

Appendix L1 Traffic Impact Analysis

Appendices

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Traffic Impact Analysis

OCMA – RESIDENTIAL PROJECT CITY OF NEWPORT BEACH

Prepared by



Project No. 14078-003
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DKS Associates
Jeffrey Heald, P.E.
Mario Gutierrez, E.I.T.

2677 North Main Street
Suite 520
Santa Ana, CA
Telephone (714) 597-8060
Facsimile (714) 597-1339



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1.0 INTRODUCTION

The following presents the Traffic Impact Analysis (TIA) prepared by DKS Associates (DKS) for a proposed high-rise condominium project which will consist of 100 residential units. The existing site currently contains the Orange County Museum of Arts (OCMA) and the museum’s administrative offices. Per the proposed site plan, the project would replace the OCMA building. However, the museum’s administrative offices are proposed to stay in operation. The project is located at 850 San Clemente Drive in Newport Beach, California. This TIA has been prepared consistent with the policies of the City of Newport Beach Traffic Phasing Ordinance (TPO) requirements, California Environmental Quality Act (CEQA), discussions with the City staff of Newport Beach, and methodologies from the Institute of Transportation Engineers (ITE) manuals.

Purpose and Objectives of the TIA

Based on discussions with the City, the purpose of this TIA is to evaluate the traffic and circulation impacts of the proposed project. The study objectives of this TIA include:

- Documentation of existing traffic conditions and future traffic conditions corresponding to the “future year” (existing plus ambient growth) of the proposed project when it would be completely built-out and fully occupied one year after the project completion. The project completion year is 2020.
- Conduct capacity and performance analysis of the study intersections based on the City of Newport Beach TPO and CEQA requirements.

Analysis Scenarios

Based on discussions with the City, the analysis was conducted at the study intersections for the following scenarios as part of the TIA:

- 1) Existing (2016) Conditions
- 2) Existing (2016) Conditions Plus Project
- 3) Future (2021) Plus Approved Projects Plus Growth (No Project Conditions) - TPO
- 4) Future (2021) Plus Approved Projects Plus Growth Plus Project Conditions - TPO
- 5) Future (2021) Plus Approved Projects Plus Cumulative Projects Plus Growth (No Project Conditions) - CEQA
- 6) Future (2021) Plus Approved Projects Plus Cumulative Projects Plus Growth Plus Project Conditions - CEQA
- 7) Future (2021) Plus Approved Projects Plus Growth Plus Project Conditions Plus Mitigation (if required) - TPO



- 8) Future (2021) Plus Approved Projects Plus Cumulative Projects Plus Growth Plus Project Conditions Plus Mitigation (if required) - CEQA

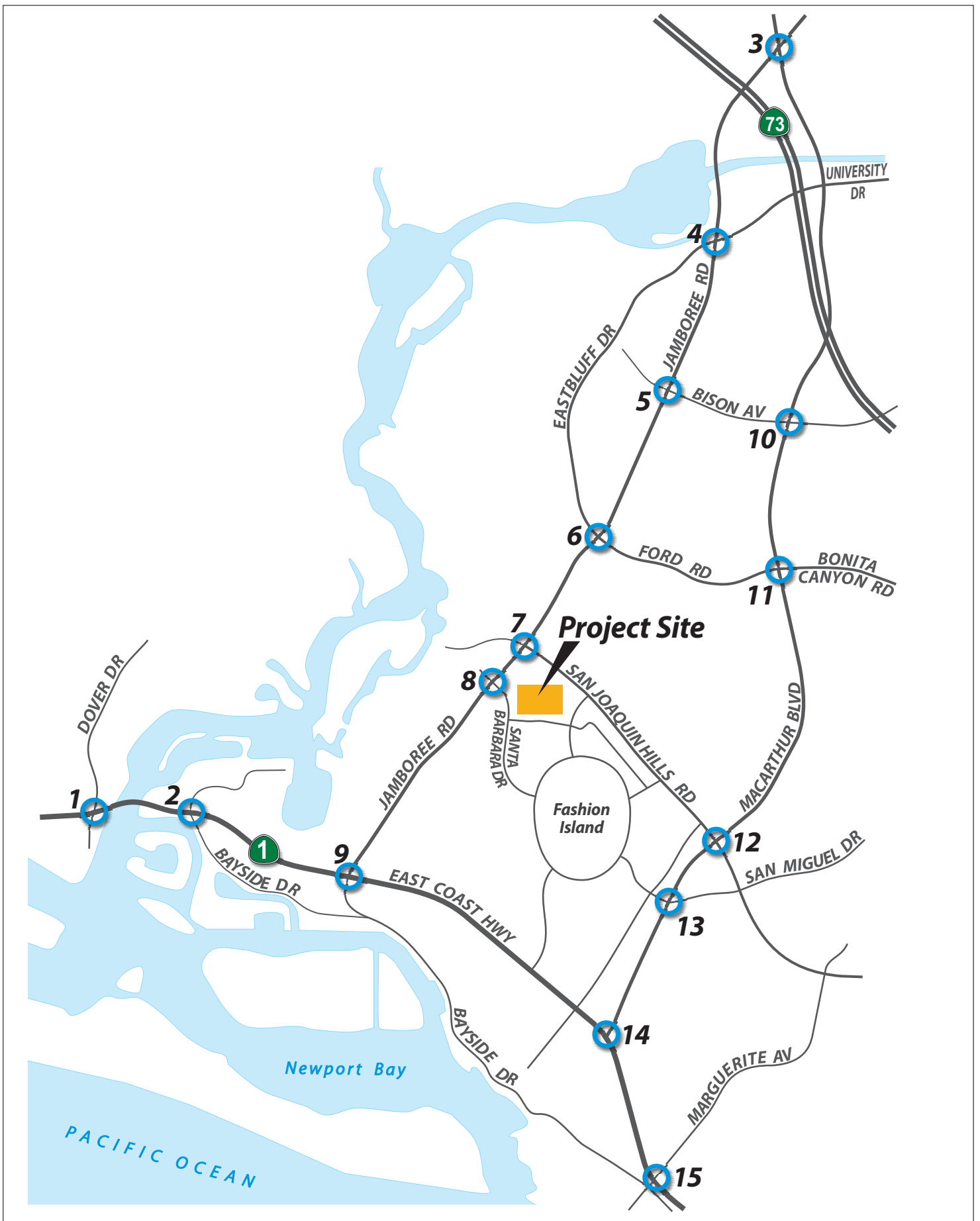
Site Location and Study Area

The project site is located in the City of Newport Beach at 850 San Clemente Drive. The TPO requires analyzing primary intersections within the project vicinity (see Appendix A of the TPO). Regional access is provided by Coast Highway (SR-1), Jamboree Road, and MacArthur Boulevard.

Based on discussions with the City of Newport Beach, the project's traffic related impact will be evaluated at following intersections:

- 1) Dover Drive at West Coast Highway (Caltrans Owned)
- 2) Bayside Drive at East Coast Highway (Caltrans Owned)
- 3) Jamboree Road at MacArthur Boulevard
- 4) Jamboree Road at Eastbluff Drive/University Drive
- 5) Jamboree Road at Bison Avenue
- 6) Jamboree Road at Eastbluff Drive/Ford Road
- 7) Jamboree Road at San Joaquin Hills Road
- 8) Jamboree Road at Santa Barbara Drive
- 9) Jamboree Road at East Coast Highway
- 10) MacArthur Boulevard at Bison Avenue
- 11) MacArthur Boulevard at Ford Road/Bonita Canyon Drive
- 12) MacArthur Boulevard at San Joaquin Hills Road
- 13) MacArthur Boulevard at San Miguel Drive
- 14) MacArthur Boulevard at East Coast Highway
- 15) Marguerite Avenue at East Coast Highway

Figure 1 illustrates the project site location and study intersections.



LEGEND
 # - Study Intersection

L1-5

DKS



No Scale

Figure 1

Project Site and Study Intersections



Methodology

Per consultation with the City, and the review of the City of Newport Beach Traffic Phasing Ordinance (TPO), the analysis of signalized intersections was performed using the Intersection Capacity Utilization (ICU) methodology. The City of Newport Beach requires the analysis of all study intersections based on ICU methodology as part of the TPO. Intersections under the jurisdiction of Caltrans require the analysis to be performed using the HCM methodology. The assessment of intersection conditions addresses level of service (LOS), in terms of volume-to-capacity (V/C) ratio for ICU analysis for signalized intersections. The Traffix Version 8 software package was used to determine intersection LOS based on ICU methodology and HCM methodology for the study intersections. Brief level of service definitions along with the corresponding volume to capacity ratio for the ICU methodology and corresponding control delay for the HCM methodology for signalized intersections are shown in Tables A1 and A2, respectively.

The degree of congestion at an intersection is described by the level of service, which ranges from LOS A to LOS F, with LOS A representing free-flow conditions with little delay and LOS F representing over-saturated traffic flow throughout the peak hour. Table B provides a description of each specific level of service grade (LOS A through LOS F).

Table A1 – Level of Service Definitions for Signalized Intersections Based on ICU V/C

Level of Service	V/C Ratio
A	0.00-0.60
B	0.61-0.70
C	0.71-0.80
D	0.81-0.90
E	0.91-1.00
F	1.01 or greater

SOURCE: Orange County Congestion Management Plan, 2013

Table A2 – Level of Service Definitions for Signalized Intersections Based on HCM Delay

Level of Service	Delay per Vehicle (in seconds)
A	≤ 0 - 10
B	> 10 - 20
C	> 20 – 35
D	> 35 – 55
E	> 55 – 80
F	> 80

SOURCE: Highway Capacity Manual, Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.



Table B – Level of Service Descriptions

LOS	Description
A	No approach phase is fully utilized by traffic, and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are nearing full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

SOURCE: Highway Capacity Manual, Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.

Significance Criteria

Based on the review of the TPO and General Plan for the City of Newport Beach, the acceptable level of service for all study intersections is LOS D with the exception of the following:

- LOS E at any intersection in the John Wayne Airport Area shared with Irvine
- LOS E at the intersection of Marguerite Avenue at East Coast Highway
- LOS E at the intersection of Dover Drive at West Coast Highway

For intersections under the Congestion Management Program (CMP), the acceptable level of service is LOS E.

The “significant” traffic impact for study intersections in the City of Newport Beach require an increase in 0.01 or more project related v/c for intersections already operating at unacceptable (E or F) level of service in the no project conditions. Also, if the project causes an intersection which is operating at an acceptable level of service in



the no project conditions, to operate at unacceptable level of service (E or F); it is a “significant” traffic impact for that intersection.

For intersections under the jurisdiction of Caltrans, the significant impact criteria are based on the ‘Caltrans Guide for the Preparation of Traffic Impact Studies’ document. Caltrans maintains a target LOS at the transition between LOS C and LOS D using the HCM methodology. The project impact on a Caltrans intersection would be significant if the project either causes an intersection operating at LOS C to deteriorate to LOS D or worse or causes an intersection already operating at LOS D or worse to deteriorate to a worse Level of Service.

2.0 EXISTING CONDITIONS

Roadways

Regional access to the project vicinity is provided by Coast Highway (SR-1) located south of the site. Local access is provided via San Clemente Drive immediately adjacent to the project site. The following describes the existing roads in the study area.

West Coast Highway

West Coast Highway is a six-lane divided roadway located west of Bayside Drive. It is located south of the project site. In the study area, West Coast Highway is signalized at the intersection with Dover Drive. On-street parking is restricted along the roadway. The speed limit is 45 miles per hour (MPH) west of Bayside Drive.

East Coast Highway

East Coast Highway is an eight-lane divided roadway between Bayside Drive and Jamboree Road, a six-lane divided roadway between Jamboree Road and west of MacArthur Boulevard and a four-lane divided roadway between MacArthur Boulevard and Marguerite Avenue. It is located south of the project site. In the study area, East Coast Highway is signalized at intersections with Bayside Drive, Jamboree Road, MacArthur Boulevard and Marguerite Avenue. On-street parking is permitted at some locations along the roadway. The speed limit is 50 MPH west of MacArthur Boulevard and 35 MPH East of MacArthur Boulevard.

Dover Drive

Dover Drive is a four-lane divided roadway located west of the project site. In the study area, Dover Drive is signalized at the intersection with West Coast Highway. On-street parking is not permitted near the vicinity of the intersection. This roadway contains both northbound and southbound bike lanes. The speed limit is 45 MPH north of West Coast Highway.



Bayside Drive

Bayside Drive is a four-lane undivided roadway south of East Coast Highway and a two-lane undivided roadway north of East Coast Highway. The roadway is located southwest of the project site. In the study area, Bayside is signalized at the intersection with East Coast Highway. This intersection will be analyzed as part of the study. On-street parking is permitted along the roadway north of West Coast Highway. This roadway contains both northbound and southbound bike lanes south of East Coast Highway. The speed limit is 40 MPH south of East Coast Highway.

Jamboree Road

Jamboree Road is a six-lane divided roadway between MacArthur Boulevard and East Coast Highway. It is located west of the project site. In the study area, Jamboree Road is signalized at intersections with MacArthur Boulevard, Eastbluff Drive/University Drive, Bison Avenue, Eastbluff Drive/Ford Road, San Joaquin Hills Road, Santa Barbara Drive, Hyatt Regency/Island Lagoon Drive, Back Bay Drive, and East Coast Highway. On-street parking is restricted along the roadway. This roadway contains both northbound and southbound buffered bike lanes. The speed limit is 55 MPH between MacArthur Boulevard and East Coast Highway.

MacArthur Boulevard

MacArthur Boulevard is a six-lane divided roadway between Jamboree Road and Bison Avenue, a six-lane divided roadway between Bison Avenue and San Miguel Drive, and a four-lane divided roadway between San Miguel Drive and East Coast Highway. It is located east of the project site. In the study area, MacArthur Boulevard is signalized at intersections with Jamboree Road, Fairchild Road, Bison Avenue, Vilaggio, Ford Road/Bonita Canyon Road, San Joaquin Hills Road, San Miguel Drive, and East Coast Highway. On-street parking is restricted along the roadway. This roadway contains both northbound and southbound bike lanes. The speed limit is 55 MPH between Jamboree Road and East Coast Highway.

Eastbluff Drive/University Drive

Eastbluff Drive/University Drive is a four-lane undivided roadway west of Jamboree Road and a five-lane divided roadway east of Jamboree Road. It is located north of the project site. In the study area, Eastbluff Drive/University Drive is signalized at the intersection with Jamboree Road. This intersection will be analyzed as part of the study. On-street parking is only permitted west of Jamboree Road, adjacent to the Back Bay. Eastbluff Drive/University Drive contains both westbound and eastbound bike lanes. The speed limit is 40 MPH west of Jamboree Road and 50 MPH east of Jamboree Road.

Bison Avenue

Bison Avenue is a six-lane divided roadway between Jamboree Road and MacArthur Boulevard. It is located north of the project site. In the study area, Bison Avenue is



signalized at intersections with Jamboree Road, Country Club Drive, Belcourt Drive/Camelback Street, and MacArthur Boulevard. On-street parking is restricted along the roadway. This roadway contains both westbound and eastbound bike lanes. The speed limit is 45 MPH between Jamboree Road and MacArthur Boulevard.

Eastbluff Drive/Ford Road

Eastbluff Drive/Ford Road is a four-lane undivided roadway located north of the project site. In the study area, Eastbluff Drive/Ford Road is signalized at the intersection with Jamboree Road. This intersection will be analyzed as part of the study. On-street parking is restricted along this roadway. The speed limit is 35 MPH west of Jamboree Road and 50 MPH east of Jamboree Road.

San Joaquin Hills Road

San Joaquin Hills Road is a five-lane divided roadway east of Jamboree Road, a five-lane divided roadway between Jamboree Road and Santa Cruz Drive, and a six-lane divided roadway between Santa Cruz Drive and MacArthur Boulevard. It is located north of the project site. In the study area, San Joaquin Hills Road is signalized at intersections with Jamboree Road, Santa Cruz Drive/ Big Canyon Drive, Santa Road Drive/Big Canyon Drive, and MacArthur Boulevard. On-street parking is restricted along the roadway. The speed limit is 50 MPH east of Jamboree Road.

Santa Barbara Drive

Santa Barbara Drive is a five-lane divided roadway located west of the project site. In the study area, Santa Barbara Drive is signalized at intersections with Jamboree Road, San Clemente Drive, and Newport Center Drive West. This intersection will be analyzed as part of the study. On-street parking is restricted along this roadway. The speed limit is 45 MPH east of Jamboree Road.

Ford Road/Bonita Canyon Drive

Ford Road/Bonita Canyon Drive is a four-lane divided roadway located north of the project site. In the study area, Ford Road/Bonita Canyon Drive is signalized at the intersection with MacArthur Boulevard. This intersection will be analyzed as part of the study. On-street parking is restricted along this roadway. This roadway contains both westbound and eastbound bike lanes. The speed limit is 50 MPH along this roadway.

San Miguel Drive

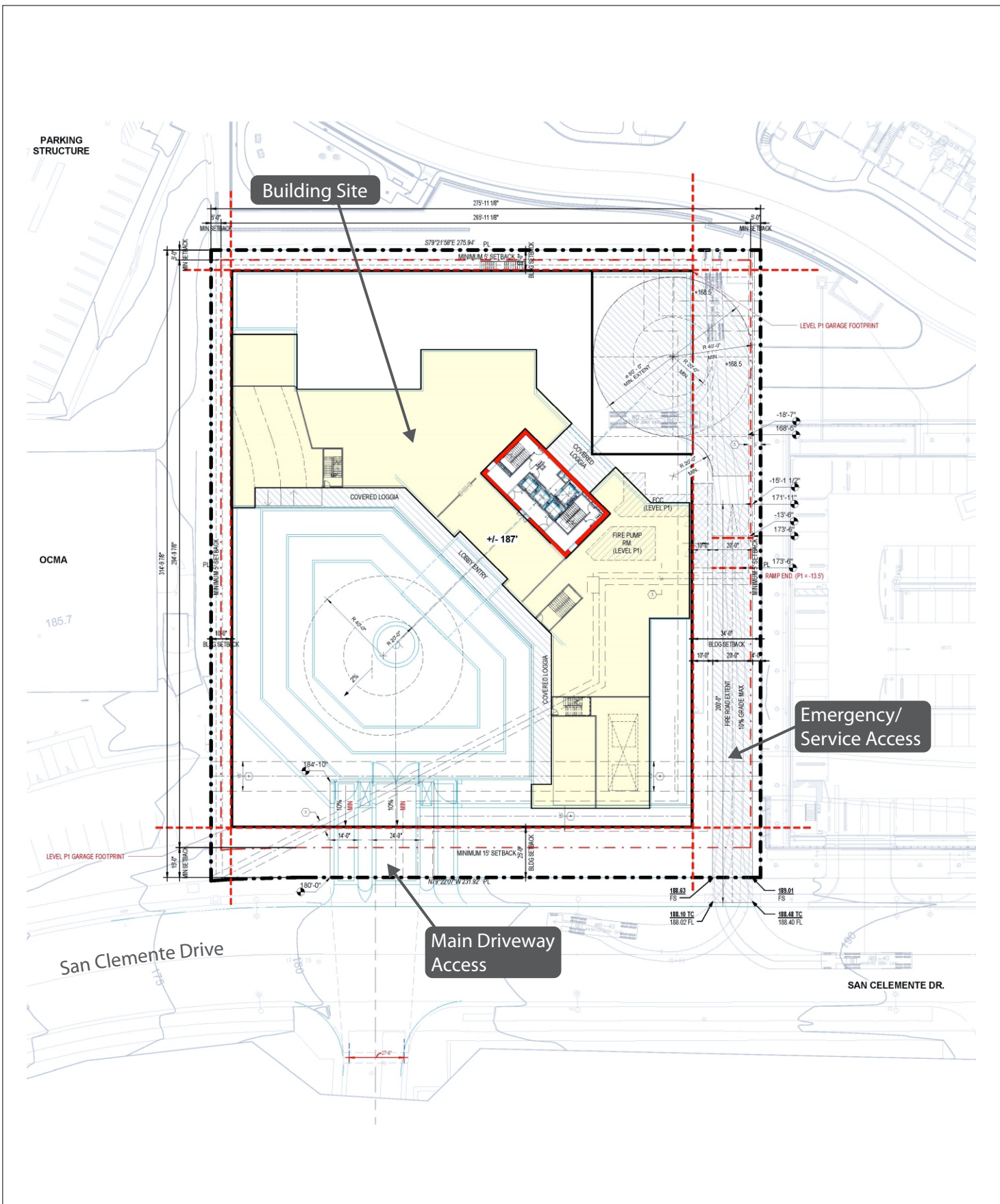
San Miguel Drive is a four-lane divided roadway located south of the project site. In the study area, San Miguel Drive is signalized at intersections with Newport Center Drive East, Avocado Avenue, and MacArthur Boulevard. This intersection will be analyzed as part of the study. On-street parking is restricted along this roadway. This roadway contains both westbound and eastbound bike lanes. The speed limit is 35 MPH west of MacArthur Boulevard and 40 MPH east of MacArthur Boulevard.



Marguerite Avenue

Marguerite Avenue is a two-lane undivided roadway located southeast of the project site. In the study area Marguerite Avenue is signalized at the intersection with East Coast Highway. This intersection will be analyzed as part of the study. On-street parking is permitted along this roadway. The speed limit is 25 MPH along this roadway.

Figure 2 and Figure 3a/b illustrate the proposed project site plan and existing lane configurations at the study intersections respectively.



DKS



No Scale

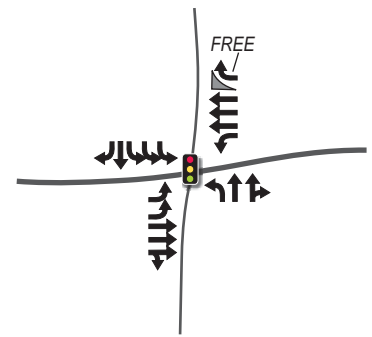
Figure 2

Project Site Plan



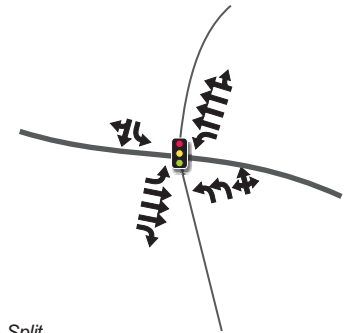

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Key Map

1. Dover Dr. @ West Coast Hwy.



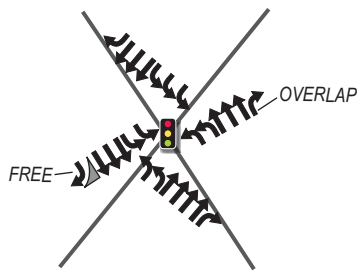
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2. Bayside Dr. @ East Coast Hwy.



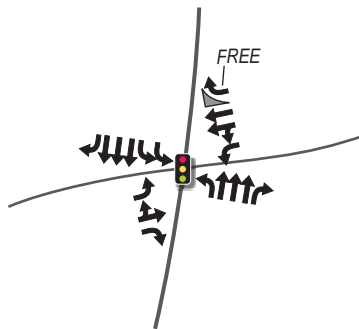
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3. Jamboree Rd. @ MacArthur Blvd.



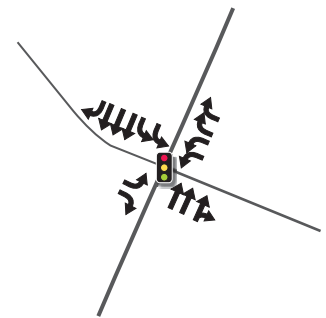
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4. Jamboree Rd. @ Eastbluff Dr./University Dr.



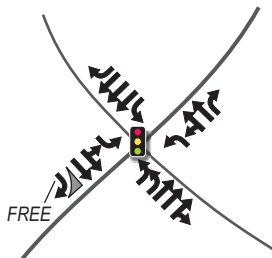
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5. Jamboree Rd. at Bison Ave.



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6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.



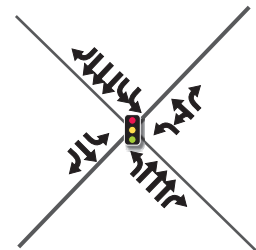
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7. Jamboree Rd. @ San Joaquin Hills Rd.



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8. Jamboree Rd. @ Santa Barbara Dr.



