Flow (pcphpl)	1,294	1,527	1,527	1,527	1,298	1,703	1,709	1,678	1,410		1,466	1,687
Calculate Speed in General Purpose Lanes												
Lane Width (ft)	12	12	12	12	12	12	12	12	12		12	12
Shoulder Width	6	6	6	6	6	6	6	6	6		6	6
TRD	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		2.7	2.7
f_{LW}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
f_{LC}	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Calc'd FFS	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1		68.1	68.1
Measured FFS	*67.6*	*67.6*	*67.6*	*67.6*	*70.8*	*70.8*	*70.8*	*50.3*	*50.3*		*23.7*	*23.7*
FFS	65	65	65	65	65	65	65	65	65		65	65
Calculate Operations in General Purpose Lanes												
v/c ratio	0.55	0.65	0.65	0.65	0.55	0.72	0.73	0.71	0.60		0.62	0.72
Speed (mph)	65.0	64.8	64.8	64.8	65.0	63.7	63.6	63.9	65.0		64.9	63.8
Density (pcphpl)	19.9	23.6	23.6	23.6	20.0	26.7	26.9	26.3	21.7		22.6	26.4
LOS	C	C	C	C	C	D	D	D	C		C	D
Calculate Operations for Entering GP Lanes												
GP_{IN} Vol (pcph)		6,478			6,543		6,812	8,547	8,852		6,658	7,235
GP_{IN} Cap (pcph)		11,750			11,750		9,400	11,750	11,750		11,750	11,750
GP_{IN} v/c ratio		0.55			0.56		0.72	0.73	0.75		0.57	0.62
Calculate Operations for Exiting GP Lanes												
GP_{OUT} Vol (pcph)				6,542	6,812	6,812		8,781	7,980			
GP_{OUT} Cap (pcph)				11,750	11,750	9,400		11,750	11,750			
GP_{OUT} v/c ratio				0.56	0.58	0.72		0.75	0.68			

Location	1	2	3	4	5	6	7	8	9	10	11	12



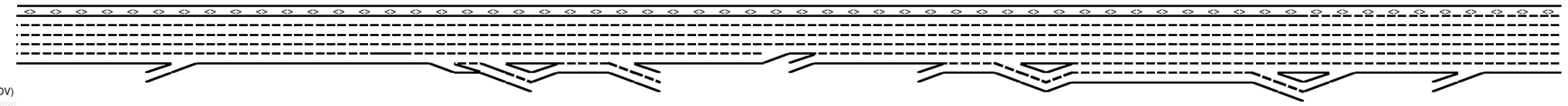
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp

Location	1	2	3	4	5	6	7	8	9	10	11	12



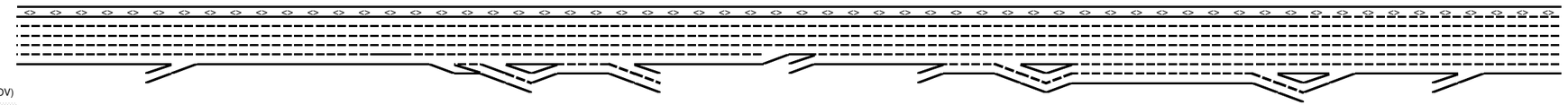
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Flow Rate in Express Lanes (EL)												
Calculate Speed in Express Lanes												
Calculate Operations in Express Lanes												
Calculate On Ramp Flow Rate												
On Volume (vph)		1,090			1,170		1,620	1,420	960		630	1,130
PHF		0.95			0.95		0.95	0.95	0.95	0.95	0.95	0.95
Total Lanes		1			1		1	1	2		1	1
Terrain		Level			Level		Level	Level	Level	Level	Level	Level
Grade %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)		0.00			0.00		0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %		2.0%			2.0%		3.5%	3.5%	2.0%	2.0%	2.0%	2.0%
RV %		0.0%			0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E_T		1.5			1.5		1.5	1.5	1.5		1.5	1.5
E_R		1.2			1.2		1.2	1.2	1.2		1.2	1.2
f_{HV}		0.990			0.990		0.983	0.983	0.990		0.990	0.990
f_P		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
On Flow (pcph)		1,159			1,244		1,735	1,521	1,021		670	1,201
On Flow (pcphpl)		1,159			1,244		1,735	1,521	510		670	1,201
Calculate On Ramp Roadway Operations												
On Ramp Type		Right			Right		Major	Major	Right		Right	Right
On Ramp Speed (mph)		35			35		55	55	35		35	35
On Ramp Cap (pcph)		2,000			2,000		2,250	2,250	4,000		2,000	2,000
On Ramp v/c ratio		0.58			0.62		0.77	0.68	0.26		0.33	0.60