N/S - Left Protected
E/W - Split

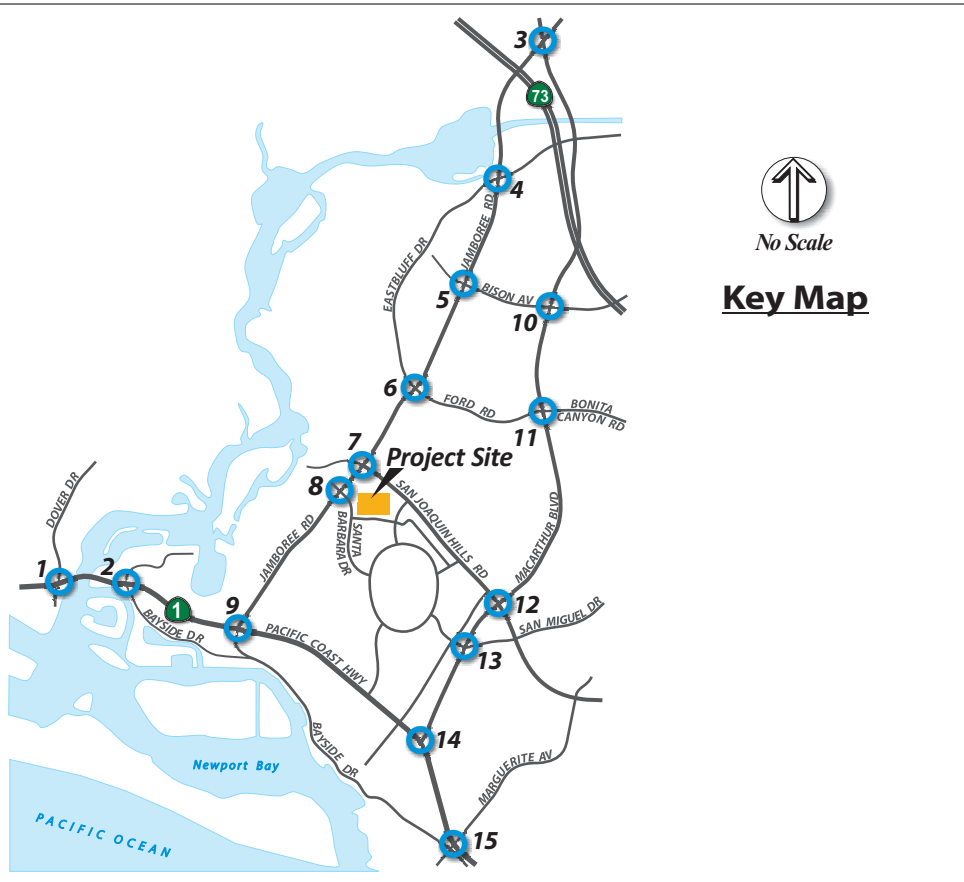
LEGEND

- #  - Study Intersection
-  - Traffic Signal
-  - Stop Sign
-  - Lane Configuration

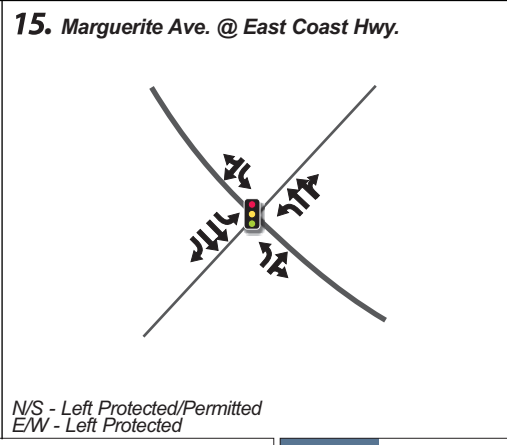
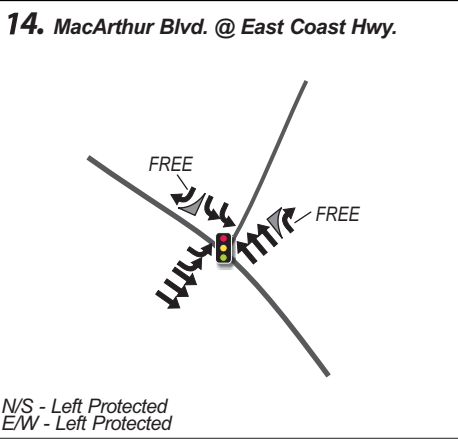
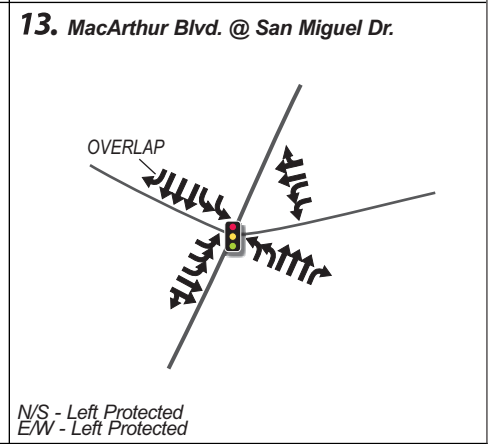
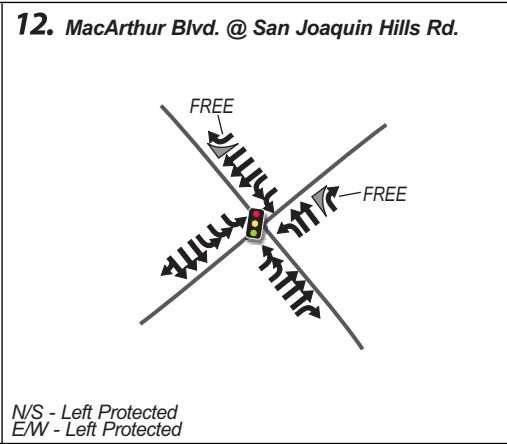
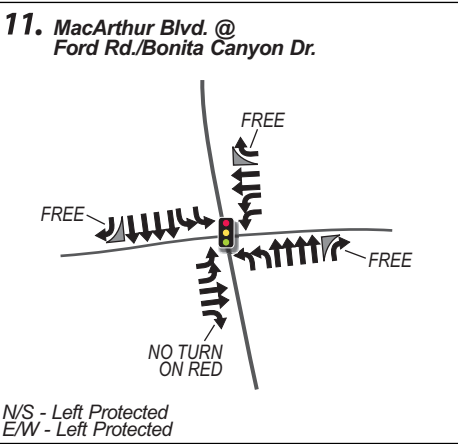
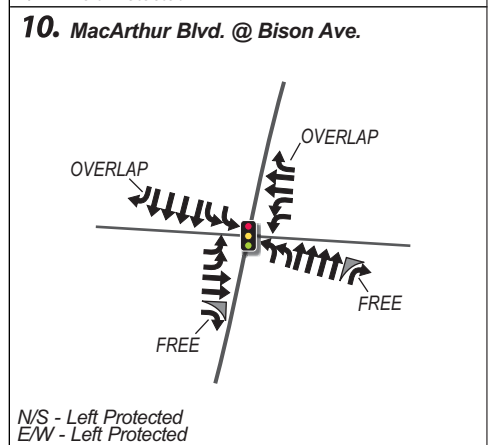
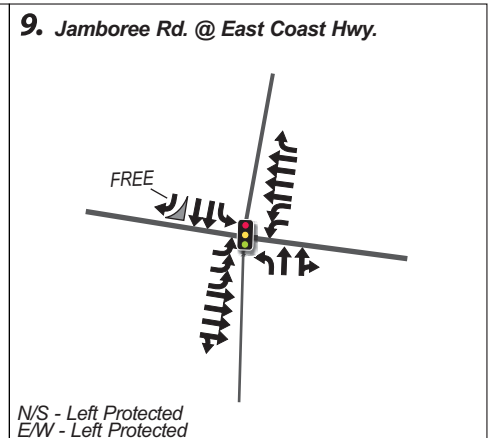
DKS

Figure 3a

Existing Lane Configurations




 No Scale
Key Map



LEGEND





- #  - Study Intersection
-  - Traffic Signal
-  - Stop Sign
-  - Lane Configuration



Figure 3b
Existing Lane Configurations



Existing (2016)

Traffic Volumes

Existing traffic volumes at all study intersections in the City of Newport Beach were collected in 2012, 2014, and 2015. These counts were obtained from the City and were adjusted by applying a 1% growth rate (on arterials only) per year based on the rates obtained from the City. The counts were adjusted by adding growth rate until the year 2016. The peak hours were determined by combining the four highest adjacent 15 minute periods during the AM peak period (7:00-9:00 AM) and the PM peak period (4:30-6:30 PM) at the intersections. Figures 4a and 4b illustrates the existing AM and PM peak hour traffic volumes at the study intersections. The actual counts are provided in the Appendix A. The regional growth rates obtained from the City are provided in Appendix B.

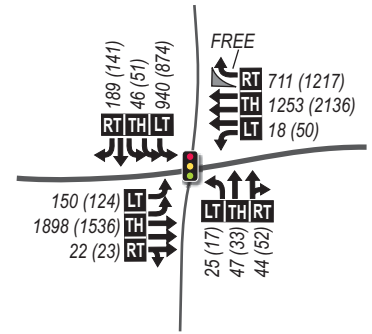
Existing Level of Service

The existing level of service has been evaluated at the study intersections based on the ICU methodology. The LOS summary is shown in Table C. As shown, all intersections operate at LOS D or better. LOS calculation sheets are provided in Appendix C.

Table C: Existing (2016) Intersection Level of Service Summary

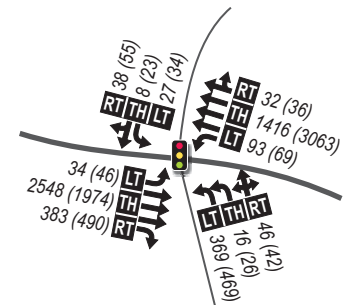
Intersection		AM Peak Hour		PM Peak Hour	
		V/C	LOS	V/C	LOS
1.	Dover Drive/West Coast Highway	.636	B	.698	B
2.	Bayside Drive/East Coast Highway	.708	C	.674	B
3.	Jamboree Road/MacArthur Boulevard	.588	A	.677	B
4.	Jamboree Road/Eastbluff Drive/University Drive	.612	B	.569	A
5.	Jamboree Road/Bison Avenue	.493	A	.492	A
6.	Jamboree Road/Eastbluff Drive/Ford Road	.645	B	.689	B
7.	Jamboree Road/San Joaquin Hills Road	.663	B	.521	A
8.	Jamboree Road/Santa Barbara Drive	.511	A	.681	B
9.	Jamboree Road/East Coast Highway	.363	A	.680	B
10.	MacArthur Boulevard/Bison Avenue	.660	B	.648	B
11.	MacArthur Boulevard/Ford Road/Bonita Canyon Drive	.631	B	.717	C
12.	MacArthur Boulevard/San Joaquin Hills Road	.623	B	.773	C
13.	MacArthur Boulevard/San Miguel Drive	.622	B	.546	A
14.	MacArthur Boulevard/East Coast Highway	.542	A	.622	B
15.	Marguerite Avenue/East Coast Highway	.708	C	.747	C

1. Dover Dr. @ West Coast Hwy.



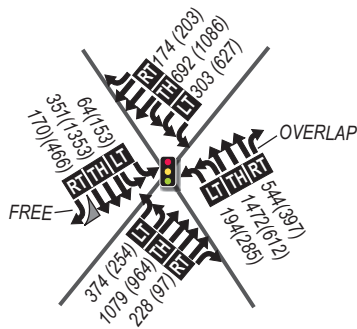
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2. Bayside Dr. @ East Coast Hwy.



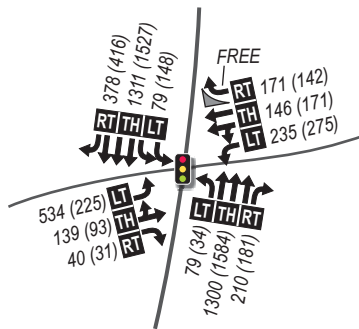
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3. Jamboree Rd. @ MacArthur Blvd.



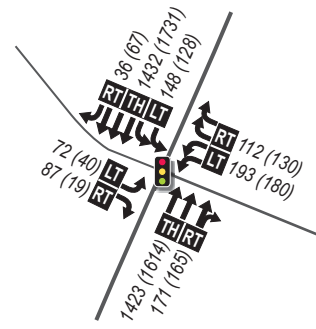
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4. Jamboree Rd. @ Eastbluff Dr./University Dr.



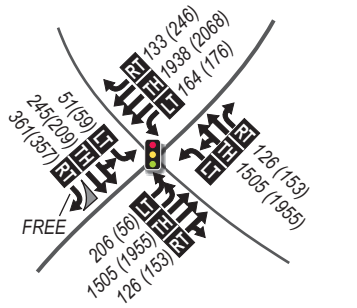
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5. Jamboree Rd. at Bison Ave.



N/S - Left Protected
E/W - Split

6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.



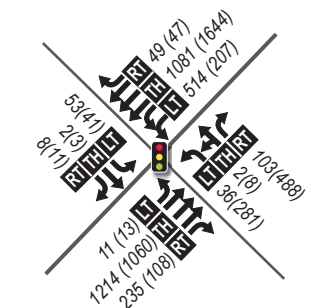
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7. Jamboree Rd. @ San Joaquin Hills Rd.



N/S - Protected
E/W - Split

8. Jamboree Rd. @ Santa Barbara Dr.



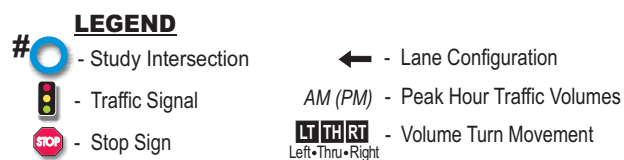
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Key Map
No Scale

3. Jamboree Rd. @ MacArthur Blvd.

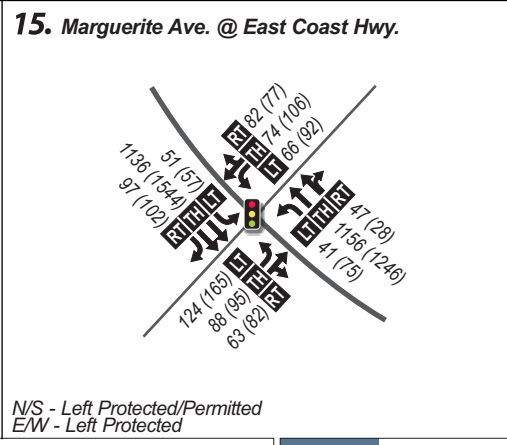
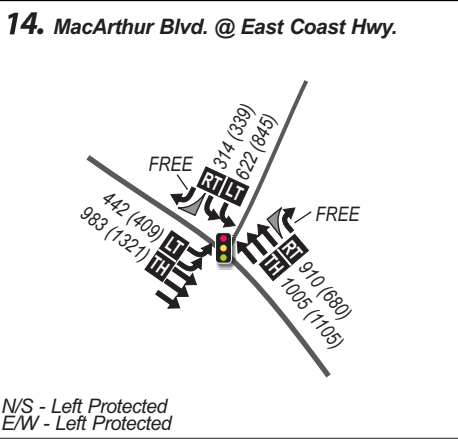
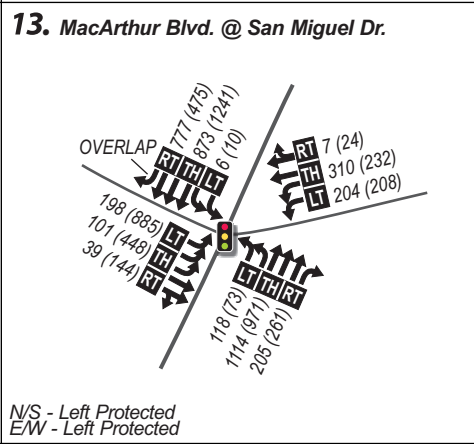
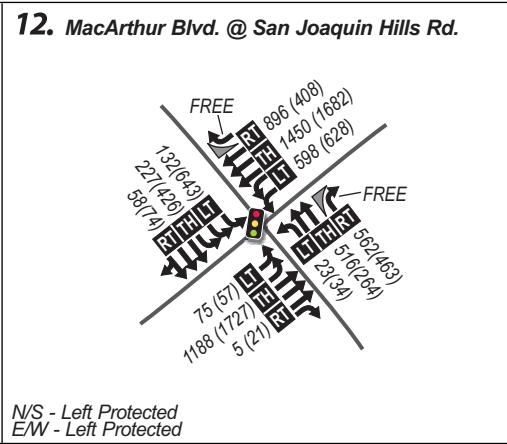
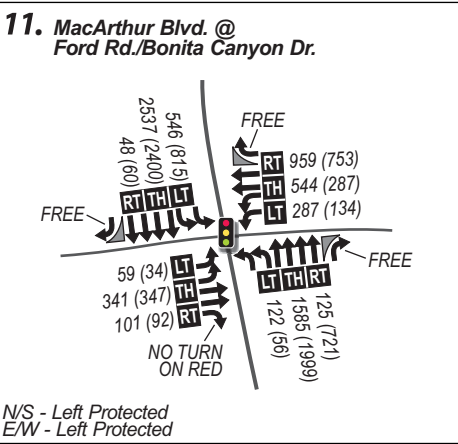
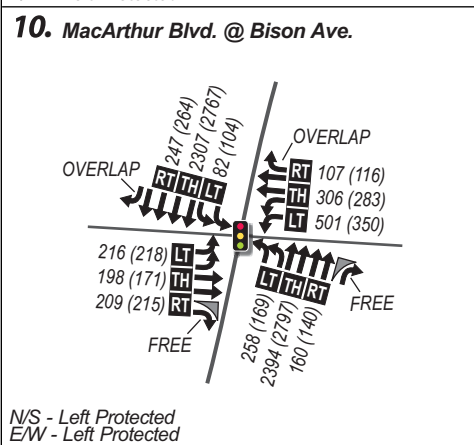
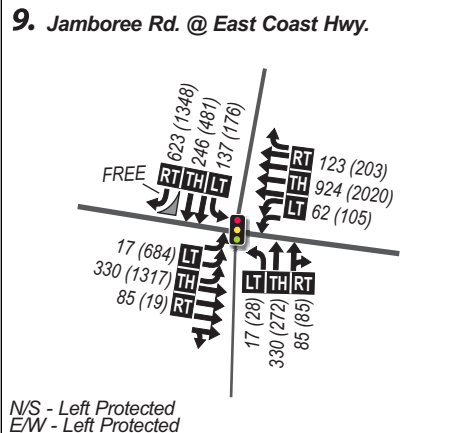
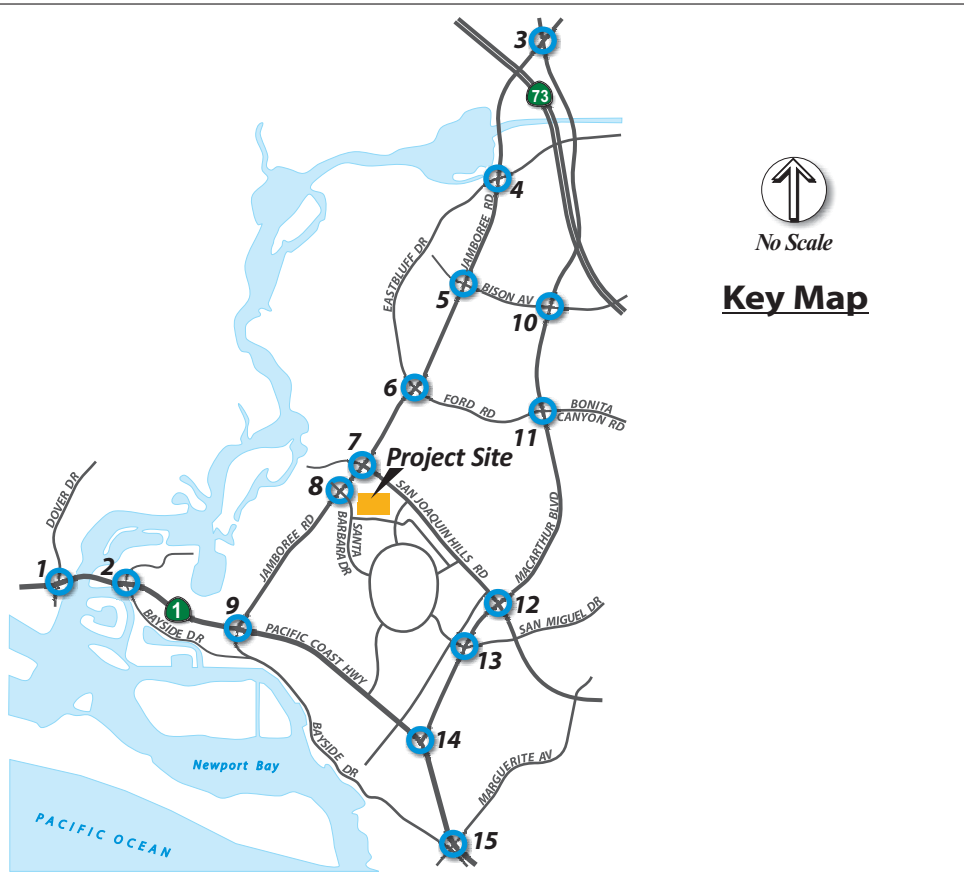
6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.



DKS

Figure 4a

**Existing (2016)
AM/PM Peak Hour Traffic Volumes**



LEGEND

- # - Study Intersection
- Traffic Signal
- Stop Sign
- Lane Configuration
- AM (PM) - Peak Hour Traffic Volumes
- Volume Turn Movement
Left-Thru-Right

DKS

Figure 4b

Existing (2016)

AM/PM Peak Hour Traffic Volumes



3.0 PROJECT DESCRIPTION

Project Size and Description

Figure 2 illustrates the site plan of the proposed project. The project proposes a 25-story structure which will consist of 100 residential units. All 25 levels will be above grade. In addition, the project proposes 2 parking levels which will be below grade. The existing site consists of the museum and the museum's administrative offices. Per the proposed plan, the project would replace the museum building. However, the administrative offices would stay in operation. The project would provide one full-access driveway directly to San Clemente Drive and will align with Santa Maria Road, as shown in Figure 2. Two service and fire access driveways are also provided. One service/fire driveway is located along San Clemente Drive.

Project Traffic

Existing Use Trip Generation Credit

The City of Newport Beach has allowed the applicant to adjust the proposed development's trip generation by applying an existing use trip credit for the museum use. DKS estimated the museum's trip generation based on empirical traffic data collected from recent surveys conducted at the museum's driveway. Based on the driveway counts, the driveway experienced an average daily traffic (ADT) of 264 trips on Thursday, January 28, 2016 and 285 trips on Friday, February 19, 2016. The approved Trip Generation Analysis Study is provided in Appendix D.

The analyzed driveway serves both the museum and its administrative offices. Therefore, DKS also surveyed the driveway traffic split between the museum and the offices. Based on driveway traffic split observations, it is estimated that 41% on Thursday and 62% on Friday of daily traffic entering and exiting the driveway is associated with the museum use. It should be noted that some vehicles were excluded from the study, such as delivery vehicles for other offices, vehicles that entered and exited without accessing the OCMA, and any other vehicles that were not affiliated with the OCMA.

The museum offers free admission day on Fridays. The survey results indicate higher museum visitors during the Friday survey date than the Thursday survey date. To be conservative, the lower trip generation survey day will be used for the museum's existing trip credit.

DKS estimated the museum's trip generation by applying the 41% estimation to the driveway ADT and the driveway AM/PM peak hour trips. A summary of the estimated vehicle trips from the museum is presented in Table D. As shown, the museum generated approximately 108 trip-ends per day, with 4 (3 inbound, 1 outbound) trips during the AM peak hour and 5 (1 inbound, 4 outbound) trips during the PM peak hour.



Table D: Museum Trip Generation Estimates

Land Use	Size		Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Generation									
Existing Use									
Museum	24	TSF	108	3	1	4	1	4	5
Total Trips			108	3	1	4	1	4	5

Trip Generation

Per the Institute of Transportation Engineers’ (ITE) Trip Generation, 9th Edition, trip generation estimates for the proposed project were developed using ITE trip rates. A summary of the trip generation rates and resulting net new vehicle trips from the proposed project and the applied existing use trip credit are presented in Table E. As shown, the proposed development is projected to generate approximately 310 net new trip-ends per day, with 30 (3 inbound, 27 outbound) net new trips during the AM peak hour and 33 (23 inbound, 10 outbound) net new trips during the PM peak hour.

Table E: Project Trip Generation Summary

Land Use	ITE Code	Size		Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Rates										
High-Rise Condominium	232	per	DU	4.18	0.06	0.28	0.34	0.24	0.14	0.38
Trip Generation										
Trips										
Condominiums (Proposed)	100	DU		418	6	28	34	24	14	38
Museum (Existing)	24	TSF		(108)	(3)	(1)	(4)	(1)	(4)	(5)
Net New Total Trips				310	3	27	30	23	10	33

ITE – Institute of Transportation Engineers



Trip Distribution and Assignment

Project trip distribution patterns were based on factors such as: 1) transportation facility characteristics that impact travel demand (i.e. location of urban arterials, freeways, and interchanges); 2) location of employment and commercial facilities; 3) location of residential facilities; and 4) existing traffic patterns. Trip distribution assumptions were approved by the City.

Figure 5 illustrates trip distribution percentages for the proposed project. Figure 6 illustrates trip distribution percentages for the existing museum. Trip distribution percentages were applied to the proposed project's trip generation to calculate the traffic volumes which the project would generate at study intersections (i.e. trip assignment). The resulting AM and PM peak hour trip assignments used for the TPO and CEQA analysis is shown in Figures 7a and 7b.

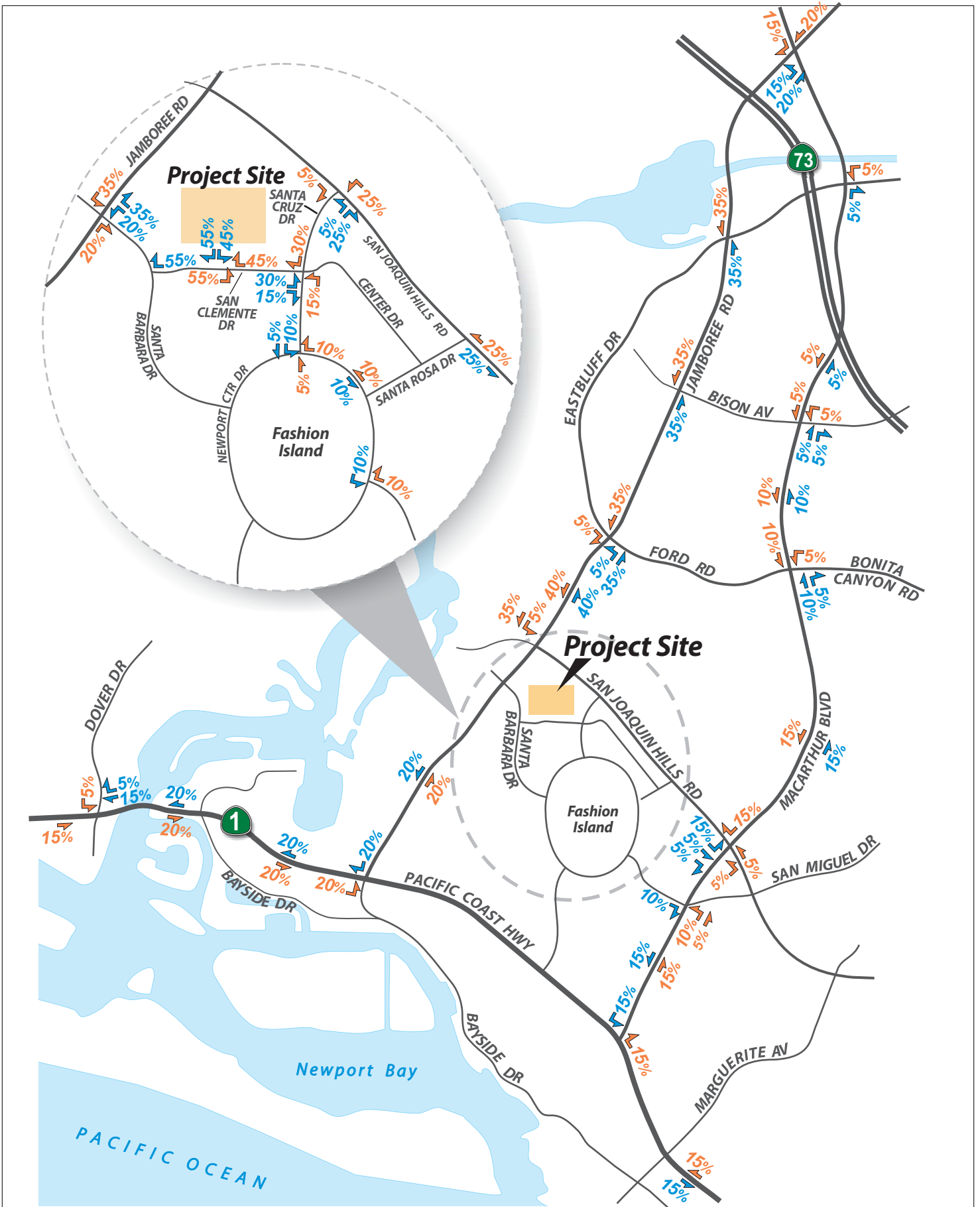
Existing (2016) Plus Project

Traffic Volumes

The trips generated from the project as shown in Figures 7a and 7b were added to the existing traffic volumes shown in Figures 4a and 4b which would result in the existing plus project traffic scenario. Figures 8a and 8b illustrate the Existing Year (2016) Plus Project traffic volumes.

Levels of Service

The Existing Plus Project level of service has been evaluated at study intersections based on the ICU methodology. The LOS summary for intersections is shown in Table F. As shown in Table F, all intersections operate at LOS C or better. Intersection LOS calculation sheets are provided in the Appendix E.



LEGEND

- 0% ↗ - Inbound Trip Distribution Percentage
- ↖ 0% - Outbound Trip Distribution Percentage

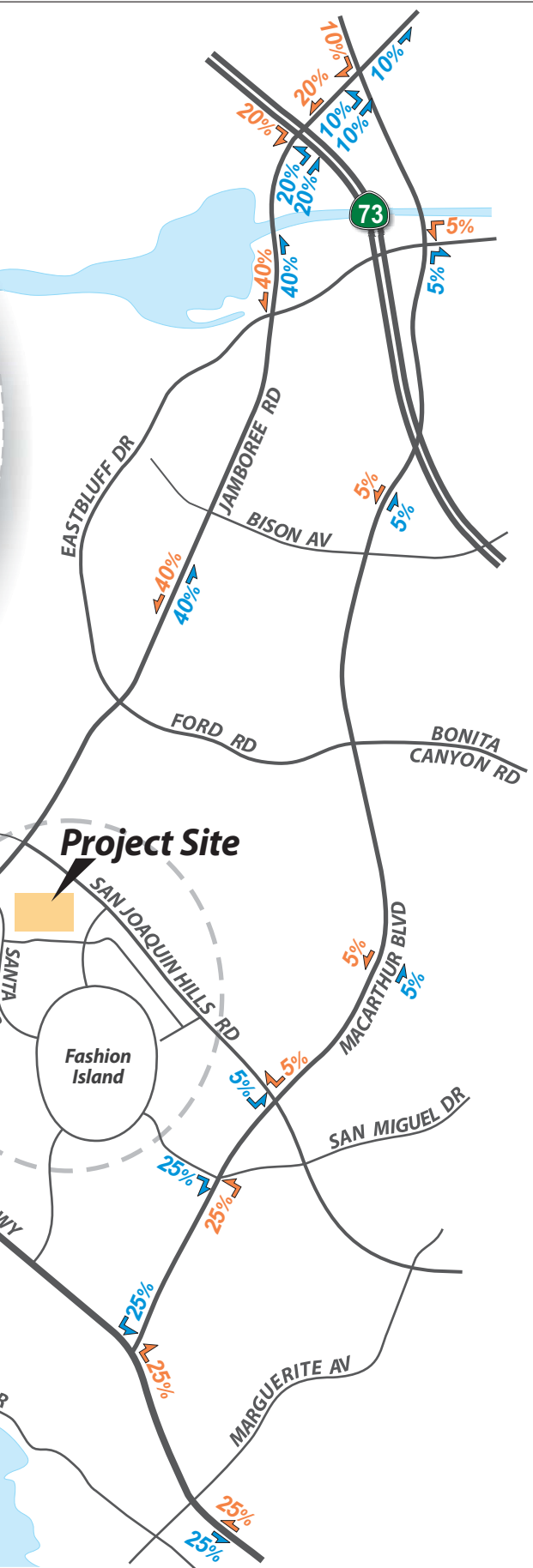
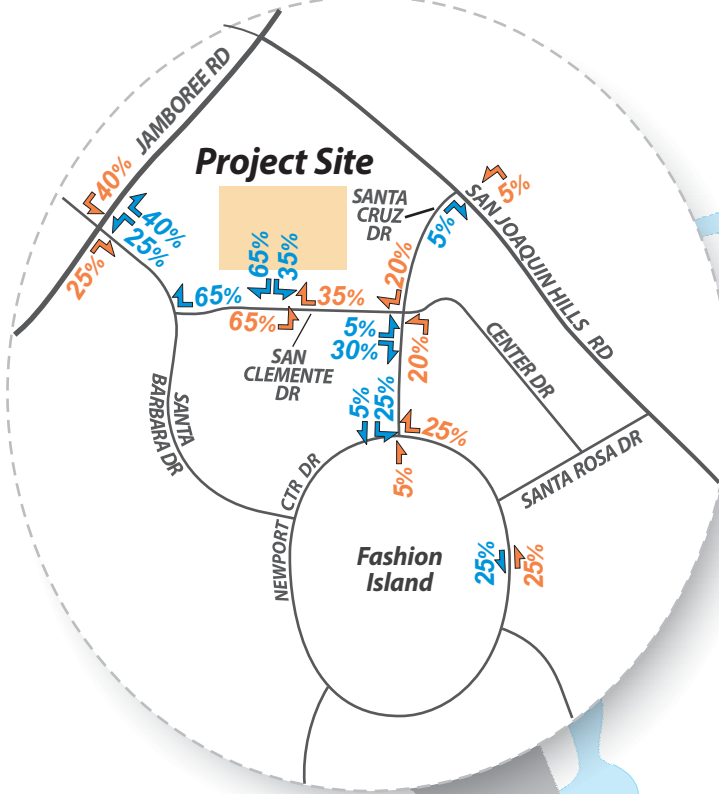
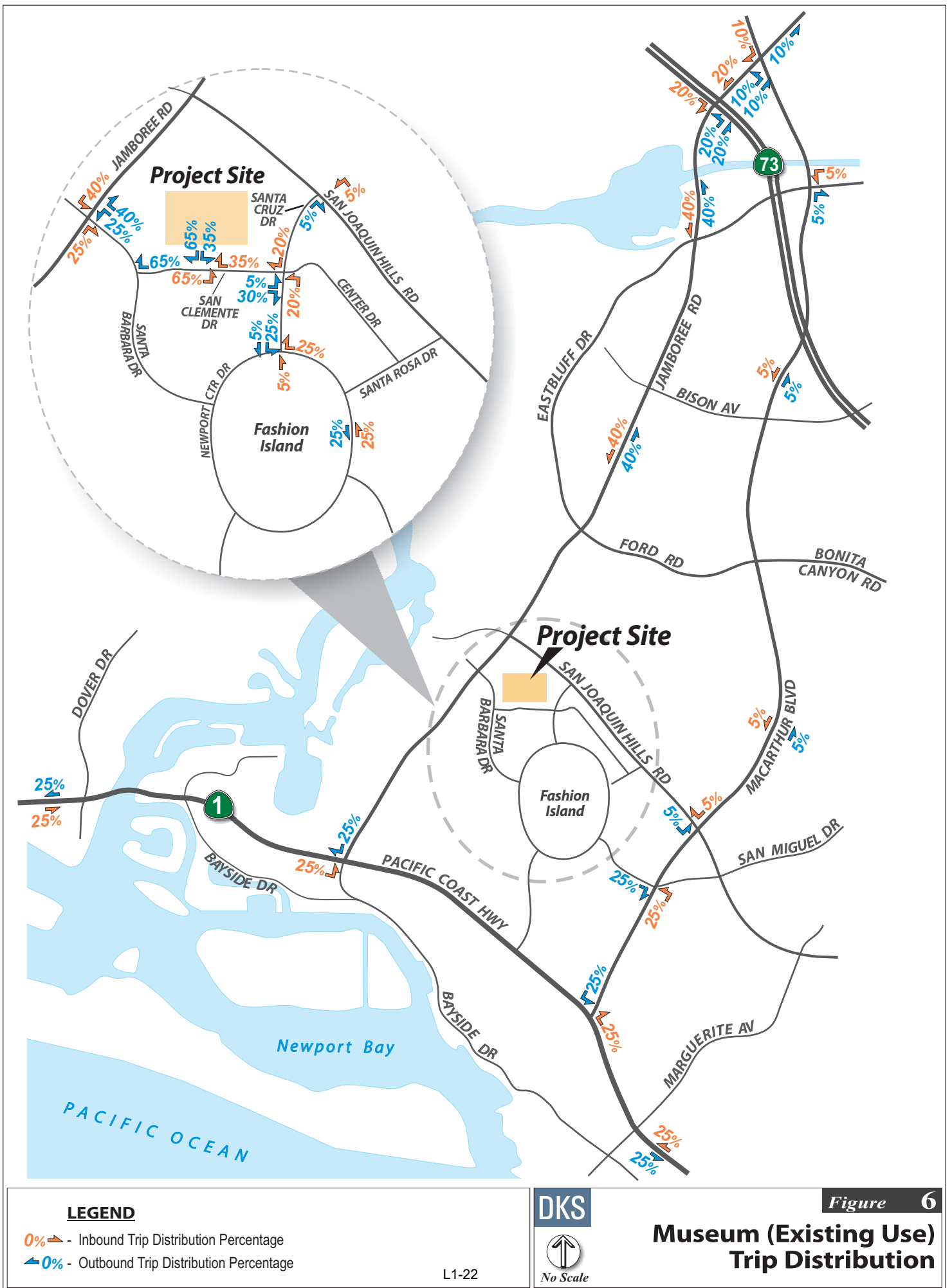
L1-21



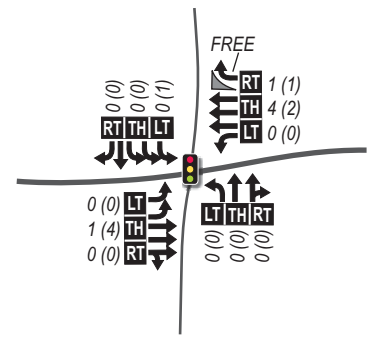
No Scale

Figure 5

Project Trip Distribution

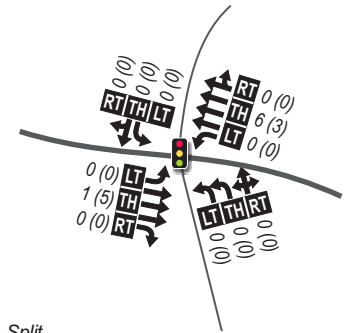


1. Dover Dr. @ West Coast Hwy.



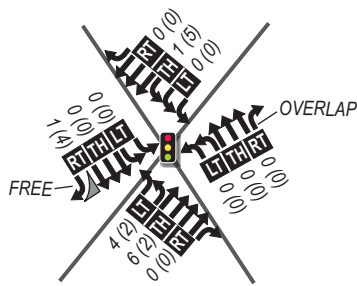
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E/W - Left Protected

2. Bayside Dr. @ East Coast Hwy.



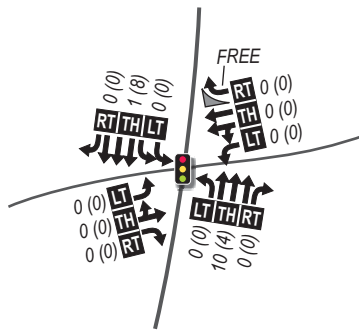
N/S - Split
E/W - Left Protected

3. Jamboree Rd. @ MacArthur Blvd.



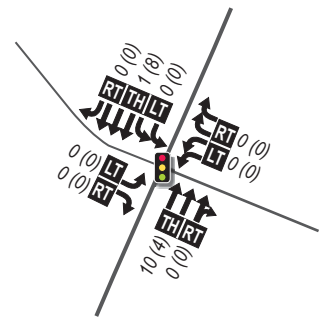
N/S - Left Protected
E/W - Left Protected

4. Jamboree Rd. @ Eastbluff Dr./University Dr.



N/S - Left Protected
E/W - Split

5. Jamboree Rd. at Bison Ave.



N/S - Left Protected
E/W - Split

6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.



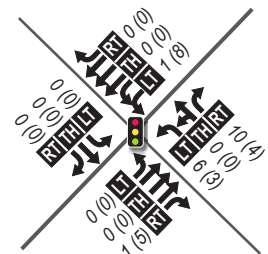
N/S - Left Protected
E/W - Split

7. Jamboree Rd. @ San Joaquin Hills Rd.



N/S - Protected
E/W - Split

8. Jamboree Rd. @ Santa Barbara Dr.



N/S - Left Protected
E/W - Split



3. Jamboree Rd. @ MacArthur Blvd.

6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.

LEGEND

- # - Study Intersection
- Traffic Signal
- Stop Sign
- Lane Configuration
- AM (PM) - Peak Hour Traffic Volumes
- Volume Turn Movement
Left-Thru-Right



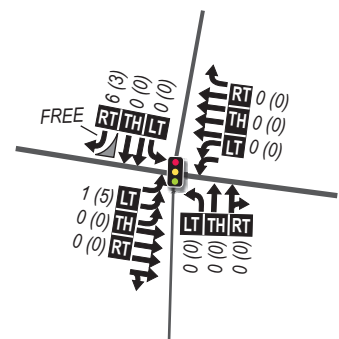
Figure 7a

**Project Trip Assignment
(TPO and CEQA Analysis)**



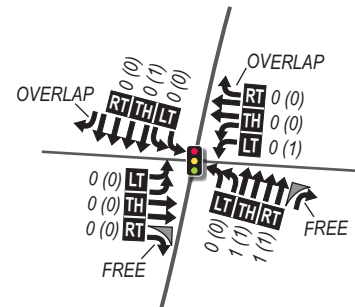
No Scale
Key Map

9. Jamboree Rd. @ East Coast Hwy.



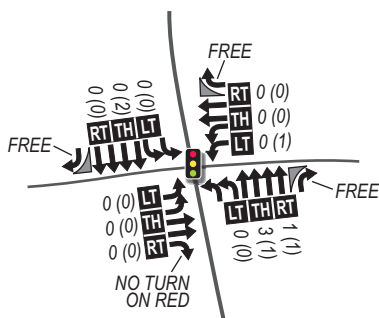
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E/W - Left Protected

10. MacArthur Blvd. @ Bison Ave.



N/S - Left Protected
E/W - Left Protected

11. MacArthur Blvd. @ Ford Rd./Bonita Canyon Dr.



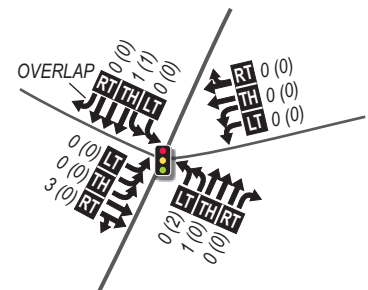
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12. MacArthur Blvd. @ San Joaquin Hills Rd.



N/S - Left Protected
E/W - Left Protected

13. MacArthur Blvd. @ San Miguel Dr.



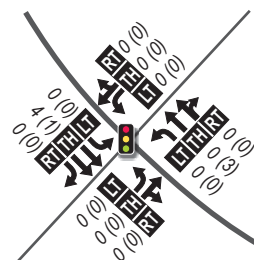
N/S - Left Protected
E/W - Left Protected

14. MacArthur Blvd. @ East Coast Hwy.



N/S - Left Protected
E/W - Left Protected

15. Marguerite Ave. @ East Coast Hwy.



N/S - Left Protected/Permitted
E/W - Left Protected

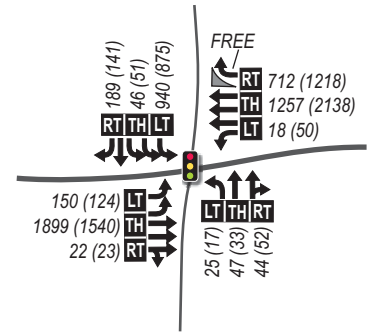
- LEGEND**
- # - Study Intersection
 - Traffic Signal
 - Stop Sign
 - Lane Configuration
 - AM (PM) - Peak Hour Traffic Volumes
 - Volume Turn Movement
Left•Thru•Right

DKS

Figure 7b

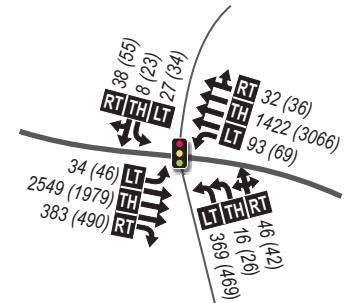
**Project Trip Assignment
(TPO and CEQA Analysis)**

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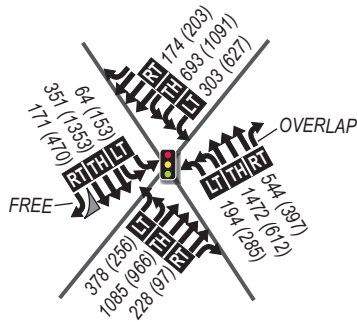
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2. Bayside Dr. @ East Coast Hwy.



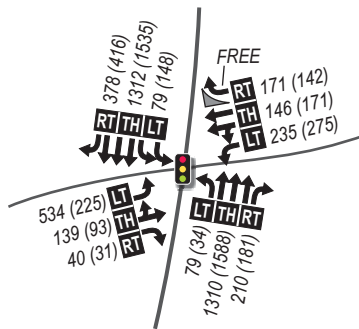
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3. Jamboree Rd. @ MacArthur Blvd.



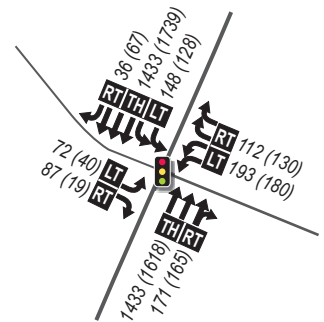
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E/W - Left Protected

4. Jamboree Rd. @ Eastbluff Dr./University Dr.



N/S - Left Protected
E/W - Split

5. Jamboree Rd. at Bison Ave.



N/S - Left Protected
E/W - Split

6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.



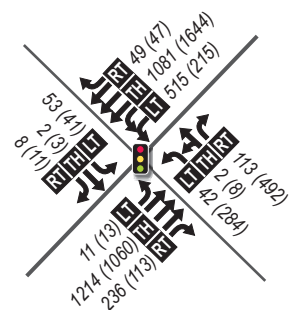
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7. Jamboree Rd. @ San Joaquin Hills Rd.



N/S - Protected
E/W - Split

8. Jamboree Rd. @ Santa Barbara Dr.



N/S - Left Protected
E/W - Split

3. Jamboree Rd. @ MacArthur Blvd.

6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.

LEGEND

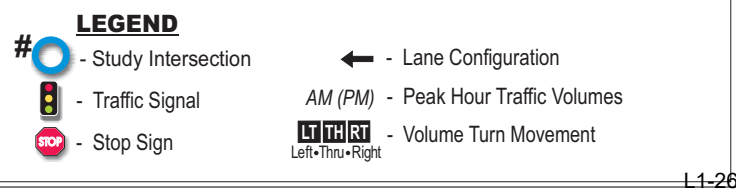
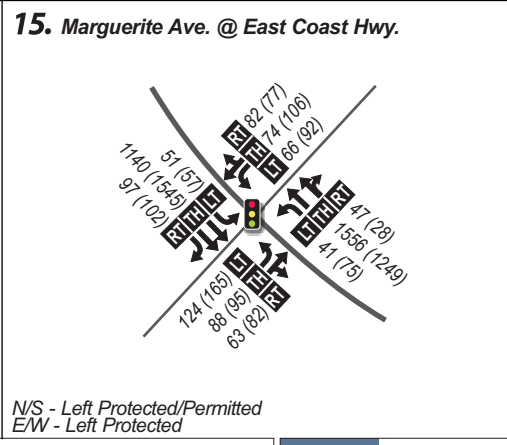
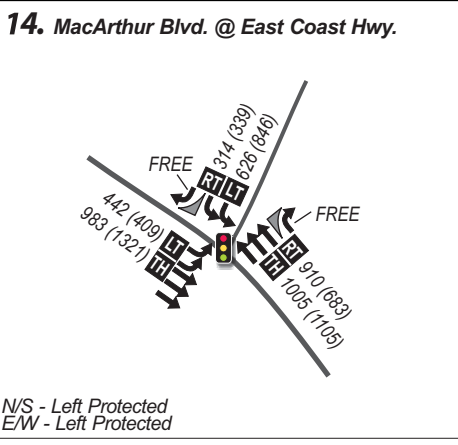
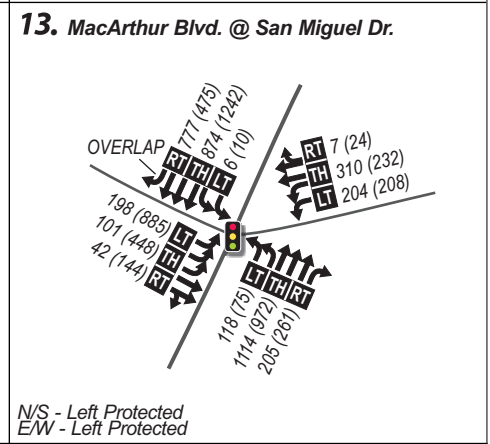
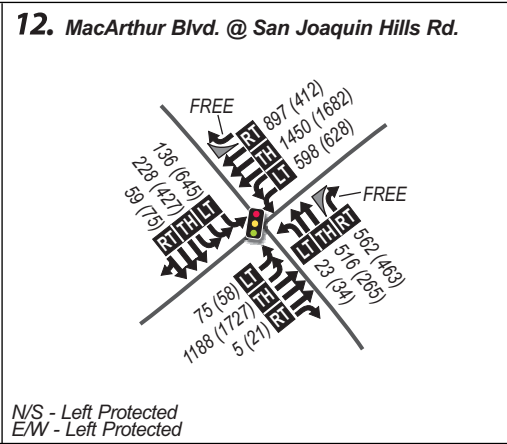
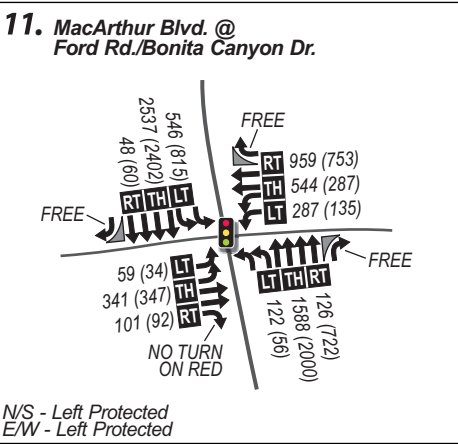
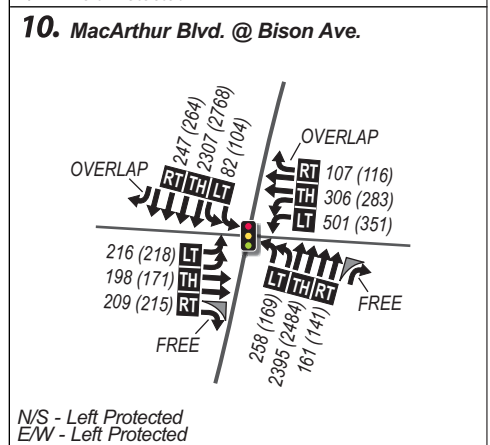
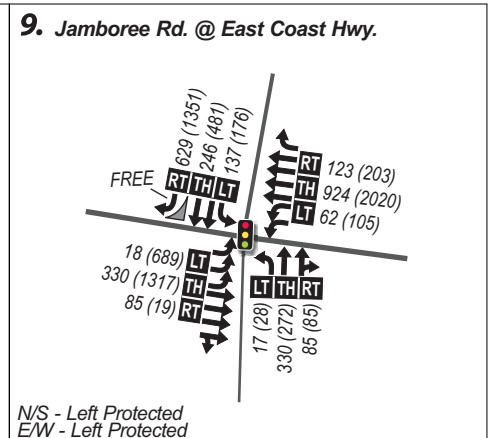
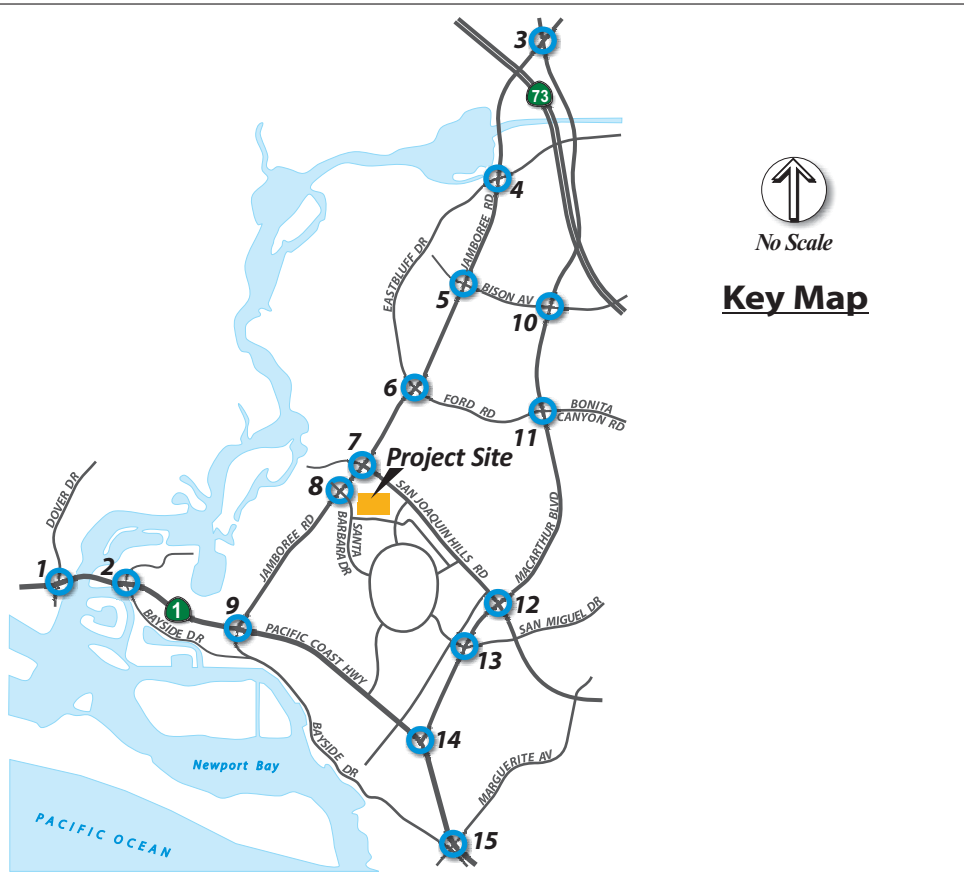
- # - Study Intersection
- Traffic Signal
- Stop Sign
- Lane Configuration
- AM (PM) - Peak Hour Traffic Volumes
- Volume Turn Movement
Left-Thru-Right



DKS

Figure 8a

**Existing (2016) Plus Project
AM/PM Peak Hour Traffic Volumes**



DKS **Figure 8b**

Existing (2016) Plus Project AM/PM Peak Hour Traffic Volumes



Table F: Existing (2016) Plus Project Intersection Level of Service Summary

Intersections		No Project				Plus Project				Difference		Project Impact
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	V/C	
1.	Dover Drive/West Coast Highway	.636	B	.698	B	.636	B	.699	B	0.000	0.001	No
2.	Bayside Drive/East Coast Highway	.708	C	.674	B	.708	B	.674	B	0.000	0.000	No
3.	Jamboree Road/MacArthur Boulevard	.588	A	.677	B	.589	A	.678	B	0.001	0.001	No
4.	Jamboree Road/Eastbluff Drive/University Drive	.612	B	.569	A	.612	B	.569	A	0.000	0.000	No
5.	Jamboree Road/Bison Avenue	.493	A	.492	A	.495	A	.493	A	0.002	0.001	No
6.	Jamboree Road/Eastbluff Drive/Ford Road	.645	B	.689	B	.646	B	.690	B	0.001	0.001	No
7.	Jamboree Road/San Joaquin Hills Road	.663	B	.521	A	.665	B	.525	A	0.002	0.004	No
8.	Jamboree Road/Santa Barbara Drive	.511	A	.681	B	.518	A	.684	B	0.007	0.003	No
9.	Jamboree Road/East Coast Highway	.363	A	.680	B	.363	A	.681	B	0.000	0.001	No
10.	MacArthur Boulevard/Bison Avenue	.660	B	.648	B	.660	B	.648	B	0.000	0.000	No
11.	MacArthur Boulevard/Ford Road/Bonita Canyon Drive	.631	B	.717	C	.631	B	.718	C	0.000	0.001	No
12.	MacArthur Boulevard/San Joaquin Hills Road	.623	B	.773	C	.624	B	.773	C	0.001	0.000	No
13.	MacArthur Boulevard/San Miguel Drive	.622	B	.546	A	.622	B	.547	A	0.000	0.001	No
14.	MacArthur Boulevard/East Coast Highway	.542	A	.622	B	.543	A	.622	B	0.001	0.000	No
15.	Marguerite Avenue/East Coast Highway	.708	C	.747	C	.708	C	.747	C	0.000	0.000	No

Significant Impact

Based on the threshold for significant impacts of the proposed project, the trips generated from the proposed project would not cause significant impact on any of the study intersections. Therefore, no mitigation measures are required on study intersections as part of the project.