Location	1	2	3	4	5	6	7	8	9	10	11	12



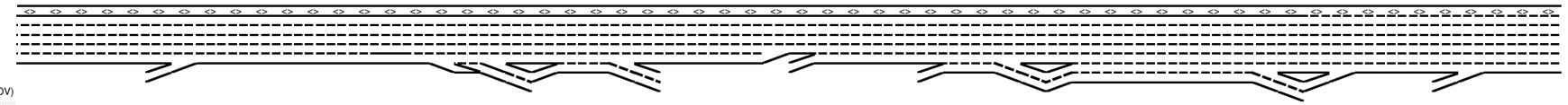
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Off Ramp Flow Rate												
Off Volume (vph)				1,030	910			1,210	1,780			
PHF				0.95	0.95			0.95	0.95	0.95		
Total Lanes				2	2			2	2			
Terrain				Level	Level			Level	Level	Level		
Grade %				0.0%	0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)				0.00	0.00			0.00	0.00	0.00		
Truck & Bus %				2.0%	3.5%			2.0%	2.0%	2.0%		
RV %				0.0%	0.0%			0.0%	0.0%	0.0%		
E_T				1.5	1.5			1.5	1.5	1.5		
E_R				1.2	1.2			1.2	1.2	1.2		
f_{HV}				0.990	0.983			0.990	0.990	0.990		
f_P				1.00	1.00			1.00	1.00	1.00		
Off Flow (pcph)				1,095	975			1,286	1,892			
Off Flow (pcphpl)				548	487			643	946			
Calculate Off Ramp Roadway Operations												
Off Ramp Type				Right	Major			Right	Right			
Off Ramp Speed				35	55			35	35			
Off Ramp Cap (pcph)				4,000	4,500			4,000	4,000			
Off Ramp v/c ratio				0.27	0.22			0.32	0.47			
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps												
Up Type												
Up Distance												
Up Flow (pcph)												
Down Type												
Down Distance												
Down Flow (pcph)												
Calculate Merge Influence Area Operations												
Effective v_P (pcph)		4,923									4,860	5,282
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FM} (Eqn 13-3)		0.593									0.592	0.610
P_{FM} (Eqn 13-4)												
P_{FM} (Eqn 13-5)												
P_{FM}		0.073									0.134	0.068
v_{12} (pcph)		359									652	357
v_3 (pcph)												
v_{34} (pcph)		4,564									4,209	4,925
v_{12a} (pcph)		1,969									1,944	2,113
v_{R12a} (pcph)		3,128									2,614	3,314
Merge Speed Index		0.37									0.34	0.35
Merge Area Speed		56.5									57.2	57.0
Outer Lanes Volume		1,477									1,458	1,585
Outer Lanes Speed		61.5									61.6	61.1
Segment Speed		58.8									59.4	59.0
Merge v/c ratio		0.68									0.57	0.72
Merge Density		25.9									22.3	23.4
Merge LOS		C									C	C

Location	1	2	3	4	5	6	7	8	9	10	11	12



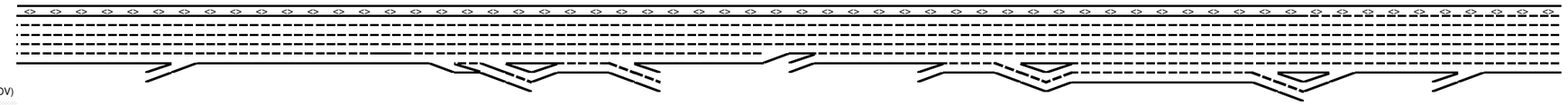
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Diverge Influence Area Operations												
Effective v_P (pcph)				6,109								
Up Ramp L_{EQ}												
Down Ramp L_{EQ}												
P_{FD} (Eqn 13-9)				0.557								
P_{FD} (Eqn 13-10)												
P_{FD} (Eqn 13-11)												
P_{FD}				0.260								
v_{12} (pcph)				2,399								
v_3 (pcph)												
v_{34} (pcph)				3,711								
v_{12a} (pcph)				2,444								
Diverge Speed Index				0.53								
Diverge Area Speed				52.9								
Outer Lanes Volume				1,833								
Outer Lanes Speed				68.1								
Segment Speed				61.1								
Diverge v/c ratio				0.56								
Diverge Density				18.3								
Diverge LOS				B								
					A B C D A+B			A B C D A+B	A B C D A+B			
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					6,100 1,170 6,360 910 7,270			7,980 1,420 8,190 1,210 9,400	8,190 960 7,370 1,780 9,150			
On to Off Volume (vph)					*146*			*183*	*187*			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to Off Flow (pcph)					156			194	199			
Calculate On Ramp to Mainline Flow Rate for Weave Segments												
On to ML Volume (vph)					1,024			1,237	773			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					2.0%			3.5%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.990			0.983	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
On to ML Flow (pcph)					1,088			1,325	822			