4.0 FUTURE (2021) CONDITIONS

Future (2021) Plus Approved Projects Plus Growth (No Project) – TPO Analysis

Traffic Volumes

Future buildout traffic forecasts were developed in order to analyze the project traffic impacts during the buildout year of the project. A 1% annual growth was added to the existing vehicular traffic volumes (on arterials only) for a period of 5 years to determine the future 2021 traffic volumes at the study intersections based on the growth rate obtained from the City. In addition, the City of Newport Beach provided a list of approved projects and trips on the study intersections to be used for the future 2021 analysis. The approved projects consist of developments which are approved by the City, but have not been constructed. An approved project is a project that has been approved pursuant to the TPO, and requires no further discretionary approval from the City. Trips generated from the approved projects were distributed to the roadway network by the city. The list of approved projects is presented in Table G.

Table G: List of Approved Projects

No.	Approved Project	No.	Approved Project
1.	Fashion Island Expansion	12.	Mariner’s Pointe
2.	Temple Bat Yahm Expansion	13.	4221 Dolphin Striker
3.	Newport Dunes	14.	San Joaquin Hills Plaza
4.	Hoag Hospital Phase III	15.	Uptown Newport (Phase 2)
5.	St. Mark Presbyterian Church	16.	Uptown Newport (Phase 1)
6.	2300 Newport Boulevard	17.	Marina Park
7.	Hoag Health Center	18.	Back Bay Landing
8.	North Newport Center	19.	Westcliff Drive Medical
9.	Santa Barbara Condo	20.	Lido House Hotel Traffic
10.	328 Old Newport Medical	21.	Newport Executive Center
11.	Bayview Medical Office	22.	ENC Pre-School

Figures 9a and 9b show the future ambient growth and approved project volumes at study intersections. Figures 10a and 10b illustrate the Future (2021) Plus Approved Projects Plus Growth AM and PM peak hour traffic volumes in the study area. Approved

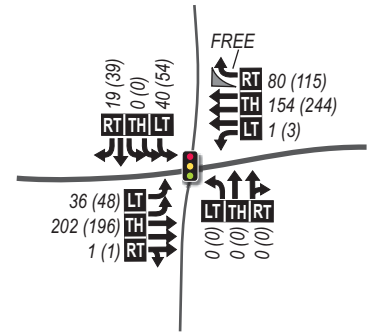


project volumes that were provided by the City of Newport Beach are included in Appendix F.

Level of Service

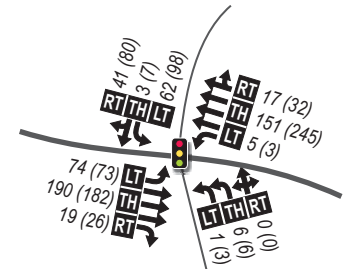
The Future (2021) Plus Approved Project Plus Growth (No Project) level of service has been evaluated at study intersections based on the ICU methodology. The LOS summary for intersections is shown in Table H. As shown in Table H, all intersections operate at LOS D or better. Intersection LOS calculation sheets are provided in the Appendix G.

1. Dover Dr. @ West Coast Hwy.



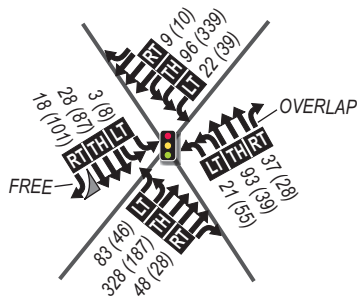
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2. Bayside Dr. @ East Coast Hwy.



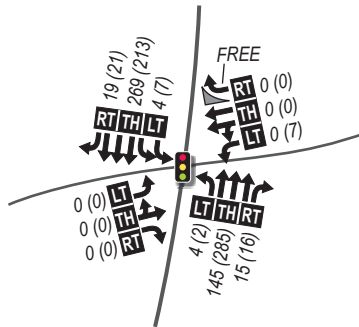
N/S - Split
E/W - Left Protected

3. Jamboree Rd. @ MacArthur Blvd.



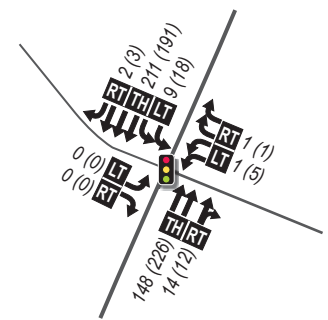
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4. Jamboree Rd. @ Eastbluff Dr./University Dr.



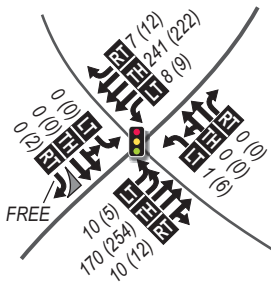
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5. Jamboree Rd. at Bison Ave.



N/S - Left Protected
E/W - Split

6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.



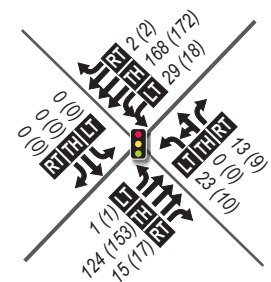
N/S - Left Protected
E/W - Split

7. Jamboree Rd. @ San Joaquin Hills Rd.



N/S - Protected
E/W - Split

8. Jamboree Rd. @ Santa Barbara Dr.



N/S - Left Protected
E/W - Split



No Scale

Key Map

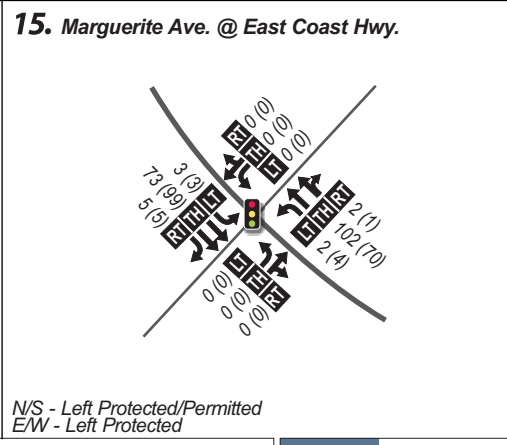
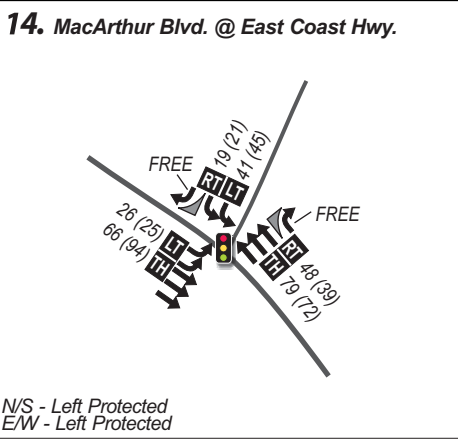
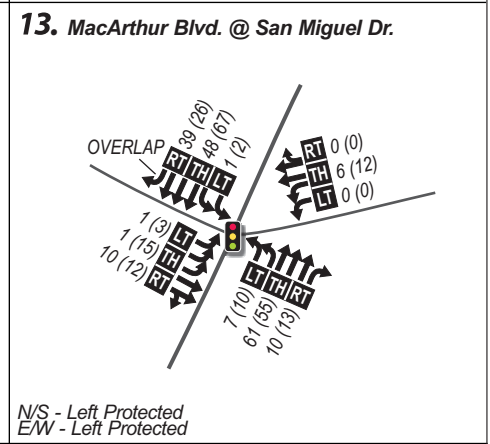
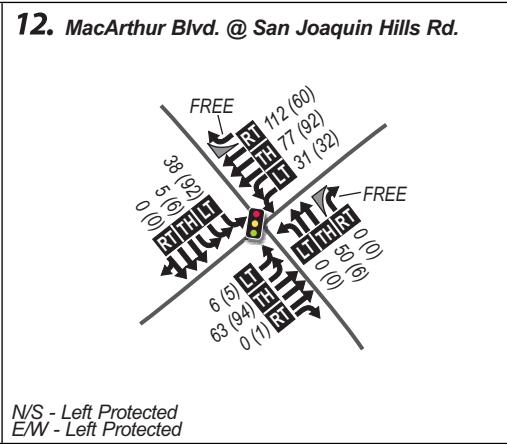
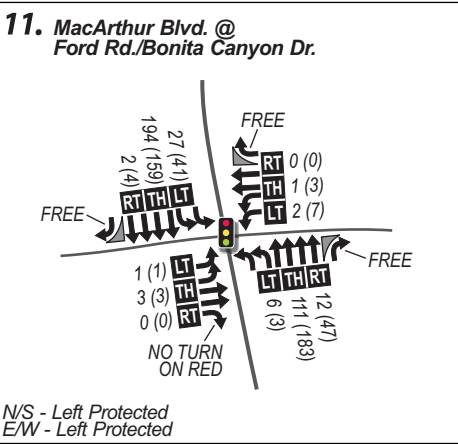
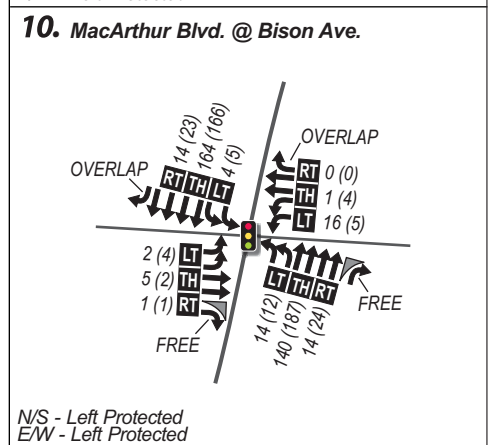
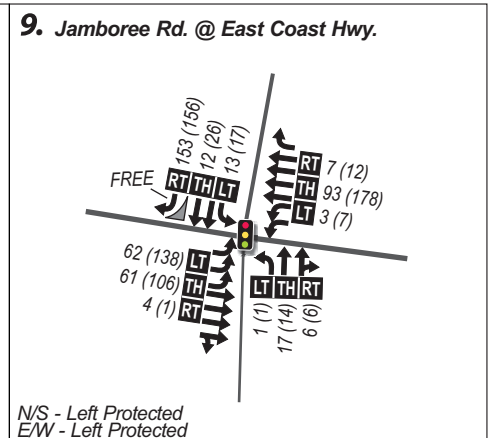
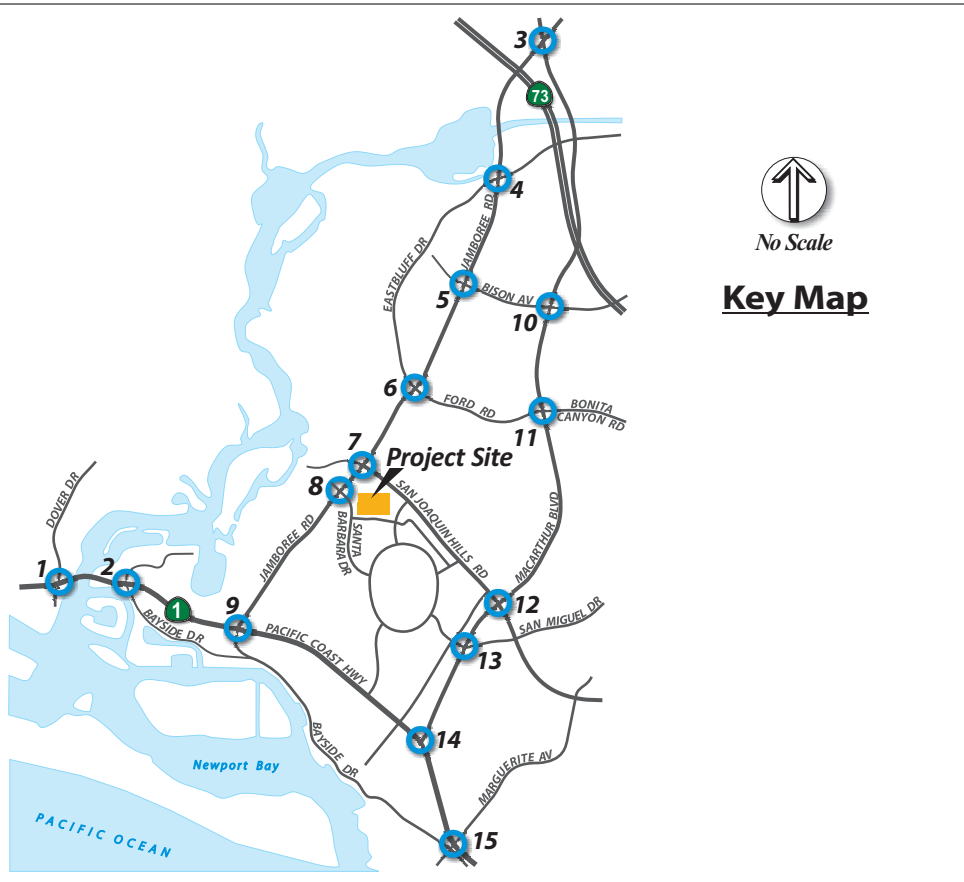
LEGEND

- # - Study Intersection
- Traffic Signal
- Stop Sign
- Lane Configuration
- AM (PM) - Peak Hour Traffic Volumes
- Volume Turn Movement
Left-Thru-Right



Figure 9a

Ambient Growth and Approved Projects Peak Hour Volumes



LEGEND

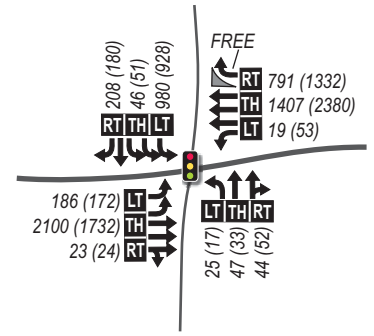
- # - Study Intersection
- Traffic Signal
- Stop Sign
- Lane Configuration
- AM (PM) - Peak Hour Traffic Volumes
- Volume Turn Movement
Left-Thru-Right

DKS

Figure 9b

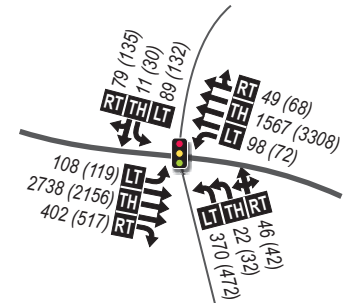
Ambient Growth and Approved Projects Peak Hour Volumes

1. Dover Dr. @ West Coast Hwy.



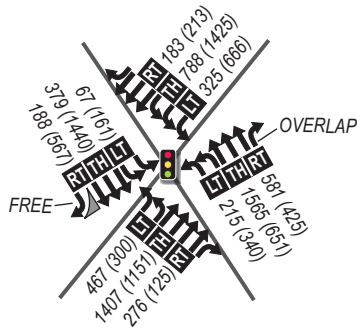
N/S - Split
E/W - Left Protected

2. Bayside Dr. @ East Coast Hwy.



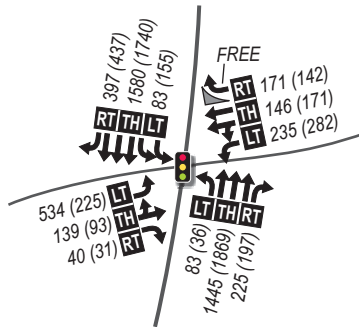
N/S - Split
E/W - Left Protected

3. Jamboree Rd. @ MacArthur Blvd.



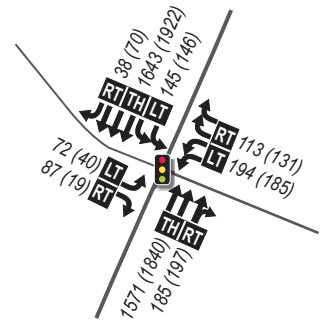
N/S - Left Protected
E/W - Left Protected

4. Jamboree Rd. @ Eastbluff Dr./University Dr.



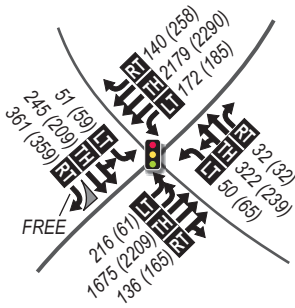
N/S - Left Protected
E/W - Split

5. Jamboree Rd. at Bison Ave.



N/S - Left Protected
E/W - Split

6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.



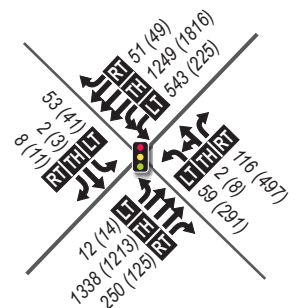
N/S - Left Protected
E/W - Split

7. Jamboree Rd. @ San Joaquin Hills Rd.



N/S - Protected
E/W - Split

8. Jamboree Rd. @ Santa Barbara Dr.



N/S - Left Protected
E/W - Split



No Scale

Key Map

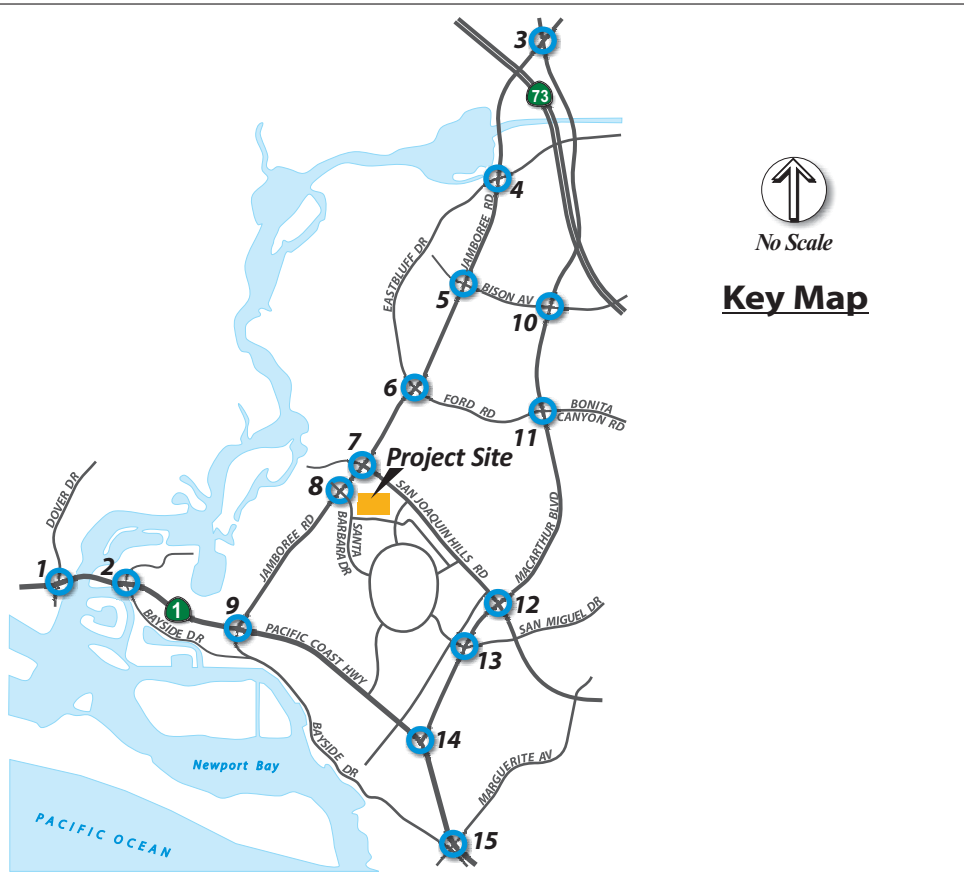
LEGEND

- # - Study Intersection
- Traffic Signal
- Stop Sign
- Lane Configuration
- AM (PM) - Peak Hour Traffic Volumes
- Volume Turn Movement
Left-Thru-Right

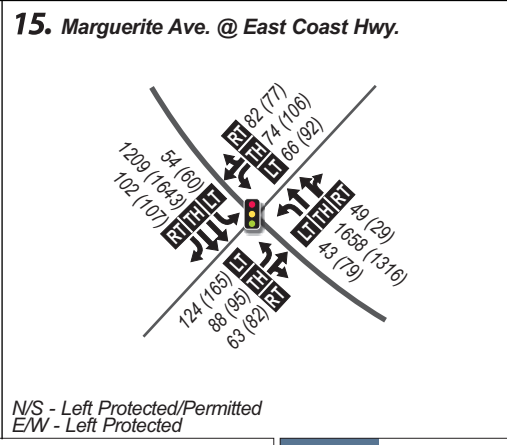
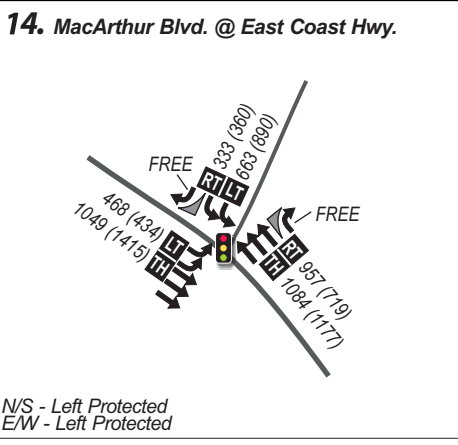
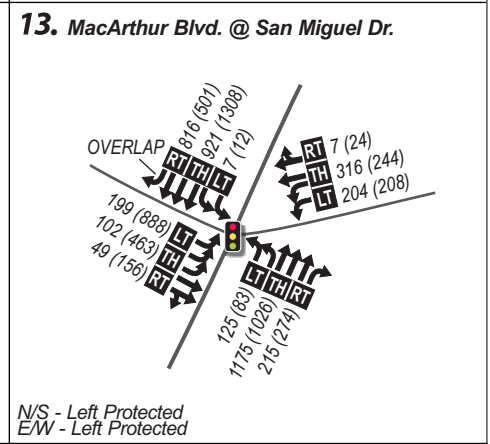
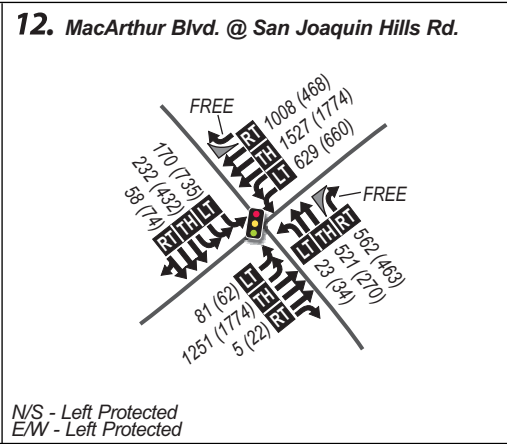
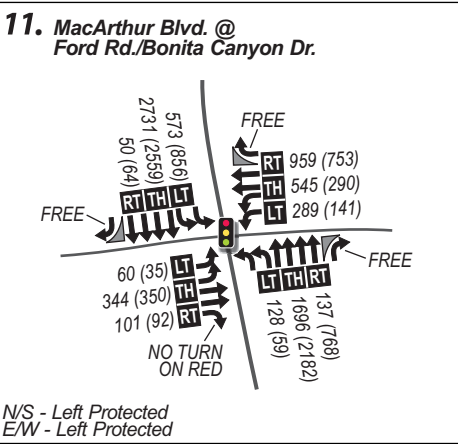
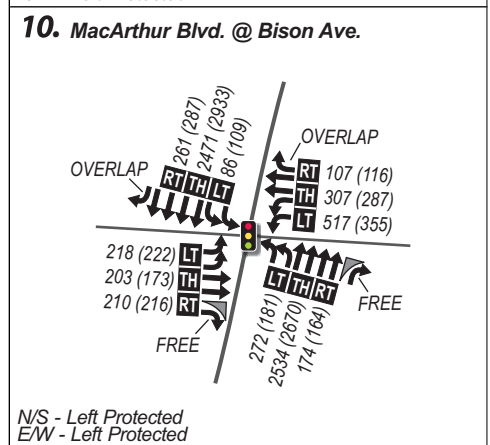
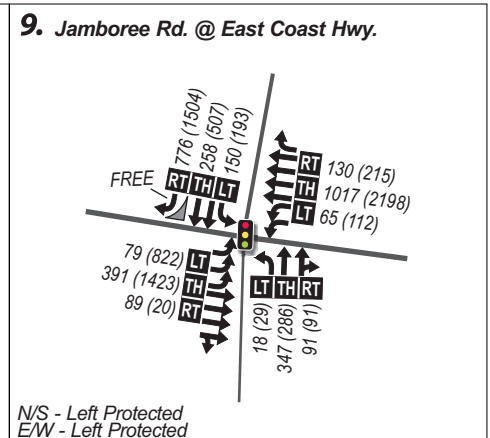


Figure 10a






**Future Year (2021)
Plus Approved Projects
Plus Growth Peak Hour Volumes**




 No Scale
Key Map



LEGEND

- #  - Study Intersection
-  - Traffic Signal
-  - Stop Sign
-  - Lane Configuration
- AM (PM) - Peak Hour Traffic Volumes
-  - Volume Turn Movement
Left+Thru+Right

DKS

Figure 10b

**Future Year (2021)
Plus Approved Projects
Plus Growth Peak Hour Volumes**



Table H: Future (2021) Plus Approved Projects Plus Growth (No Project) Intersection-Level of Service Summary (TPO Analysis)

Intersection		AM Peak Hour		PM Peak Hour	
		V/C	LOS	V/C	LOS
1.	Dover Drive/West Coast Highway	.687	B	.775	C
2.	Bayside Drive/East Coast Highway	.779	C	.819	D
3.	Jamboree Road/MacArthur Boulevard	.657	C	.797	C
4.	Jamboree Road/Eastbluff Drive/University Drive	.671	B	.632	B
5.	Jamboree Road/Bison Avenue	.530	A	.549	A
6.	Jamboree Road/Eastbluff Drive/Ford Road	.699	B	.750	C
7.	Jamboree Road/San Joaquin Hills Road	.723	C	.600	B
8.	Jamboree Road/Santa Barbara Drive	.554	A	.723	C
9.	Jamboree Road/East Coast Highway	.405	A	.753	C
10.	MacArthur Boulevard/Bison Avenue	.696	B	.680	B
11.	MacArthur Boulevard/Ford Road/Bonita Canyon Drive	.665	B	.762	C
12.	MacArthur Boulevard/San Joaquin Hills Road	.655	B	.823	D
13.	MacArthur Boulevard/San Miguel Drive	.650	B	.567	A
14.	MacArthur Boulevard/East Coast Highway	.579	A	.659	B
15.	Marguerite Avenue/East Coast Highway	.742	C	.780	C

Future (2021) Plus Approved Plus Growth Plus Project – TPO Analysis

TPO Analysis

In addition to the CEQA analysis, the City of Newport Beach also requires the analysis of the future buildout year of the proposed development as per the Traffic Phasing Ordinance (TPO) requirements. Unlike in the CEQA analysis where the cumulative projects are required to be included in the analysis, the TPO analysis includes only the approved projects in the no project baseline conditions. Therefore, this scenario is analyzed based on the TPO requirements only.

One Percent Methodology for TPO Analysis

As per the TPO analysis, the study intersections are required to be reviewed based on the one percent methodology in order to determine if they need to be analyzed further or not. If the proposed project trips at any approach are greater than the 1% of the no project volume (Future 2021 Plus Approved Plus Growth No Project) at that approach, the intersection qualifies for further analysis for level of service (ICU).



Based on the comparison between the Future (2021) Plus Approved Plus Growth No Project as shown in Figures 10a and 10b with the project trip assignment as shown in Figures 7a and 7b, the following two (2) intersections do satisfy the one percent threshold and would require further analysis for this scenario. The threshold calculation worksheets are provided in Appendix H.

1. Jamboree Road/Santa Barbara Drive
2. MacArthur Boulevard/San Joaquin Hills Road

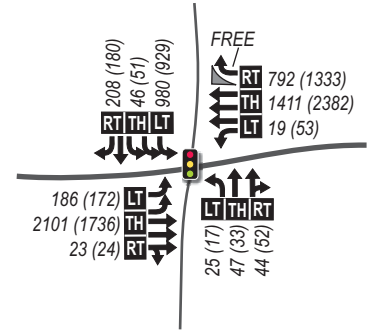
Traffic Volumes

The trips generated from the project as shown in Figures 7a and 7b were added to the future (2021) no project traffic volumes shown in Figures 10a and 10b which would result in the future (2021) plus project traffic scenario. Figures 11a and 11b illustrate the Future (2021) Plus Approved Projects Plus Growth Plus Project traffic volumes.

Level of Service

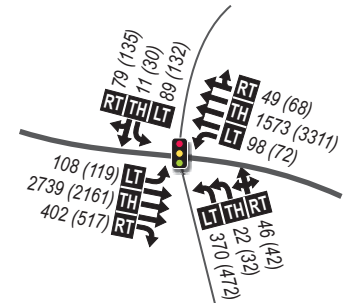
The Future (2021) Plus Approved Plus Growth Plus Project level of service has been evaluated at study intersections based on the ICU methodology. The LOS summary for intersections is shown in Table I. As shown in Table I, all intersections operate at LOS D or better. Intersection LOS calculation sheets are provided in the Appendix I.

1. Dover Dr. @ West Coast Hwy.



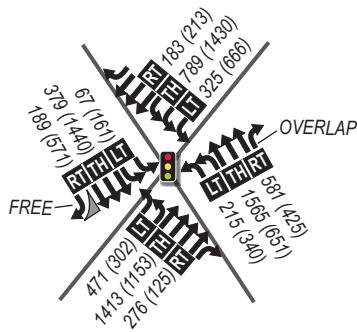
N/S - Split
E/W - Left Protected

2. Bayside Dr. @ East Coast Hwy.



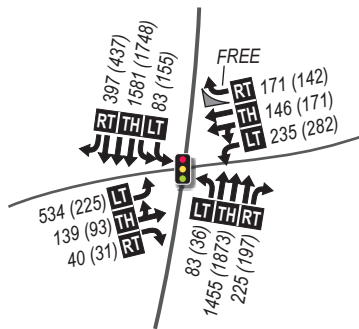
N/S - Split
E/W - Left Protected

3. Jamboree Rd. @ MacArthur Blvd.



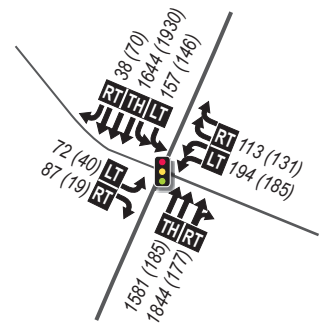
N/S - Left Protected
E/W - Left Protected

4. Jamboree Rd. @ Eastbluff Dr./University Dr.



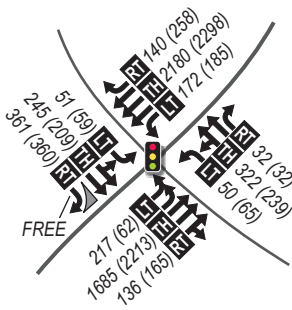
N/S - Left Protected
E/W - Split

5. Jamboree Rd. at Bison Ave.



N/S - Left Protected
E/W - Split

6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.



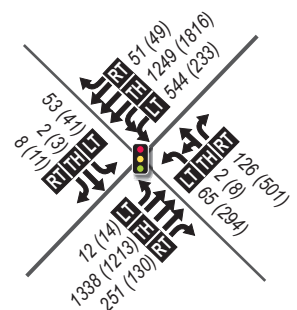
N/S - Left Protected
E/W - Split

7. Jamboree Rd. @ San Joaquin Hills Rd.



N/S - Protected
E/W - Split

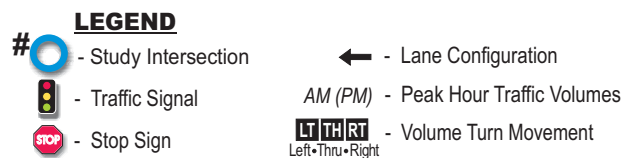
8. Jamboree Rd. @ Santa Barbara Dr.



N/S - Left Protected
E/W - Split



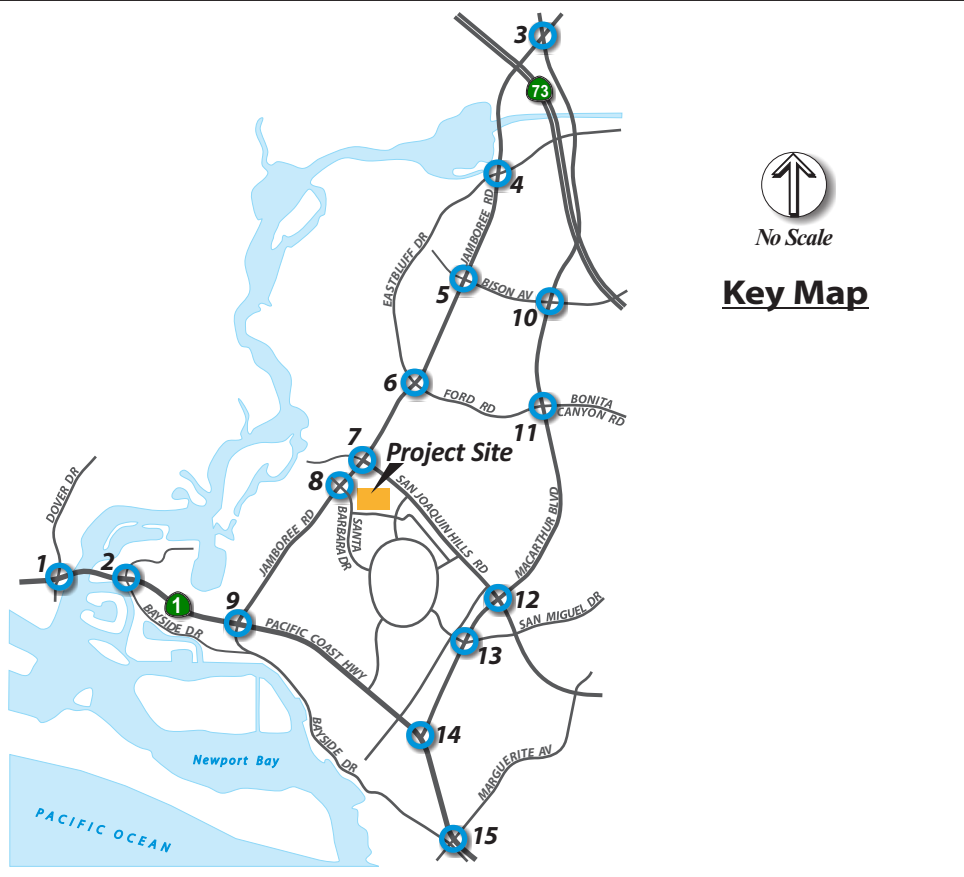
Key Map



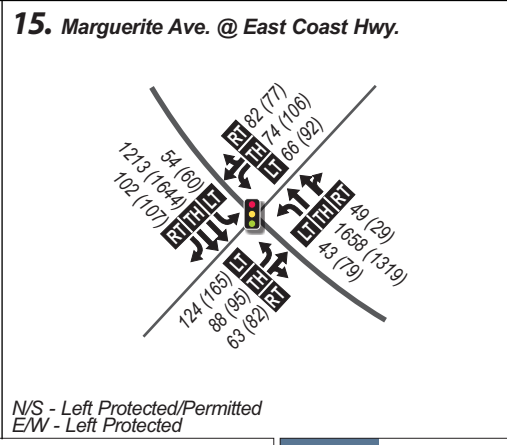
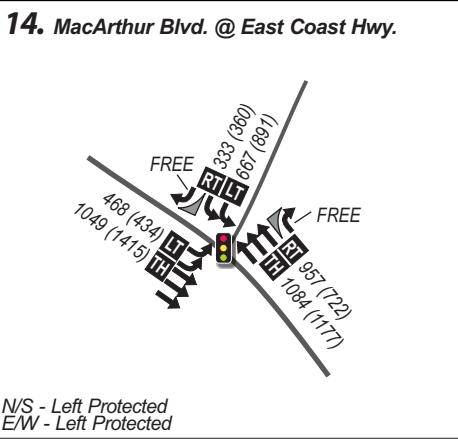
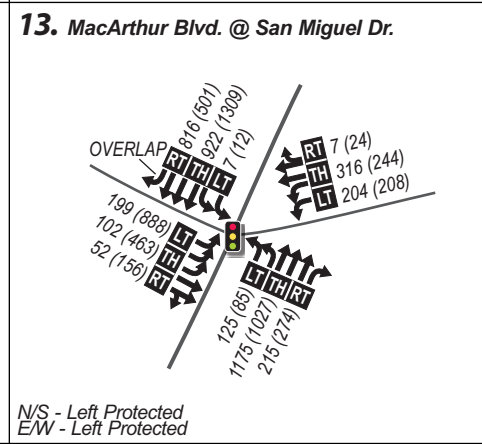
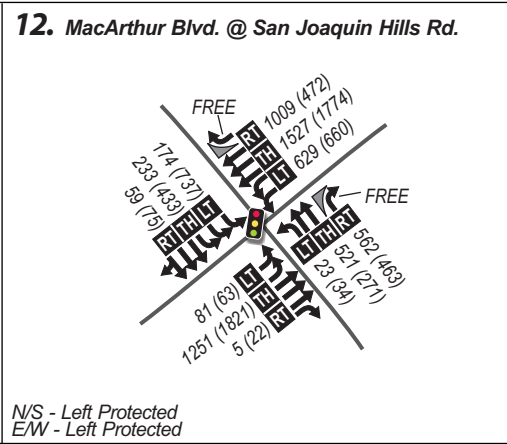
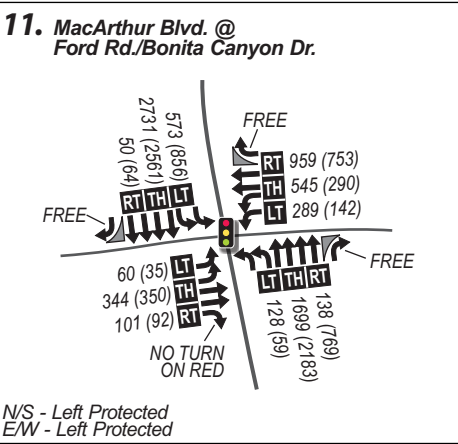
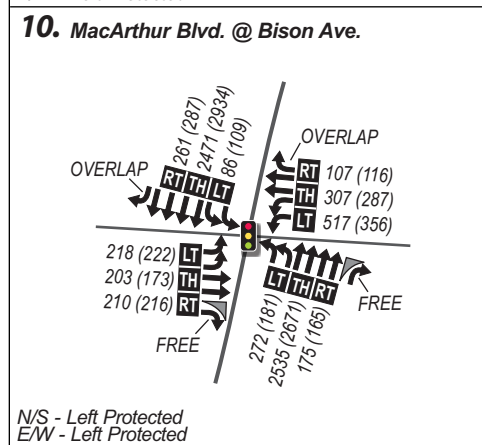
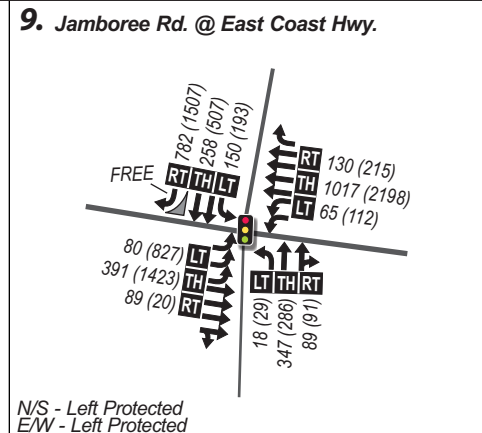
DKS

Figure 11a

**Future Year (2021)
Plus Approved Projects Plus Growth
Plus Project Peak Hour Volumes**



No Scale
Key Map



LEGEND

- # - Study Intersection
- Traffic Signal
- Stop Sign
- Lane Configuration
- AM (PM) - Peak Hour Traffic Volumes
- Volume Turn Movement
Left-Thru-Right

DKS

Figure 11b

**Future Year (2021)
Plus Approved Projects Plus Growth
Plus Project Peak Hour Volumes**



Table I: Future (2021) Plus Approved Projects Plus Growth Plus Project Intersection Level of Service Summary (TPO Analysis)

Intersections		No Project				Plus Project				Difference		Project Impact
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	V/C	
8.	Jamboree Road/Santa Barbara Drive	.554	A	.723	C	.560	A	.726	C	.006	.003	No
12.	MacArthur Blvd/San Joaquin Hills Rd	.655	B	.823	D	.656	B	.824	D	.001	.001	No

Significant Impact

Based on the threshold for significant impacts of the proposed project, the trips generated from the proposed project would not cause significant impact on any of the study intersections. Therefore, no mitigation measures are required on the study intersections as part of the project.

Future (2021) Plus Approved Projects Plus Cumulative Projects Plus Growth (No Project) – CEQA Analysis

Traffic Volumes

Future buildout traffic forecasts were developed in order to analyze the project traffic impacts during the buildout year of the project. A 1% annual growth was added to the existing vehicular traffic volumes (on arterials only) for a period of 5 years to determine the future 2021 traffic volumes at the study intersections based on the growth rate obtained from the City. In addition to the list of approved projects, the City of Newport Beach provided a list of cumulative project locations and traffic study documents which needed to be included for the future 2021 analysis. The cumulative projects consist of developments which are not yet approved by the City, but are expected to be completed or almost be completed around the completion of the proposed project. Trips generated from the approved and cumulative projects were distributed to the roadway network. The list of cumulative project is presented in Table J. The details of cumulative projects are included in Appendix J.



Table J: List of Cumulative Projects

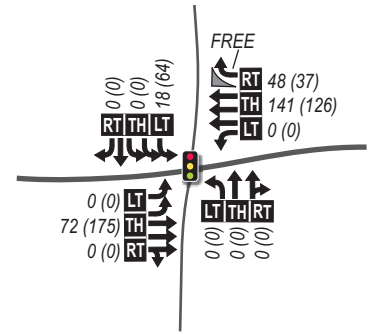
No.	Cumulative Project
1.	Banning Ranch
2.	Koll Mixed-Use Development
3.	Balboa Marina West Expansion
4.	ExplorOcean Amusement Park
5.	Porsche Auto Dealership
6.	One Newport Hotel at Uptown Newport
7.	Newport Coast TAZ

Figures 12a and 12b shows the cumulative project volumes at study intersections. Figures 13a and 13b illustrate the Future (2021) Plus Approved Projects Plus Cumulative Project Plus Growth AM and PM peak hour traffic volumes in the study area.

Level of Service

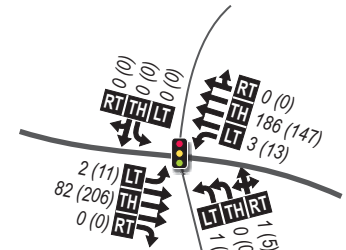
The Future (2021) Plus Approved Plus Cumulative Plus Growth (No Project) level of service has been evaluated at study intersections based on the ICU methodology. The LOS summary for intersections is shown in Table K. As shown in Table K, all intersections operate at acceptable levels of service. Intersection LOS calculation sheets are provided in the Appendix K.

1. Dover Dr. @ West Coast Hwy.



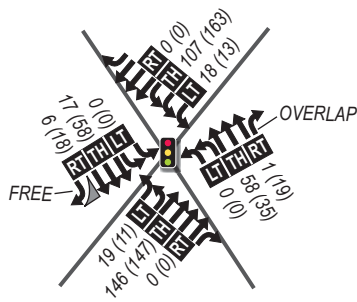
N/S - Split
E/W - Left Protected

2. Bayside Dr. @ East Coast Hwy.



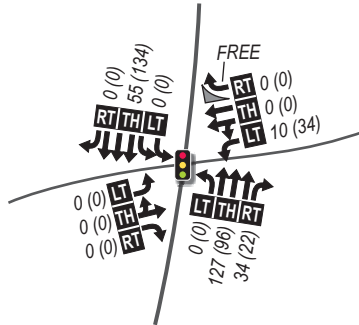
N/S - Split
E/W - Left Protected

3. Jamboree Rd. @ MacArthur Blvd.



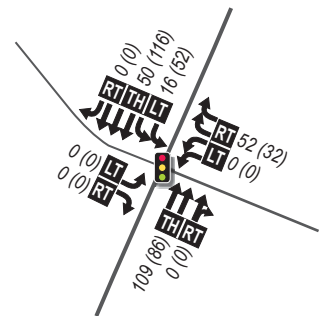
N/S - Left Protected
E/W - Left Protected

4. Jamboree Rd. @ Eastbluff Dr./University Dr.



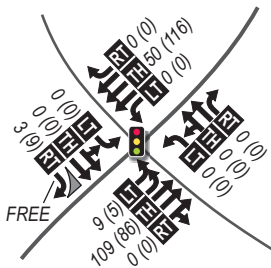
N/S - Left Protected
E/W - Split

5. Jamboree Rd. at Bison Ave.



N/S - Left Protected
E/W - Split

6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.



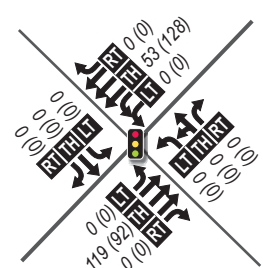
N/S - Left Protected
E/W - Split

7. Jamboree Rd. @ San Joaquin Hills Rd.



N/S - Protected
E/W - Split

8. Jamboree Rd. @ Santa Barbara Dr.



N/S - Left Protected
E/W - Split



No Scale

Key Map

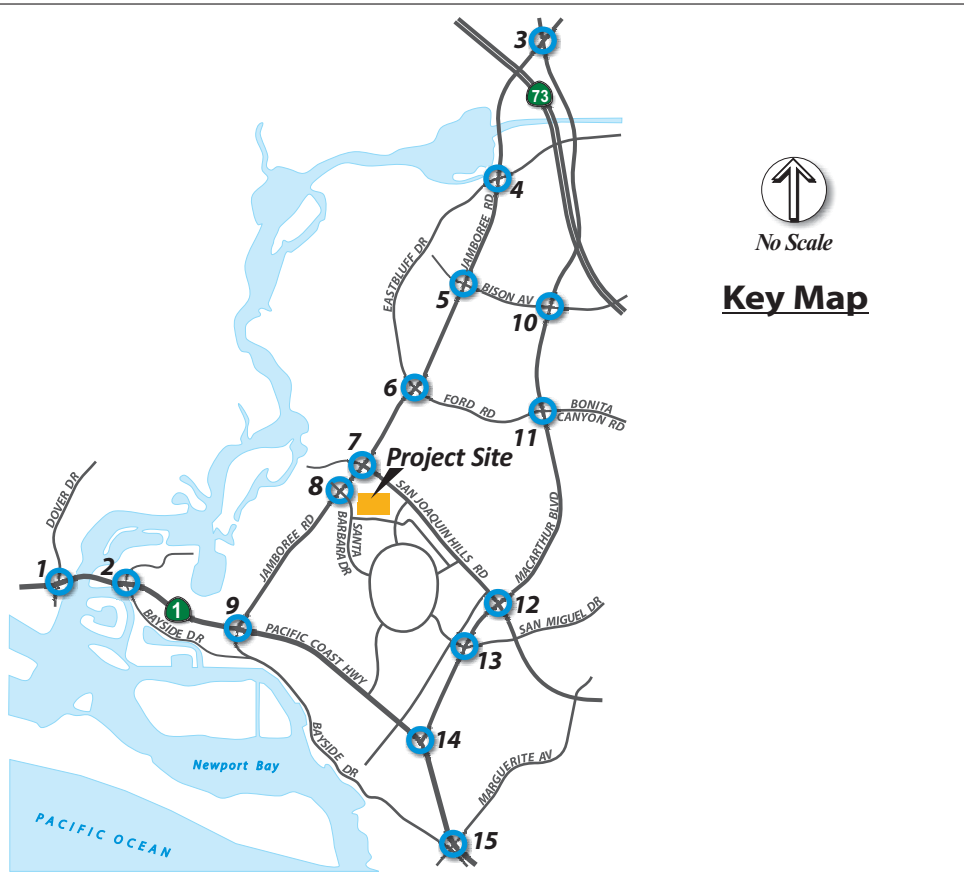
LEGEND

- # - Study Intersection
- Traffic Signal
- Stop Sign
- Lane Configuration
- AM (PM) - Peak Hour Traffic Volumes
- Volume Turn Movement
Left-Thru-Right