Location	1	2	3	4	5	6	7	8	9	10	11	12



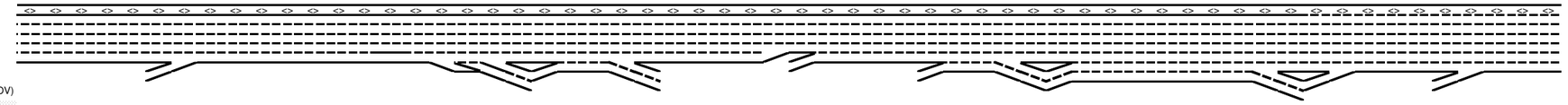
Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Mainline to Off Ramp Flow Rate for Weave Segments												
ML to Off Volume (vph)					764			1,027	1,593			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			2.0%	2.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.990	0.990	0.990		
f_P					1.00			1.00	1.00	1.00		
ML to Off Flow (pcph)					818			1,092	1,694			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments												
GP to GP Volume (vph)					5,336			6,953	6,597			
PHF					0.95			0.95	0.95	0.95		
Terrain					Level			Level	Level	Level		
Grade %					0.0%			0.0%	0.0%	0.0%		
Grade Length (mi)					0.00			0.00	0.00	0.00		
Truck & Bus %					3.5%			3.5%	5.0%	2.0%		
RV %					0.0%			0.0%	0.0%	0.0%		
E_T					1.5			1.5	1.5	1.5		
E_R					1.2			1.2	1.2	1.2		
f_{HV}					0.983			0.983	0.976	0.990		
f_P					1.00			1.00	1.00	1.00		
GP to GP Flow (pcph)					5,716			7,447	7,118			