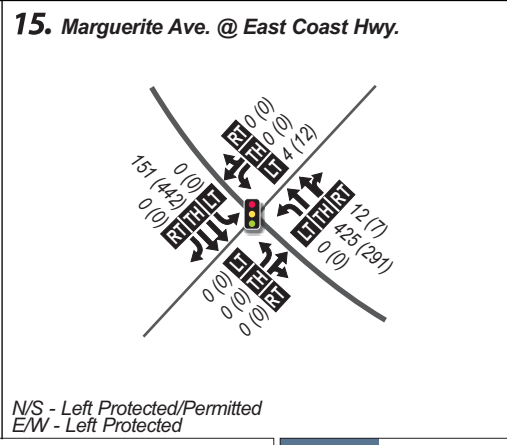
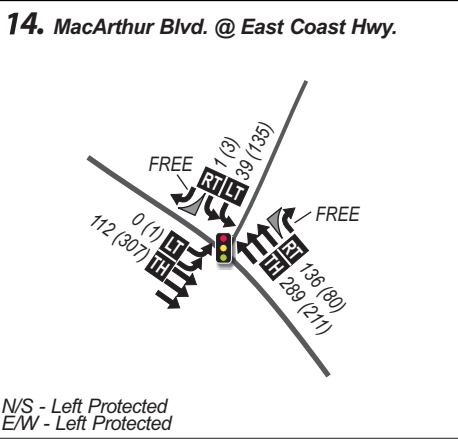
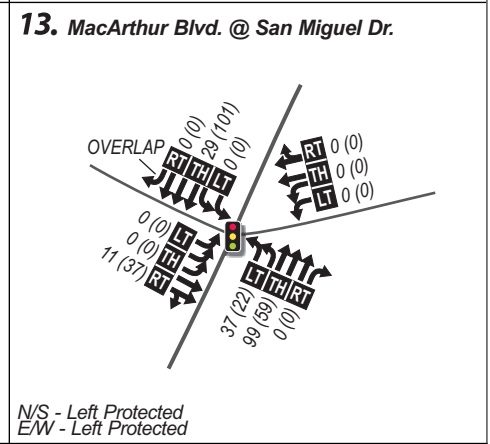
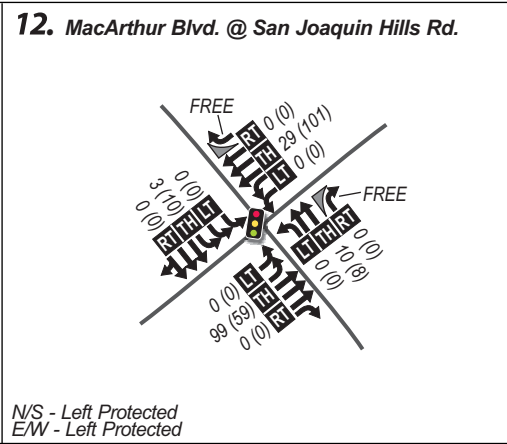
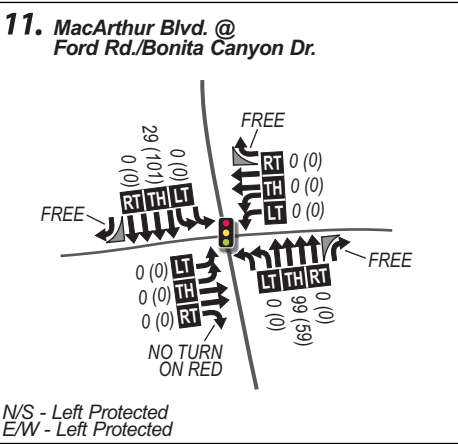
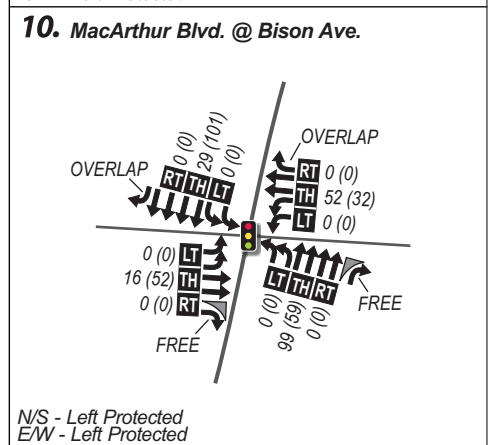
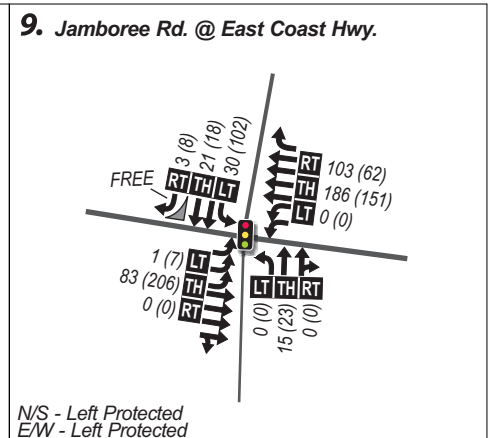
DKS

Figure 12a

Cumulative Project Peak Hour Volumes



No Scale
Key Map



LEGEND

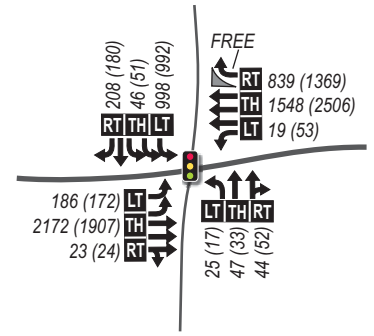
- # (in blue circle) - Study Intersection
- (Traffic Signal Icon) - Traffic Signal
- (STOP Sign Icon) - Stop Sign
- ← - Lane Configuration
- AM (PM) - Peak Hour Traffic Volumes
- LT TH RT - Volume Turn Movement
- Left-Thru-Right

DKS

Figure 12b

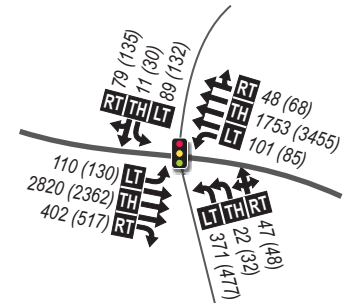
Cumulative Project Peak Hour Volumes

1. Dover Dr. @ West Coast Hwy.



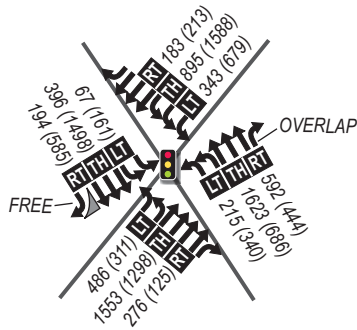
N/S - Split
E/W - Left Protected

2. Bayside Dr. @ East Coast Hwy.



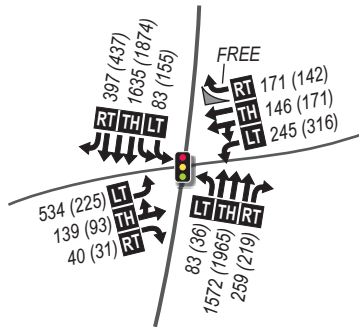
N/S - Split
E/W - Left Protected

3. Jamboree Rd. @ MacArthur Blvd.



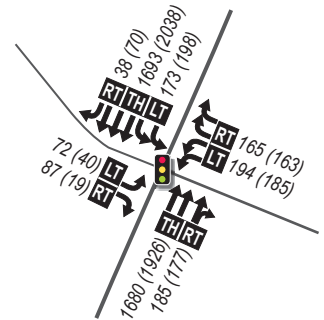
N/S - Left Protected
E/W - Left Protected

4. Jamboree Rd. @ Eastbluff Dr./University Dr.



N/S - Left Protected
E/W - Split

5. Jamboree Rd. at Bison Ave.



N/S - Left Protected
E/W - Split

6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.



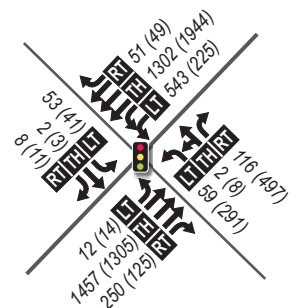
N/S - Left Protected
E/W - Split

7. Jamboree Rd. @ San Joaquin Hills Rd.



N/S - Protected
E/W - Split

8. Jamboree Rd. @ Santa Barbara Dr.



N/S - Left Protected
E/W - Split



3. Jamboree Rd. @ MacArthur Blvd.

4. Jamboree Rd. @ Eastbluff Dr./University Dr.

5. Jamboree Rd. at Bison Ave.

6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.

7. Jamboree Rd. @ San Joaquin Hills Rd.

8. Jamboree Rd. @ Santa Barbara Dr.

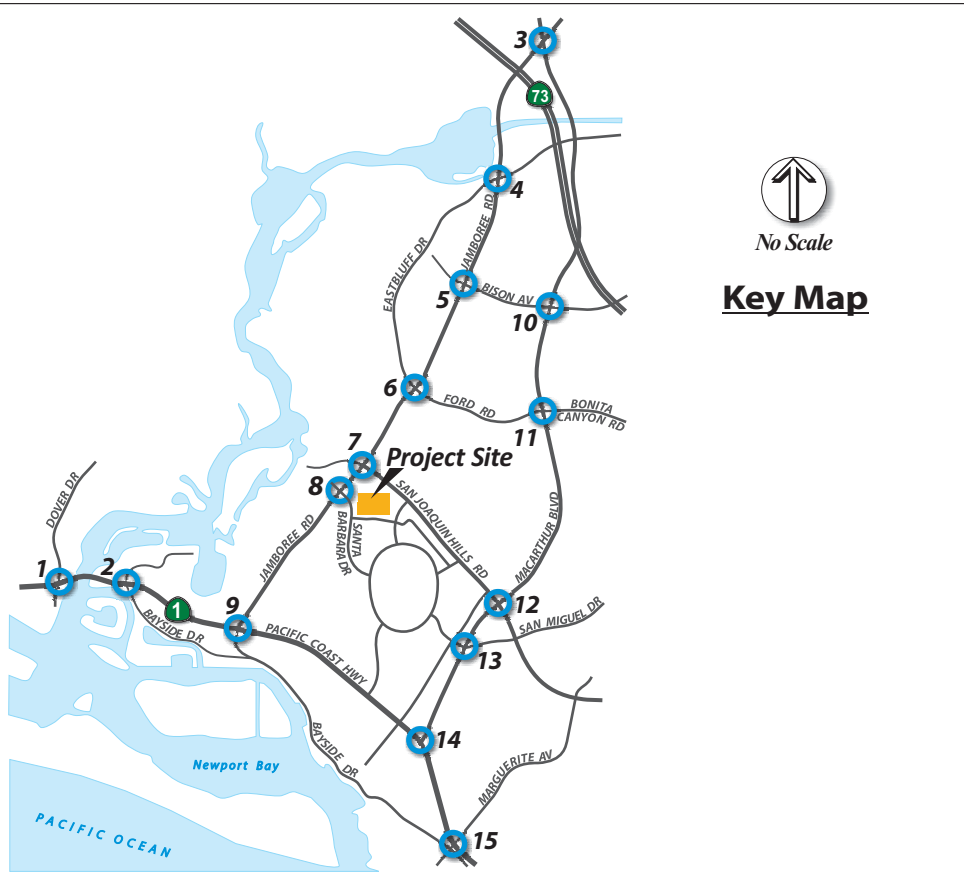
LEGEND

- # - Study Intersection
- ◀ - Lane Configuration
- 🚦 - Traffic Signal
- AM (PM) - Peak Hour Traffic Volumes
- 🛑 - Stop Sign
- LT/TH/RT - Volume Turn Movement (Left-Thru-Right)

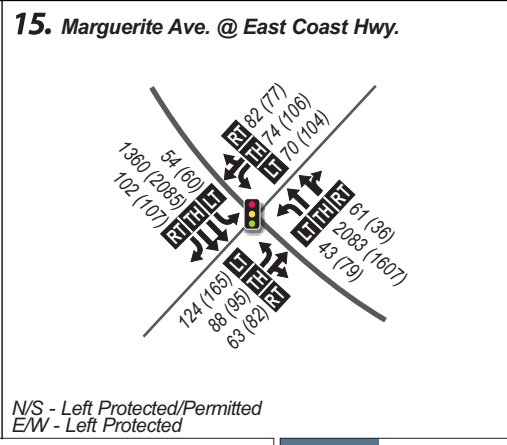
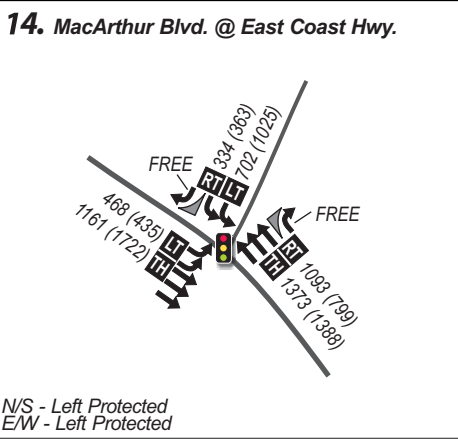
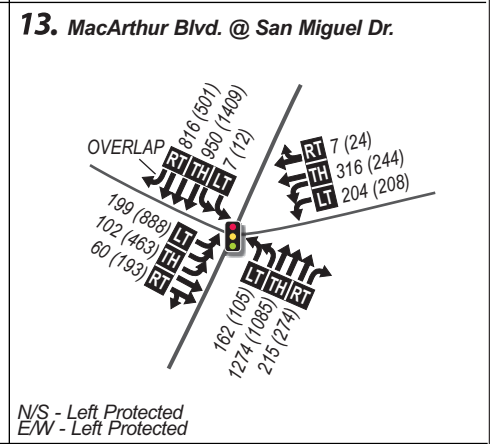
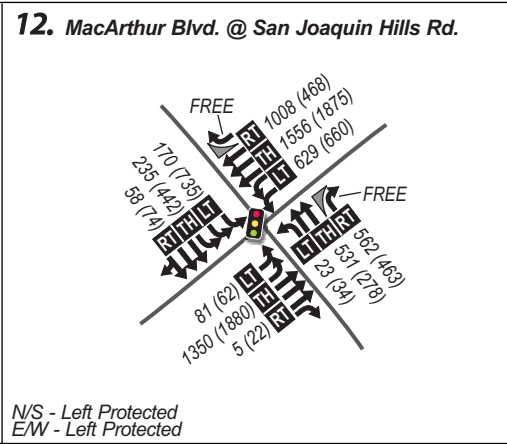
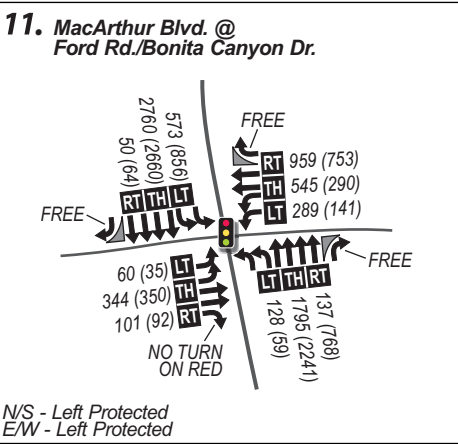
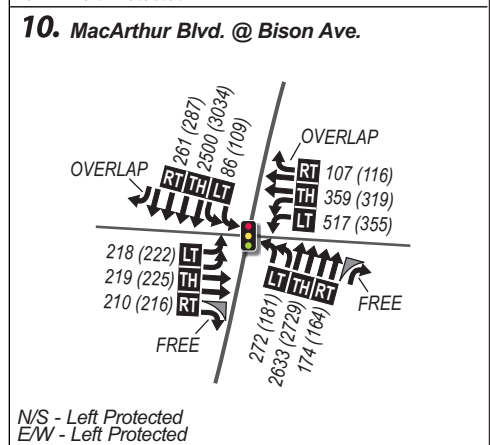
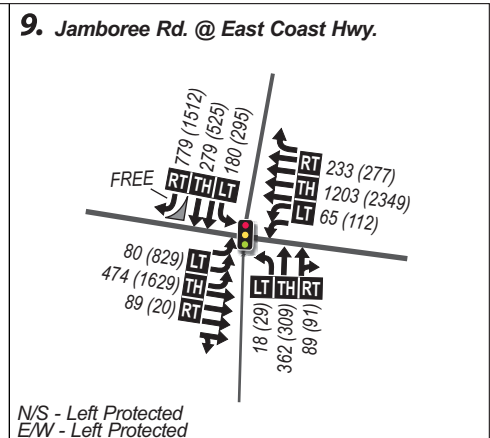
DKS

Figure 13a

Future Year (2021) Plus Approved Project Plus Cumulative Projects Plus Growth Peak Hour Volumes



No Scale
Key Map



LEGEND

- # (blue circle) - Study Intersection
- (Traffic Signal Icon) - Traffic Signal
- (Stop Sign Icon) - Stop Sign
- ← - Lane Configuration
- AM (PM) - Peak Hour Traffic Volumes
- LT TH RT - Volume Turn Movement (Left-Thru-Right)

DKS

Figure 13b

Future Year (2021) Plus Approved Projects Plus Cumulative Projects Plus Growth Peak Hour Volumes



Table K: Future (2021) Plus Approved Plus Cumulative Plus Growth (No Project) Intersection Level of Service Summary (CEQA Analysis)

Intersection		AM Peak Hour		PM Peak Hour	
		V/C	LOS	V/C	LOS
1.	Dover Drive/West Coast Highway	.705	C	.815	D
2.	Bayside Drive/East Coast Highway	.798	C	.851	D
3.	Jamboree Road/MacArthur Boulevard	.697	B	.846	D
4.	Jamboree Road/Eastbluff Drive/University Drive	.684	B	.659	B
5.	Jamboree Road/Bison Avenue	.558	A	.583	A
6.	Jamboree Road/Eastbluff Drive/Ford Road	.712	C	.768	C
7.	Jamboree Road/San Joaquin Hills Road	.748	C	.619	B
8.	Jamboree Road/Santa Barbara Drive	.579	A	.750	C
9.	Jamboree Road/East Coast Highway	.458	A	.849	D
10.	MacArthur Boulevard/Bison Avenue	.706	C	.712	C
11.	MacArthur Boulevard/Ford Road/Bonita Canyon Drive	.669	B	.771	C
12.	MacArthur Boulevard/San Joaquin Hills Road	.679	B	.838	D
13.	MacArthur Boulevard/San Miguel Drive	.661	B	.596	A
14.	MacArthur Boulevard/East Coast Highway	.652	B	.746	C
15.	Marguerite Avenue/East Coast Highway	.879	D	.918	E

Future (2021) Plus Approved Plus Cumulative Plus Growth Plus Project – CEQA Analysis

Traffic Volumes

The trips generated from the project as shown in Figures 7a and 7b were added to the future (2021) no project traffic volumes shown in Figures 13a and 13b which would result in the future (2021) plus project traffic scenario. Figures 14a and 14b illustrate the Future (2021) Plus Approved Projects Plus Cumulative Projects Plus Growth Plus Project traffic volumes. A typical CEQA analysis is conducted for this scenario.

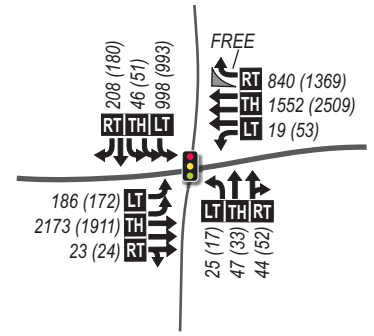
Level of Service

The Future (2021) Plus Approved Plus Cumulative Plus Growth Plus Project level of service has been evaluated at study intersections based on the ICU methodology. The LOS summary for intersections is shown in Table L. As shown in Table L, all intersections



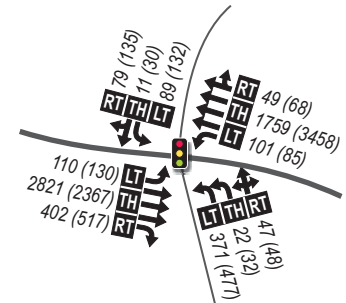
operate at acceptable levels of service. Intersection LOS calculation sheets are provided in the Appendix L.

1. Dover Dr. @ West Coast Hwy.



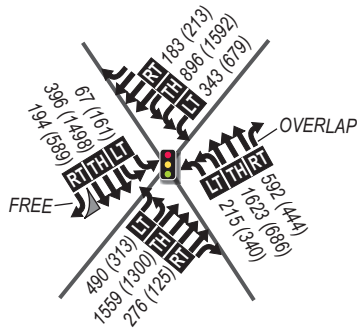
N/S - Split
E/W - Left Protected

2. Bayside Dr. @ East Coast Hwy.



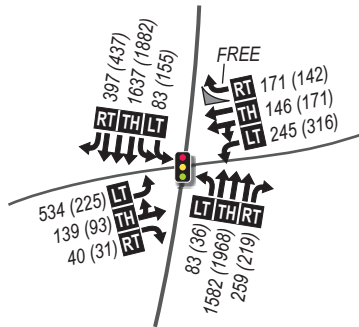
N/S - Split
E/W - Left Protected

3. Jamboree Rd. @ MacArthur Blvd.



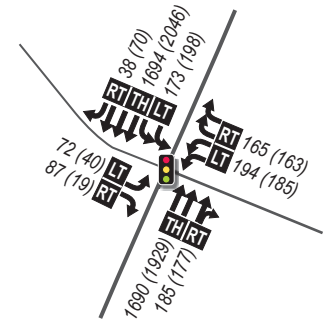
N/S - Left Protected
E/W - Left Protected

4. Jamboree Rd. @ Eastbluff Dr./University Dr.



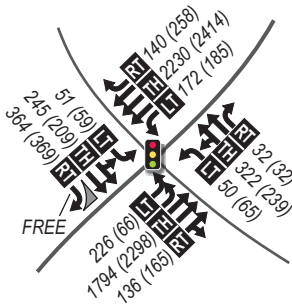
N/S - Left Protected
E/W - Split

5. Jamboree Rd. at Bison Ave.



N/S - Left Protected
E/W - Split

6. Jamboree Rd. @ Eastbluff Dr./Ford Rd.



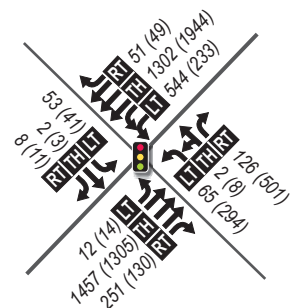
N/S - Left Protected
E/W - Split

7. Jamboree Rd. @ San Joaquin Hills Rd.



N/S - Protected
E/W - Split

8. Jamboree Rd. @ Santa Barbara Dr.



N/S - Left Protected
E/W - Split



No Scale

Key Map

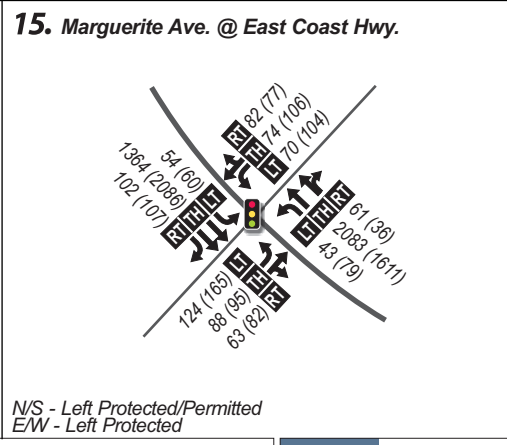
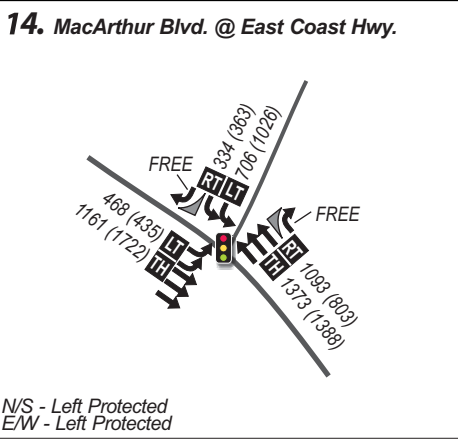
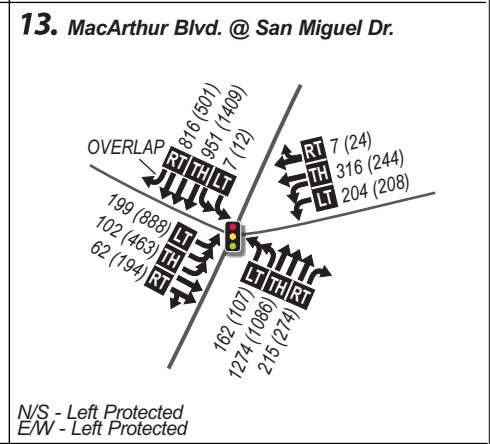
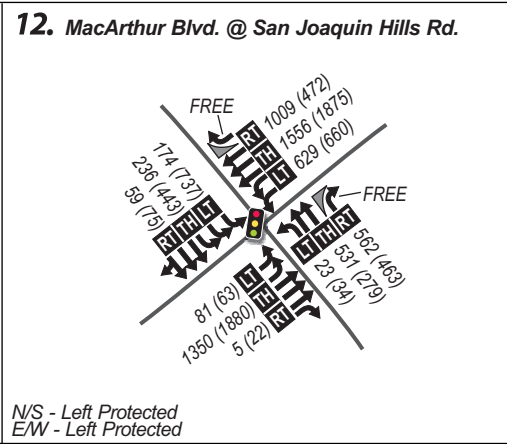
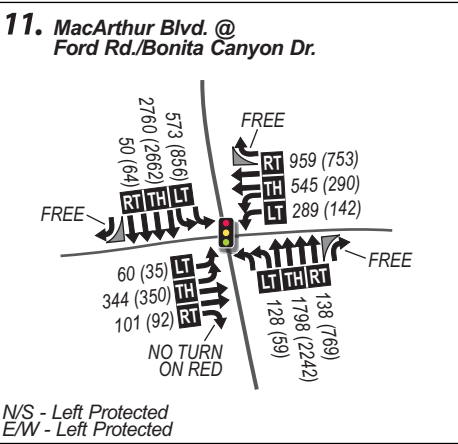
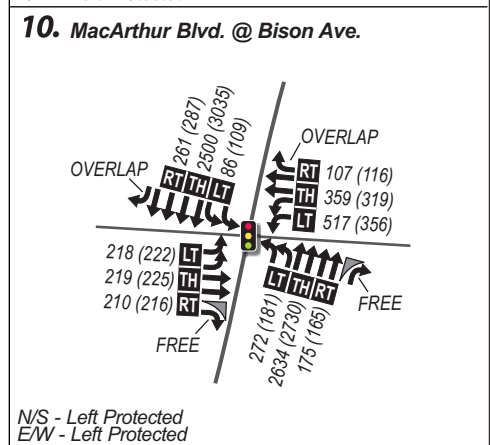
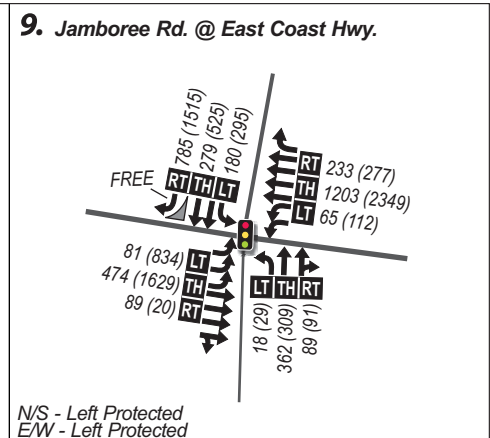
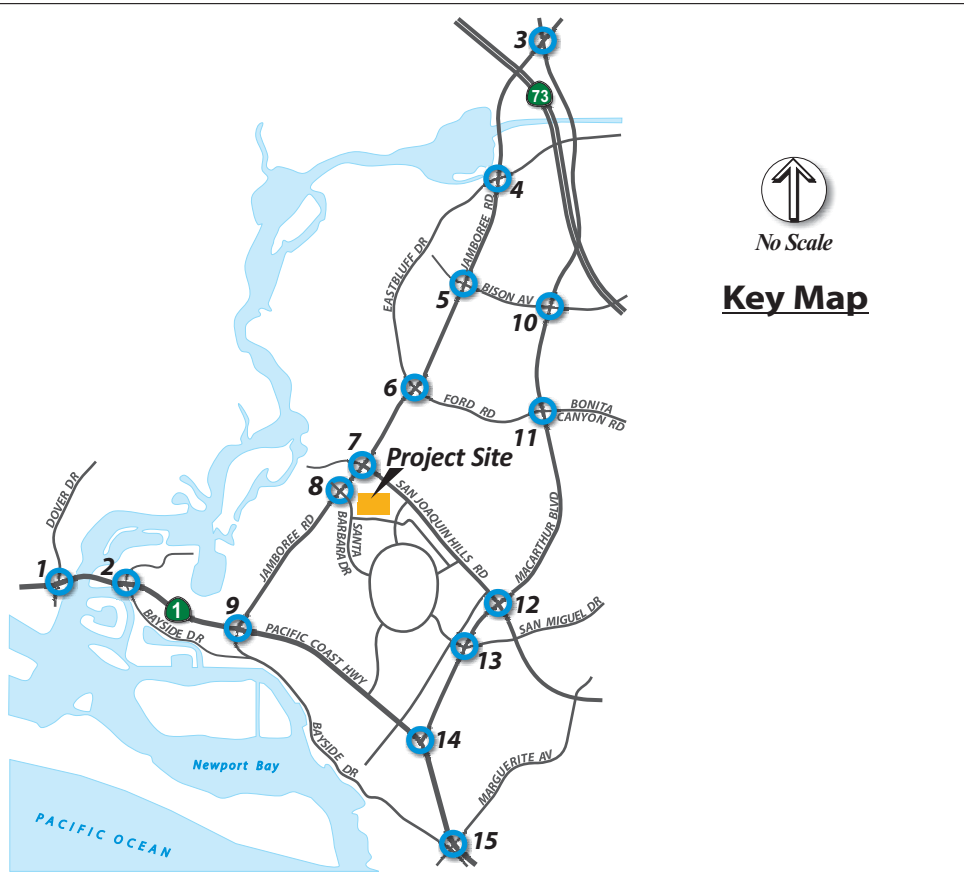
LEGEND