Location	1	2	3	4	5	6	7	8	9	10	11	12

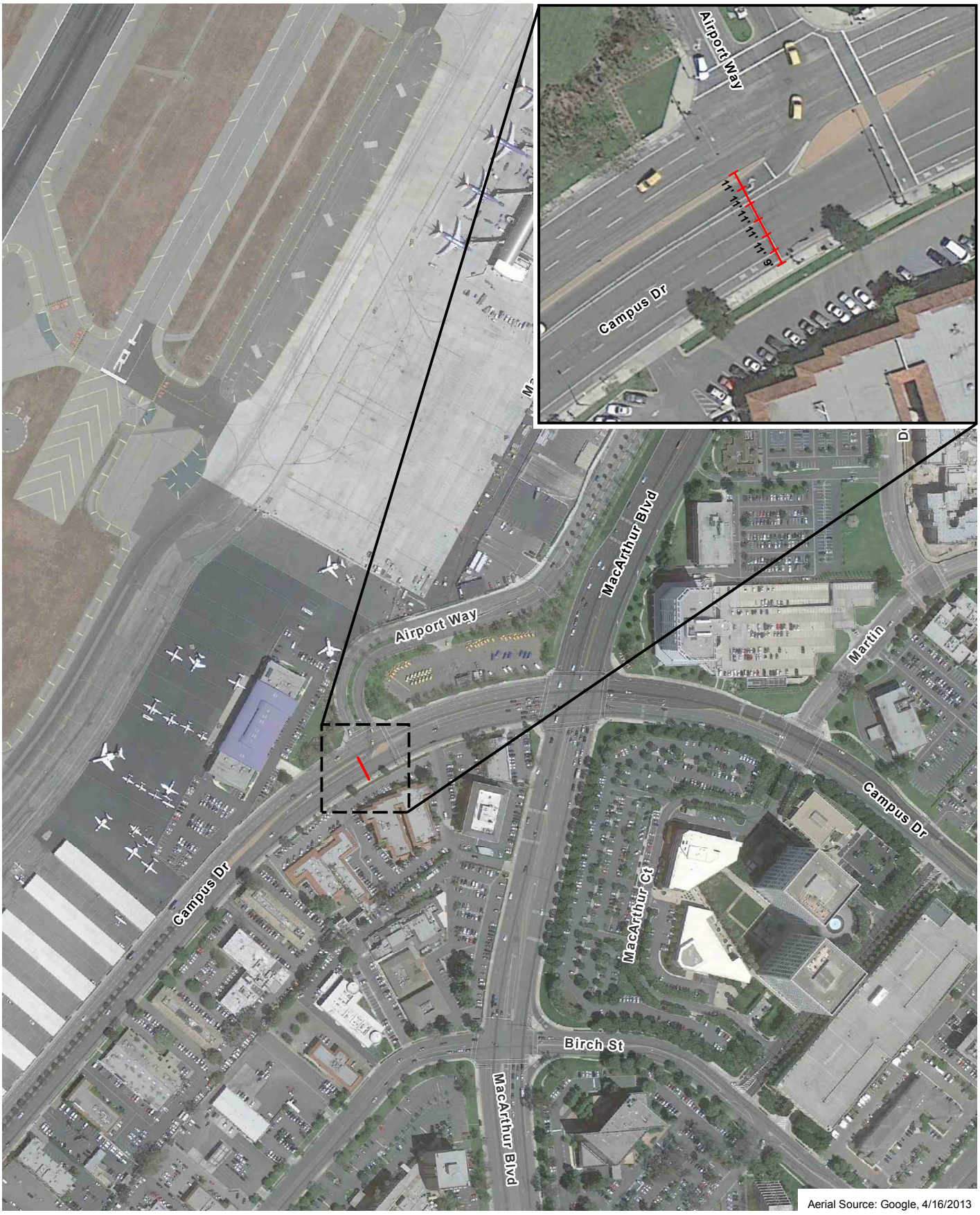


Key

<> Express Lane (HOV)

No Trucks

Name	Off to 405 S to Fairview On	Fairview On Ramp	Fairview On to Bristol Off	Bristol Off Ramp	Bristol On to 55 N Off	Lane Drop	On from 55 N	55 S On to McArthur Off	McArthur On to Jamboree Off	Part of Previous	Jamboree S Loop On Ramp	Jamboree N Direct On Ramp
Calculate Weave Segment Operations												
Weave Type					One-sided			One-sided	One-Sided			
Weave Length					1,575			500	500			
Segment Lanes					5			5	5			
Weave Lanes					2			2	3			
Weave Flow (pcph)					1,906			2,417	2,516			
Non-Weave Flow					5,871			7,641	7,316			
Segment Flow					7,777			10,058	9,832			
Max Weave Length					5,002			4,953	3,550			
Length Check					OK			OK	OK			
Ideal Weave Capacity					2,088			2,009	2,117			
f_{HV}					0.984			0.984	0.980			
f_P					0.999			0.998	0.999			
Capacity Condition 1					10,257			9,861	10,359			
Capacity Condition 2					9,623			9,802	13,388			
Weave v/c ratio					0.79			1.01	0.93			
Interchange Density					0.333333333			0.333333333	0.333333333			
Lane Changes On to ML					1			1	0			
Lane Changes ML to Off					0			0	1			
Lane Changes On to Off					0			0	0			
Min Lane Change Rate					1,088			1,325	1,694			
Weave LC Rate					1,490			1,308	1,676			
Non-Weave LC Rate 1					1,100			882	815			
Non-Weave LC Rate 2					2,998			3,393	3,320			
Non-Weave LC Rate 3					-1,796			-3,648	-3,726			
Segment LC Rate					2,590			2,190	2,491			
Weave Intensity Factor					0.335			0.725	0.802			
Weave Speed					52.5			44.0	42.7			
Non-Weave Speed					49.7			45.8	43.4			
Segment Speed					50.3			45.4	43.2			
Weave Density					30.9			-	45.5			
Weave LOS					D			F	E			
Summarize Segment Operations												
Segment v/c ratio	0.55	0.68	0.65	0.56	0.79	0.72	0.73	1.01	0.93		0.57	0.72
Segment Density	19.9	25.9	23.6	18.3	30.9	26.7	26.9	-	45.5		22.3	23.4
Segment LOS	C	C	C	B	D	D	D	F	E		C	C
Over Capacity								Weave				



Aerial Source: Google, 4/16/2013

Proposed Cross Section for Campus Drive and Airport Way

Exhibit G-1

John Wayne Airport Settlement Agreement Amendment

N
W E
S

350 175 0 350

Feet

JOHN WAYNE AIRPORT
ORANGE COUNTY

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