- # - Study Intersection
- Traffic Signal
- Stop Sign
- Lane Configuration
- AM (PM) - Peak Hour Traffic Volumes
- Volume Turn Movement
Left+Thru+Right



Figure 14a

Future Year (2021) Plus Approved Projects Plus Cumulative Projects Plus Growth Plus Project Peak Hour Volumes



LEGEND

- # - Study Intersection
- 🚦 - Traffic Signal
- 🛑 - Stop Sign
- ← - Lane Configuration
- AM (PM) - Peak Hour Traffic Volumes
- LT/TH/RT - Volume Turn Movement
Left-Thru-Right

DKS

Figure 14b

Future Year (2021) Plus Approved Projects Plus Cumulative Projects Plus Growth Plus Project Peak Hour Volumes



**Table L: Future (2021) Plus Approved Projects Plus Cumulative Projects Plus Growth
Plus Project Intersection Level of Service Summary (CEQA Analysis)**

Intersections		No Project				Plus Project				Difference		Project Impact
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	V/C	
1.	Dover Drive/West Coast Highway	.705	C	.815	D	.706	C	.816	D	0.001	0.001	No
2.	Bayside Drive/East Coast Highway	.798	C	.851	D	.799	C	.852	D	0.001	0.001	No
3.	Jamboree Road/MacArthur Boulevard	.697	B	.846	D	.699	C	.848	D	0.002	0.002	No
4.	Jamboree Road/Eastbluff Drive/University Drive	.684	B	.659	B	.685	B	.659	B	0.001	0.000	No
5.	Jamboree Road/Bison Avenue	.558	A	.583	A	.560	A	.584	A	0.002	0.001	No
6.	Jamboree Road/Eastbluff Drive/Ford Road	.712	C	.768	C	.712	C	.769	C	0.000	0.001	No
7.	Jamboree Road/San Joaquin Hills Road	.748	C	.619	B	.751	C	.621	B	0.003	0.002	No
8.	Jamboree Road/Santa Barbara Drive	.579	A	.750	C	.585	B	.752	C	0.006	0.002	No
9.	Jamboree Road/East Coast Highway	.458	A	.849	D	.458	A	.850	D	0.000	0.001	No
10.	MacArthur Boulevard/Bison Avenue	.706	C	.712	C	.706	C	.713	C	0.000	0.001	No
11.	MacArthur Boulevard/Ford Road/Bonita Canyon Drive	.669	B	.771	C	.669	B	.771	C	0.000	0.000	No
12.	MacArthur Boulevard/San Joaquin Hills Road	.679	B	.838	D	.680	B	.839	D	0.001	0.001	No
13.	MacArthur Boulevard/San Miguel Drive	.661	B	.596	A	.661	B	.597	B	0.000	0.001	No
14.	MacArthur Boulevard/East Coast Highway	.652	B	.746	C	.653	B	.746	C	0.001	0.000	No
15.	Marguerite Avenue/East Coast Highway	.879	D	.918	E	.879	D	.919	E	0.000	0.001	No

Significant Impact

Based on the threshold for significant impacts of the proposed project, the trips generated from the proposed project would not cause significant impact on any of the study intersections. Therefore, no mitigation measures are required on the study intersections as part of the project.



5.0 CALTRANS METHODOLOGY ANALYSIS

The following two study intersections are owned and operated by Caltrans, and therefore would require a specialized analysis using the HCM methodology.

- Dover Drive/West Coast Highway
- Bayside Drive/East Coast Highway

Existing (2016) Plus Project

Level of Service

The Existing (2016) No Project and Plus Project level of service comparison has been evaluated at study intersections based on the HCM methodology. The LOS summary for intersections is shown in Table M. As shown in Table M, all intersections operate at LOS C or better. Intersection LOS calculation sheets are provided in Appendix M.

Table M: Existing (2016) Plus Project Intersection Level of Service Summary (HCM Methodology)

Intersection		No Project				Plus Project				Difference		Project Impact
		AM Peak Hour		PM Peak Hour		AM Peak Hour		AM Peak Hour		AM ¹ (sec)	PM (sec)	
		Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS			
1.	Dover Drive/West Coast Highway	18.7	B	17.8	B	18.7	B	17.8	B	0.0	0.0	No
2.	Bayside Drive/East Coast Highway	11.4	B	13.0	B	11.3	B	13.0	B	0.0	0.0	No

Significant Impact

Based on the threshold for significant impacts of the proposed project, the trips generated from the proposed project would not cause significant impact on any of the study intersections. Therefore, no mitigation measures are required on the study intersections as part of the project.



Future (2021) Plus Approved Projects Plus Cumulative Projects Plus Growth Plus Project

Level of Service

The Future (2021) No Project and Plus Project level of service comparison has been evaluated at the study intersections based on the HCM methodology. The LOS summary for intersections is shown in Table N. As shown in Table N, all intersections operate at LOS C or better. Intersection LOS calculation sheets are provided in Appendix N.

Table N: Future (2021) Plus Approved Projects Plus Cumulative Projects Plus Project Intersection Level of Service Summary (HCM Methodology)

Intersection		No Project				Plus Project				Difference		Project Impact
		AM Peak Hour		PM Peak Hour		AM Peak Hour		AM Peak Hour		AM (sec)	PM (sec)	
		Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS			
1.	Dover Drive/West Coast Highway	19.0	B	19.3	B	19.0	B	19.3	B	0.0	0.0	No
2.	Bayside Drive/East Coast Highway	15.1	B	19.2	B	15.1	B	19.2	B	0.0	0.0	No

Significant Impact

Based on the threshold for significant impacts of the proposed project, the trips generated from the proposed project would not cause significant impact on any of the study intersections. Therefore, no mitigation measures are required on the study intersections as part of the project.

7.0 CONGESTION MANAGEMENT PROGRAM (CMP) CONSISTENCY

The traffic study requires the level of service analysis of intersections monitored by the Congestion Management Program (CMP) to be consistent with the analysis provided in the 2015 Orange County Congestion Management Program. As per the performance criteria stated in the 2015 Orange County Congestion Management Program, the CMP uses LOS E for the intersection analysis based on the Intersection Capacity Utilization (ICU) methodology. The CMP intersections located within the study area include the following:

- Jamboree Road/MacArthur Boulevard
- MacArthur Boulevard/East Coast Highway



The CMP states that “the TIA process recommendation is to require a TIA for any project generating 2,400 or more daily trips.” The project is estimated to generate 310 daily trips; therefore, a CMP analysis is not required.

8.0 SITE PLAN REVIEW

The project site plan provides one driveway directly to San Clemente Drive. The driveway is a full access driveway and measures 26 ft. Two service and fire access driveways are also provided. One service/fire driveway is located along San Clemente Drive.

The proposed project will provide 238 total parking spaces (200 residential spaces and 38 guest spaces). The project will contain 100 dwelling units. Based on the City of Newport Beach Zoning Code, Chapter 20.40, the parking requirement for multi-unit developments greater than 4 dwelling units is 2 spaces per unit and 0.5 spaces per unit for guest parking. Therefore, the parking required for the proposed project is 200 resident spaces and 50 guest spaces. Therefore, the project does not meet the City’s parking requirement typically applied to multi-unit projects. If the applicant wants to meet the parking requirements, DKS recommends that a minimum of 200 parking spaces be reserved for residents and a minimum of 50 parking spaces be reserved for guest parking.

9.0 CONSTRUCTION IMPACTS

Project construction activities would include demolition of the existing OCMA building, asphalt demolition, mass excavation, fine grading, and building of the proposed project structures. It is expected that large construction equipment, such as excavators, dump trucks, cranes, and tractors will be used during the project construction. Per the City of Newport Beach, construction shall only be allowed Monday through Friday from 7:00 AM - 4:00 PM. Construction workers shall park on-site unless a designated off-site parking area is approved by the City. Construction workers shall not park on local streets.

Based on construction information provided by the City of Newport Beach, the proposed project will be completed in one complete phase; however, there are various construction activities throughout the construction process. Building and asphalt demolition is expected to be completed within a 22 day period. During demolition, it is estimated that there will be a total of 112 truckload trips, which equates to 5 truckload trips per day. Additional soil hauling is expected to occur during site preparation, rough



grading, and fine grading. These activities are expected to be completed within a 24 day period. During the site preparation, rough grading, and fine grading processes, it is estimated that there will a total of 1,610 truckload trips, which equates to 67 truckload trips per day. It should be noted that the estimated daily trip ends during all construction activities are lower than the estimated proposed project daily trip ends (310 daily trips).

All construction vehicles (heavy vehicles) shall use regional and local trucks routes to access the project site. It is expected that all heavy vehicles will most likely access the site via the SR-73 Freeway (North of Bison Avenue) and then head south via Jamboree Road or MacArthur Boulevard. Once within the vicinity of the project site, heavy vehicles can use non-designated truck routes to access the project site. All proposed truck routes shall be approved by the City before beginning construction.

Per the City of Newport Beach, the project is required to prepare a construction traffic management plan (CTMP). The CTMP shall outline items such as construction hours, truck routes, traffic and parking effects, and safety procedures for pedestrians and cyclists.

10.0 CONCLUSION

Based on the results of the analysis, the proposed project generated trips would not cause significant impact at any of the study intersections. Therefore, no mitigation measures are required at any study intersection as a part of the proposed project. The proposed project would allow for adequate vehicular circulation for vehicles within the project site.



Appendix



APPENDIX A

Raw Turning Movement Counts

City: NEWPORT BEACH
 N-S Direction: DOVER-BAYSHORES
 E-W Direction: COAST HIGHWAY

File Name : H1204023
 Site Code : 00000554
 Start Date : 4/25/2012
 Page No : 1

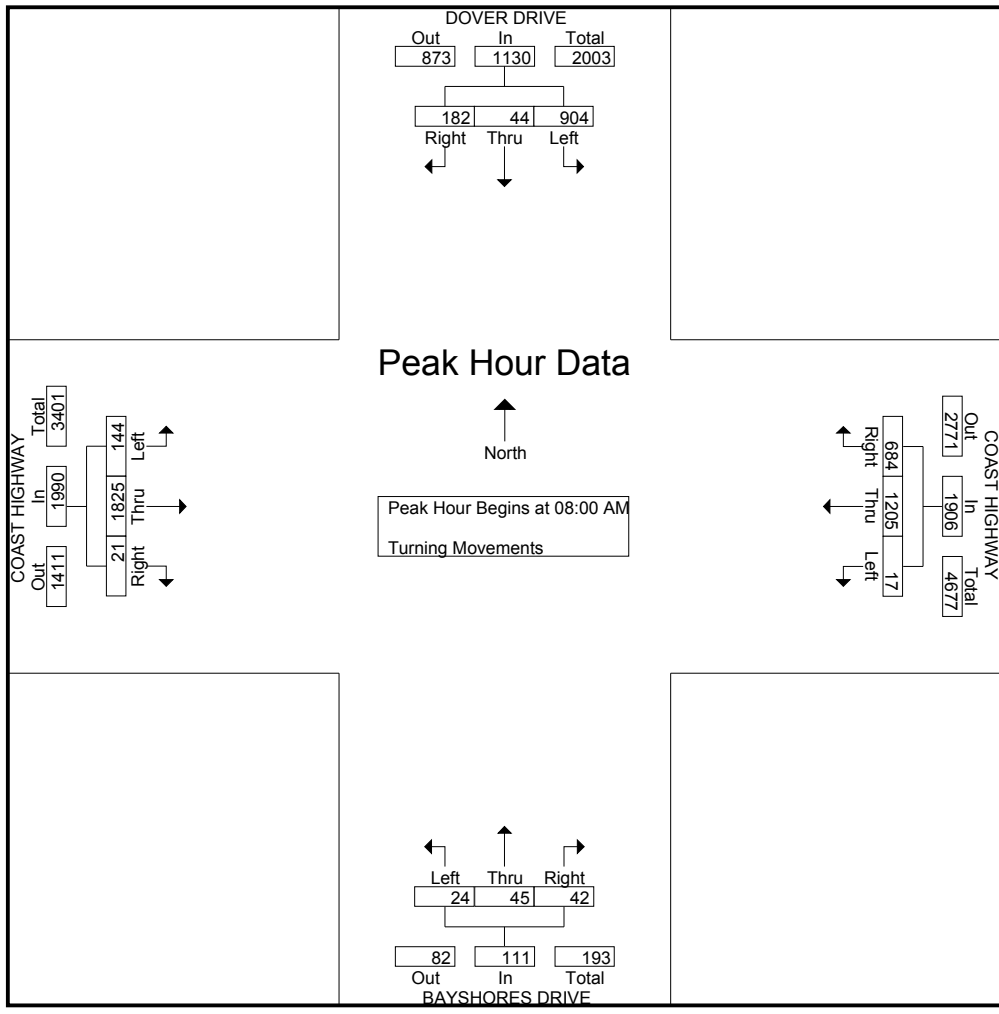
Groups Printed- Turning Movements

Start Time	DOVER DRIVE Southbound			COAST HIGHWAY Westbound			BAYSHORES DRIVE Northbound			COAST HIGHWAY Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	22	11	108	61	145	1	7	6	2	5	244	11	623
07:15 AM	35	6	174	63	189	1	5	6	3	8	282	16	788
07:30 AM	38	6	181	94	234	1	10	18	8	5	392	21	1008
07:45 AM	40	7	256	129	253	4	17	15	10	3	486	21	1241
Total	135	30	719	347	821	7	39	45	23	21	1404	69	3660
08:00 AM	41	14	169	168	295	5	13	4	7	9	449	33	1207
08:15 AM	48	8	245	159	302	8	12	12	5	4	452	29	1284
08:30 AM	48	6	202	173	297	2	10	18	6	5	453	41	1261
08:45 AM	45	16	288	184	311	2	7	11	6	3	471	41	1385
Total	182	44	904	684	1205	17	42	45	24	21	1825	144	5137
*** BREAK ***													
04:30 PM	31	17	175	260	467	7	3	8	4	4	389	39	1404
04:45 PM	37	15	209	268	463	10	4	4	8	4	384	31	1437
Total	68	32	384	528	930	17	7	12	12	8	773	70	2841
05:00 PM	32	12	181	258	509	10	9	9	3	7	379	32	1441
05:15 PM	34	12	230	323	544	16	10	11	4	4	389	29	1606
05:30 PM	32	12	221	305	515	13	15	9	8	5	356	28	1519
05:45 PM	38	13	208	284	486	9	16	3	1	6	353	30	1447
Total	136	49	840	1170	2054	48	50	32	16	22	1477	119	6013
06:00 PM	30	5	174	253	454	12	6	10	2	1	351	27	1325
06:15 PM	32	11	190	217	443	8	2	4	3	1	336	34	1281
Grand Total	583	171	3211	3199	5907	109	146	148	80	74	6166	463	20257
Apprch %	14.7	4.3	81	34.7	64.1	1.2	39	39.6	21.4	1.1	92	6.9	
Total %	2.9	0.8	15.9	15.8	29.2	0.5	0.7	0.7	0.4	0.4	30.4	2.3	

City: NEWPORT BEACH
 N-S Direction: DOVER-BAYSHORES
 E-W Direction: COAST HIGHWAY

File Name : H1204023
 Site Code : 0000554
 Start Date : 4/25/2012
 Page No : 2

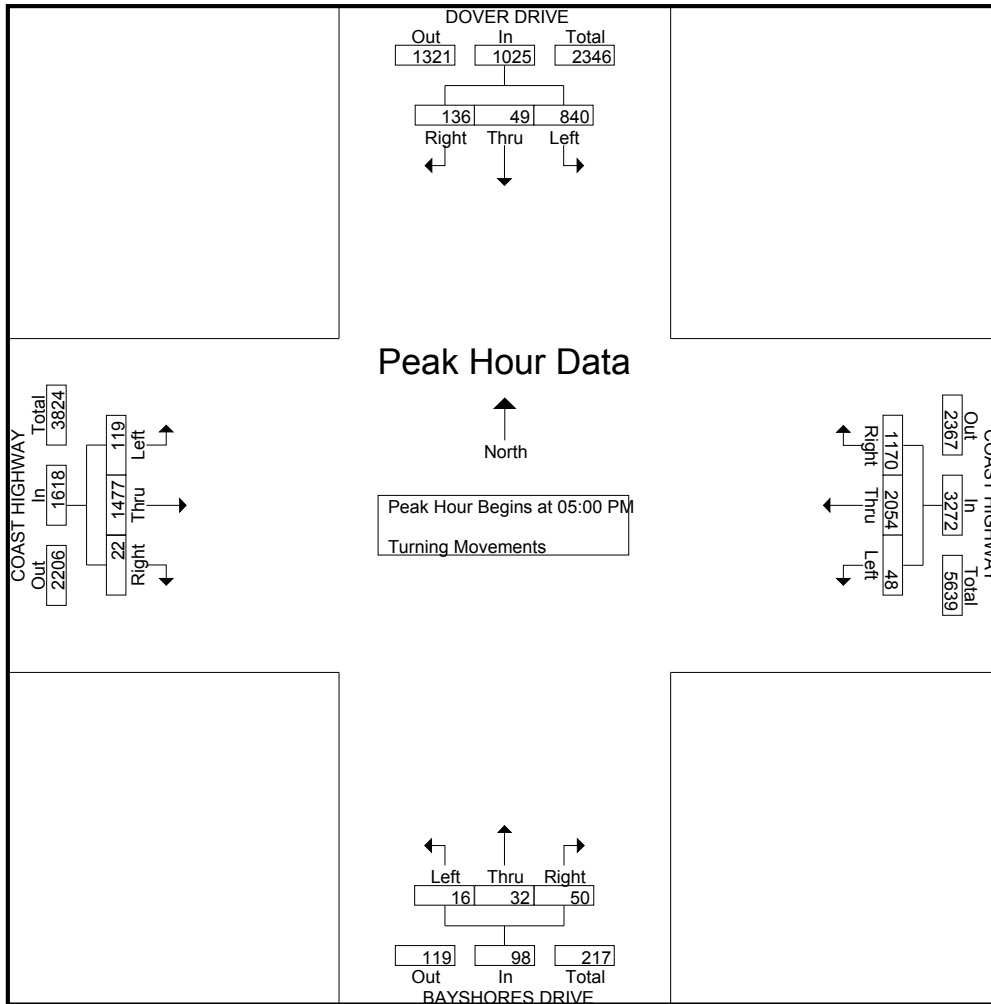
Start Time	DOVER DRIVE Southbound				COAST HIGHWAY Westbound				BAYSHORES DRIVE Northbound				COAST HIGHWAY Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	41	14	169	224	168	295	5	468	13	4	7	24	9	449	33	491	1207
08:15 AM	48	8	245	301	159	302	8	469	12	12	5	29	4	452	29	485	1284
08:30 AM	48	6	202	256	173	297	2	472	10	18	6	34	5	453	41	499	1261
08:45 AM	45	16	288	349	184	311	2	497	7	11	6	24	3	471	41	515	1385
Total Volume	182	44	904	1130	684	1205	17	1906	42	45	24	111	21	1825	144	1990	5137
% App. Total	16.1	3.9	80		35.9	63.2	0.9		37.8	40.5	21.6		1.1	91.7	7.2		
PHF	.948	.688	.785	.809	.929	.969	.531	.959	.808	.625	.857	.816	.583	.969	.878	.966	.927



City: NEWPORT BEACH
 N-S Direction: DOVER-BAYSHORES
 E-W Direction: COAST HIGHWAY

File Name : H1204023
 Site Code : 0000554
 Start Date : 4/25/2012
 Page No : 3

Start Time	DOVER DRIVE Southbound				COAST HIGHWAY Westbound				BAYSHORES DRIVE Northbound				COAST HIGHWAY Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. 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	32	12	181	225	258	509	10	777	9	9	3	21	7	379	32	418	1441
05:15 PM	34	12	230	276	323	544	16	883	10	11	4	25	4	389	29	422	1606
05:30 PM	32	12	221	265	305	515	13	833	15	9	8	32	5	356	28	389	1519
05:45 PM	38	13	208	259	284	486	9	779	16	3	1	20	6	353	30	389	1447
Total Volume	136	49	840	1025	1170	2054	48	3272	50	32	16	98	22	1477	119	1618	6013
% App. Total	13.3	4.8	82		35.8	62.8	1.5		51	32.7	16.3		1.4	91.3	7.4		
PHF	.895	.942	.913	.928	.906	.944	.750	.926	.781	.727	.500	.766	.786	.949	.930	.959	.936



City: NEWPORT BEACH
 N-S Direction: BAYSIDE DRIVE
 E-W Direction: COAST HIGHWAY

File Name : h1404115
 Site Code : 00000000
 Start Date : 5/1/2014
 Page No : 1

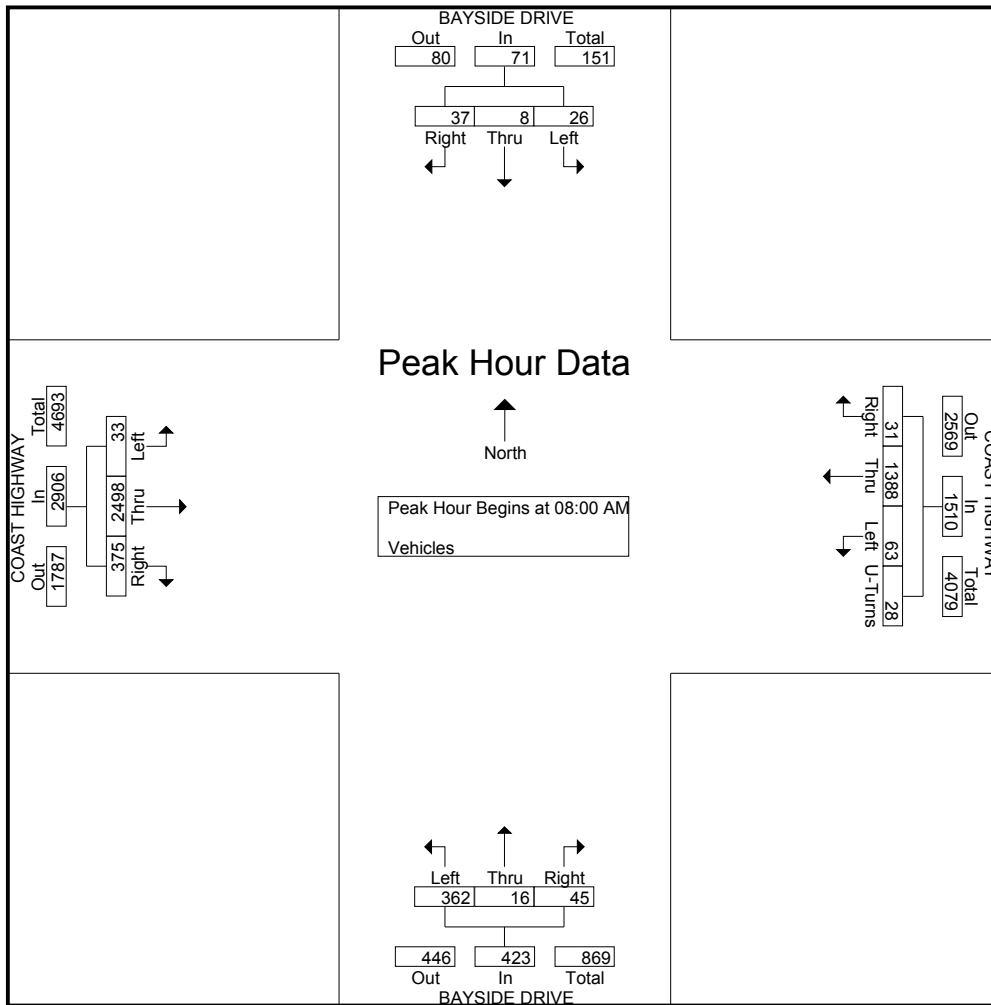
Groups Printed- Vehicles

Start Time	BAYSIDE DRIVE Southbound			COAST HIGHWAY Westbound				BAYSIDE DRIVE Northbound			COAST HIGHWAY Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	U-Turns	Right	Thru	Left	Right	Thru	Left	
07:00 AM	9	4	6	7	200	11	1	11	3	38	65	462	6	823
07:15 AM	12	6	5	5	275	11	8	14	0	75	56	583	9	1059
07:30 AM	11	6	8	5	285	14	9	7	4	76	70	554	9	1058
07:45 AM	6	1	11	7	342	11	5	7	0	85	81	508	9	1073
Total	38	17	30	24	1102	47	23	39	7	274	272	2107	33	4013
08:00 AM	14	0	9	8	332	7	7	10	4	73	100	661	8	1233
08:15 AM	11	2	5	6	316	7	8	12	5	106	79	667	10	1234
08:30 AM	8	4	8	4	378	11	7	13	2	87	86	604	8	1220
08:45 AM	4	2	4	13	362	38	6	10	5	96	110	566	7	1223
Total	37	8	26	31	1388	63	28	45	16	362	375	2498	33	4910
*** BREAK ***														
04:30 PM	15	2	13	13	614	16	11	1	5	89	130	432	7	1348
04:45 PM	14	3	11	8	657	14	5	13	6	125	134	470	12	1472
Total	29	5	24	21	1271	30	16	14	11	214	264	902	19	2820
05:00 PM	14	9	5	9	777	7	4	13	3	118	119	474	11	1563
05:15 PM	12	6	12	11	798	21	4	7	9	125	127	471	16	1619
05:30 PM	14	5	5	7	771	0	13	8	7	92	100	520	6	1548
05:45 PM	13	3	2	9	636	0	5	14	2	118	114	429	7	1352
Total	53	23	24	36	2982	28	26	42	21	453	460	1894	40	6082
06:00 PM	8	5	11	11	671	0	3	13	1	71	88	393	11	1286
06:15 PM	9	4	7	9	596	0	9	8	5	81	104	423	13	1268
Grand Total	174	62	122	132	8010	168	105	161	61	1455	1563	8217	149	20379
Apprch %	48.6	17.3	34.1	1.6	95.2	2	1.2	9.6	3.6	86.8	15.7	82.8	1.5	
Total %	0.9	0.3	0.6	0.6	39.3	0.8	0.5	0.8	0.3	7.1	7.7	40.3	0.7	

City: NEWPORT BEACH
 N-S Direction: BAYSIDE DRIVE
 E-W Direction: COAST HIGHWAY

File Name : h1404115
 Site Code : 00000000
 Start Date : 5/1/2014
 Page No : 2

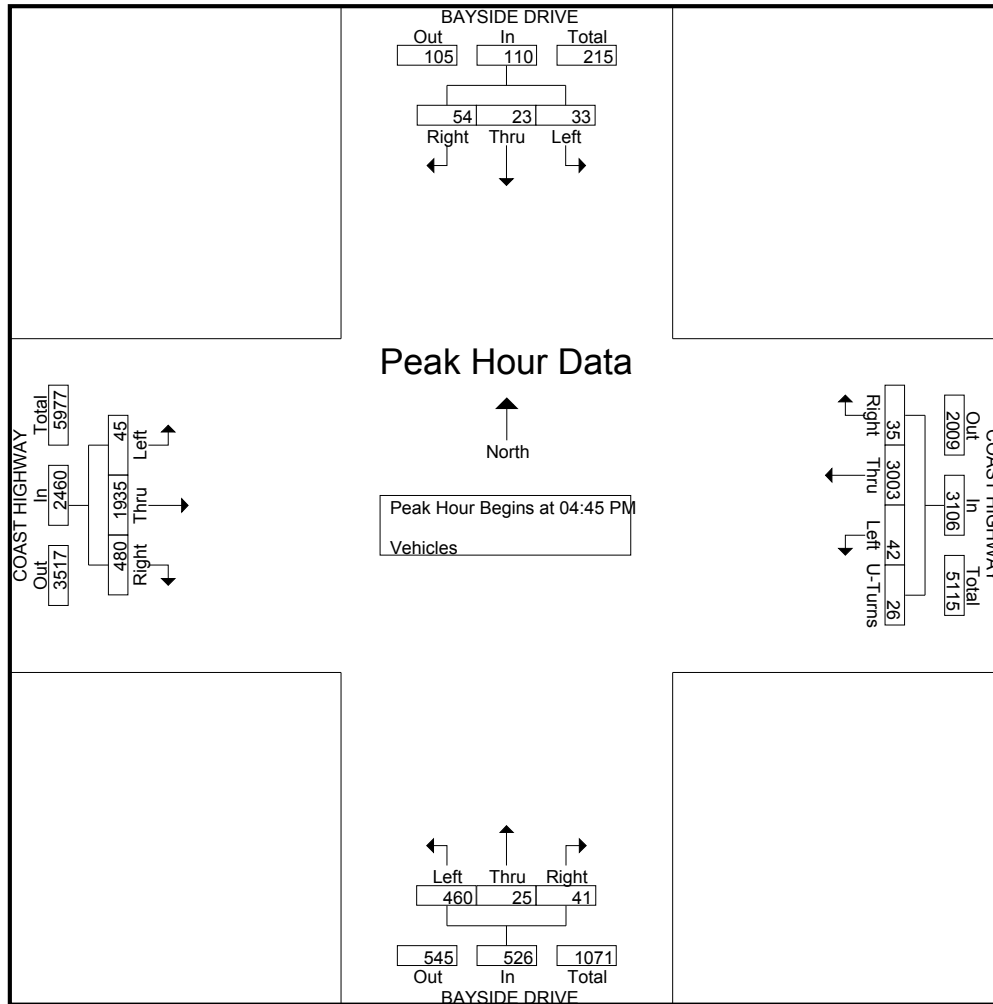
Start Time	BAYSIDE DRIVE Southbound				COAST HIGHWAY Westbound					BAYSIDE DRIVE Northbound				COAST HIGHWAY Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 08:00 AM																		
08:00 AM	14	0	9	23	8	332	7	7	354	10	4	73	87	100	661	8	769	1233
08:15 AM	11	2	5	18	6	316	7	8	337	12	5	106	123	79	667	10	756	1234
08:30 AM	8	4	8	20	4	378	11	7	400	13	2	87	102	86	604	8	698	1220
08:45 AM	4	2	4	10	13	362	38	6	419	10	5	96	111	110	566	7	683	1223
Total Volume	37	8	26	71	31	1388	63	28	1510	45	16	362	423	375	2498	33	2906	4910
% App. Total	52.1	11.3	36.6		2.1	91.9	4.2	1.9		10.6	3.8	85.6		12.9	86	1.1		
PHF	.661	.500	.722	.772	.596	.918	.414	.875	.901	.865	.800	.854	.860	.852	.936	.825	.945	.995



City: NEWPORT BEACH
 N-S Direction: BAYSIDE DRIVE
 E-W Direction: COAST HIGHWAY

File Name : h1404115
 Site Code : 00000000
 Start Date : 5/1/2014
 Page No : 3

Start Time	BAYSIDE DRIVE Southbound				COAST HIGHWAY Westbound					BAYSIDE DRIVE Northbound				COAST HIGHWAY Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:45 PM																		
04:45 PM	14	3	11	28	8	657	14	5	684	13	6	125	144	134	470	12	616	1472
05:00 PM	14	9	5	28	9	777	7	4	797	13	3	118	134	119	474	11	604	1563
05:15 PM	12	6	12	30	11	798	21	4	834	7	9	125	141	127	471	16	614	1619
05:30 PM	14	5	5	24	7	771	0	13	791	8	7	92	107	100	520	6	626	1548
Total Volume	54	23	33	110	35	3003	42	26	3106	41	25	460	526	480	1935	45	2460	6202
% App. Total	49.1	20.9	30		1.1	96.7	1.4	0.8		7.8	4.8	87.5		19.5	78.7	1.8		
PHF	.964	.639	.688	.917	.795	.941	.500	.500	.931	.788	.694	.920	.913	.896	.930	.703	.982	.958



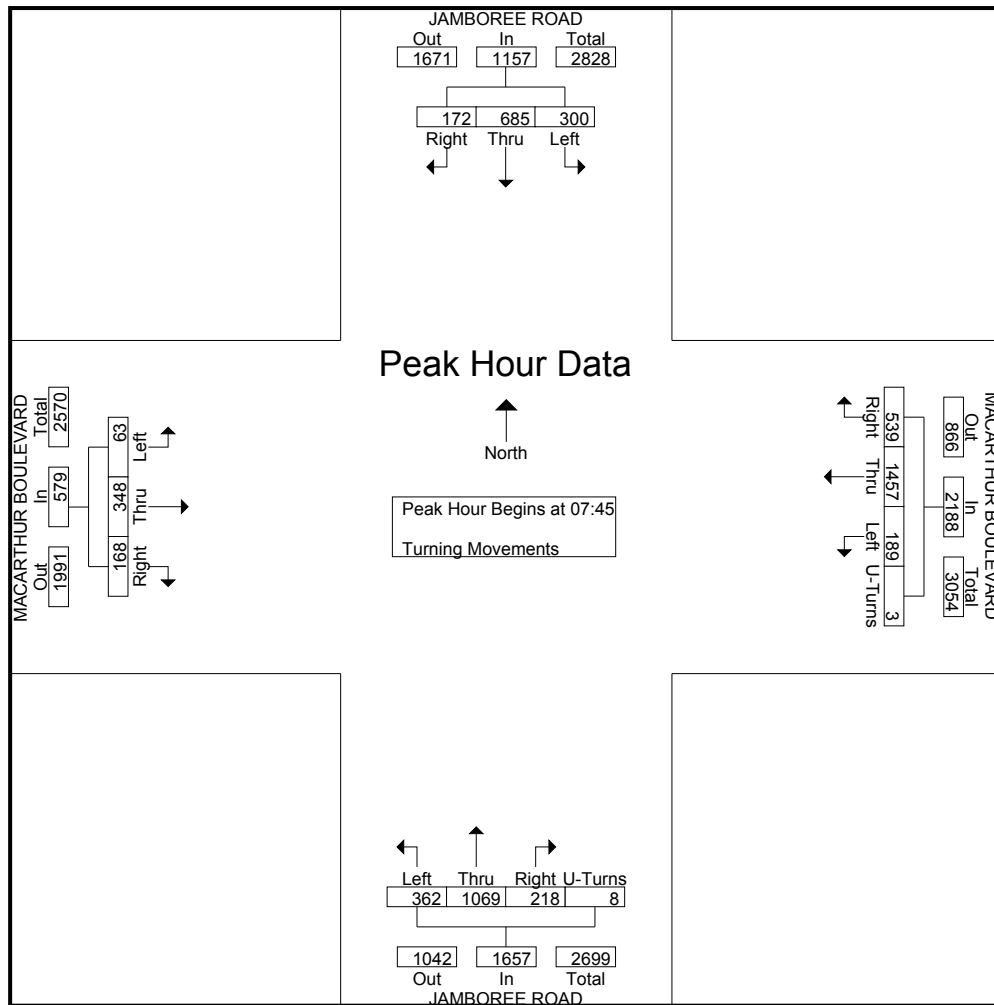
City: NEPORT BEACH
 N-S- Direction: JAMBOREE ROAD
 E-W Direction: MACARTHUR BOULEVARD

File Name : h1503019
 Site Code : 00000000
 Start Date : 3/25/2015
 Page No : 1

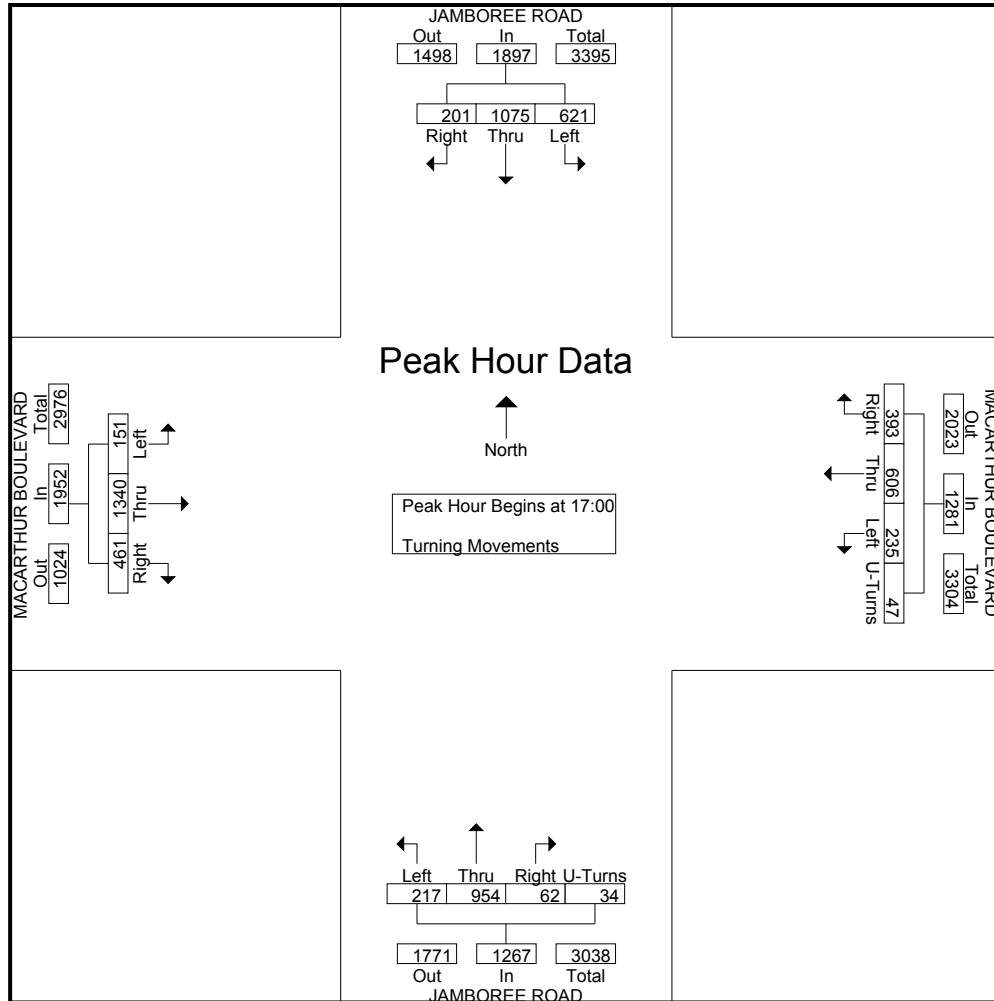
Groups Printed- Turning Movements

Start Time	JAMBOREE ROAD Southbound			MACARTHUR BOULEVARD Westbound				JAMBOREE ROAD Northbound				MACARTHUR BOULEVARD Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	
07:00	24	133	48	48	145	11	1	23	168	32	0	18	40	3	694
07:15	26	142	55	68	194	18	1	25	199	45	3	25	65	15	881
07:30	27	138	75	95	278	27	2	45	292	80	1	34	66	14	1174
07:45	41	177	75	112	406	37	1	45	284	84	4	36	79	15	1396
Total	118	590	253	323	1023	93	5	138	943	241	8	113	250	47	4145
08:00	32	201	65	126	359	55	1	56	250	94	2	34	89	13	1377
08:15	49	165	82	144	336	46	0	56	299	113	1	49	87	18	1445
08:30	50	142	78	157	356	51	1	61	236	71	1	49	93	17	1363
08:45	37	162	74	136	350	38	3	58	217	96	6	54	90	17	1338
Total	168	670	299	563	1401	190	5	231	1002	374	10	186	359	65	5523
16:30	32	219	135	85	105	38	5	11	202	49	3	80	212	27	1203
16:45	30	227	141	97	158	65	8	21	174	52	7	90	256	44	1370
Total	62	446	276	182	263	103	13	32	376	101	10	170	468	71	2573
17:00	55	268	143	101	165	72	12	19	250	48	7	110	309	55	1614
17:15	63	250	197	117	151	47	13	15	269	42	16	128	386	34	1728
17:30	37	273	131	81	167	69	10	14	205	57	7	118	384	32	1585
17:45	46	284	150	94	123	47	12	14	230	70	4	105	261	30	1470
Total	201	1075	621	393	606	235	47	62	954	217	34	461	1340	151	6397
18:00	20	227	166	97	147	53	11	15	189	50	4	94	314	33	1420
18:15	25	215	81	100	105	57	11	5	211	61	4	96	232	27	1230
Grand Total	594	3223	1696	1658	3545	731	92	483	3675	1044	70	1120	2963	394	21288
Apprch %	10.8	58.5	30.8	27.5	58.8	12.1	1.5	9.2	69.7	19.8	1.3	25	66.2	8.8	
Total %	2.8	15.1	8	7.8	16.7	3.4	0.4	2.3	17.3	4.9	0.3	5.3	13.9	1.9	

Start Time	JAMBOREE ROAD Southbound				MACARTHUR BOULEVARD Westbound					JAMBOREE ROAD Northbound					MACARTHUR BOULEVARD Eastbound				Int. Total		
	Right	Thru	Left	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	App. Total			
07:00 to 08:45 - Peak 1 of 1	Peak Hour for Entire Intersection Begins at 07:45																				
07:45	41	177	75	293	112	406	37	1	556	45	284	84	4	402	34	89	13	136	1377		
08:00	32	201	65	298	126	359	55	1	541	56	250	94	2	402	34	89	13	136	1377		
08:15	49	165	82	296	144	336	46	0	526	56	299	113	1	469	49	87	18	154	1445		
08:30	50	172	685	300	1157	157	539	1457	189	3	2188	61	218	1069	362	8	1657	168	93	159	1363
Total Volume	172	685	300	1157	539	1457	189	3	2188	218	1069	362	8	1657	168	93	159	348	63	579	5581
% App. Total	14.9	59.2	25.9		24.6	56.6	8.6	0.1		13.2	54.5	21.8	0.5		29	50.1	10.9		10.9		
PHF	.860	.852	.915	.971	.858	.897	.859	.750	.968	.893	.894	.801	.500	.883	.857	.935	.875	.910			.966



Start Time	JAMBOREE ROAD Southbound				MACARTHUR BOULEVARD Westbound					JAMBOREE ROAD Northbound					MACARTHUR BOULEVARD Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																			
Peak Hour for Entire Intersection Begins at 17:00																			
17:00	55	268	143	466	101	165	72	12	350	19	250	48	7	324	110	309	55	474	1614
17:15	63	250	197	510	117	151	47	13	327	14	205	57	7	283	118	384	32	534	1728
17:30	37	273	131	441	81	167	69	10	327	14	205	57	7	283	118	384	32	534	1585
17:45	46	284	150	480	94	123	47	12	276	14	230	70	4	318	105	261	30	396	1470
Total Volume	201	1075	621	1897	393	606	235	47	1281	62	954	217	34	1267	461	1340	151	1952	6397
% App. Total	10.6	56.7	32.7		30.7	47.3	18.3	3.7		4.9	75.3	17.1	2.7		23.6	68.6	7.7		
PHF	.798	.946	.788	.930	.840	.907	.816	.904	.915	.816	.887	.775	.531	.926	.900	.868	.686	.891	.925



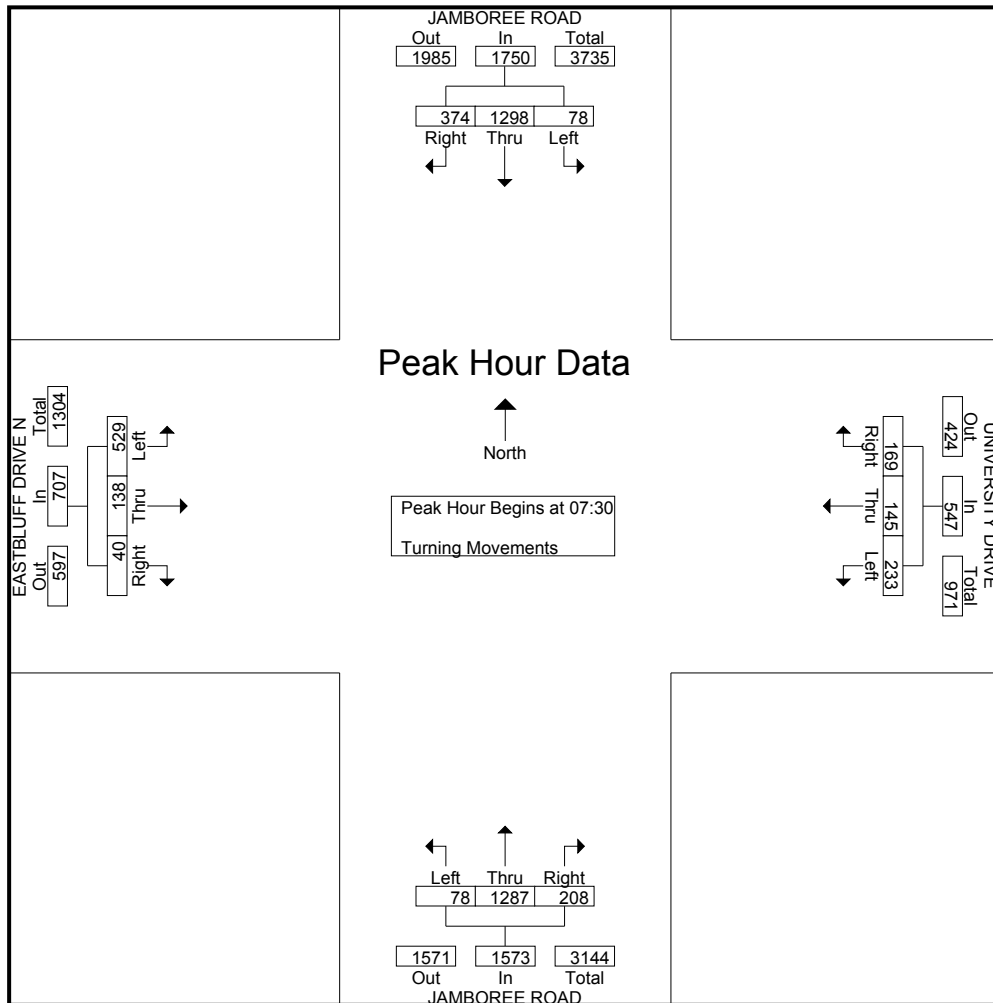
City: NEWPORT BEACH
 N-S- Direction: JAMBOREE ROAD
 E-W Direction: EASTBLUFF N / UNIVERSITY

File Name : H1503017
 Site Code : 00000000
 Start Date : 3/17/2015
 Page No : 1

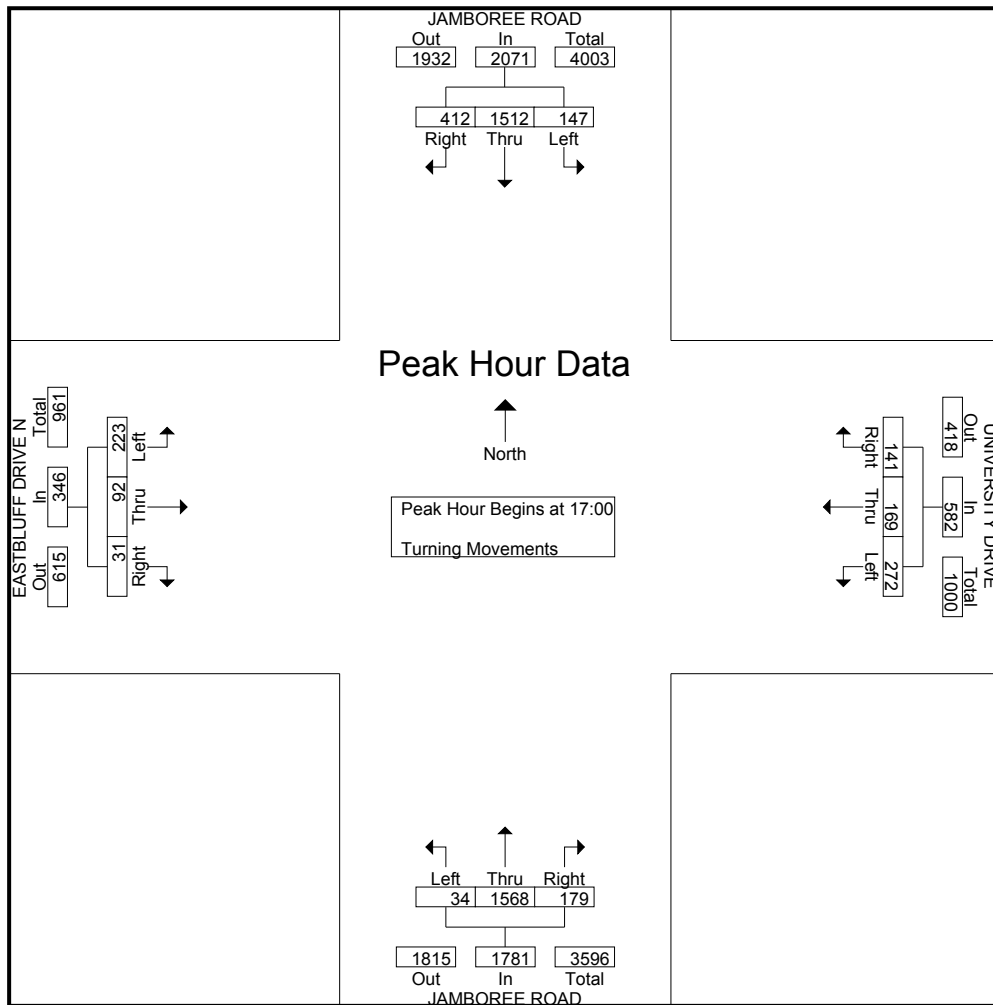
Groups Printed- Turning Movements

Start Time	JAMBOREE ROAD Southbound			UNIVERSITY DRIVE Westbound			JAMBOREE ROAD Northbound			EASTBLUFF DRIVE N Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00	63	299	8	23	15	26	29	190	3	0	19	60	735
07:15	93	300	17	24	34	48	37	237	11	7	12	72	892
07:30	152	280	16	42	68	37	52	293	45	13	39	120	1157
07:45	89	303	21	48	31	63	59	355	21	13	50	170	1223
Total	397	1182	62	137	148	174	177	1075	80	33	120	422	4007
08:00	60	347	20	37	20	54	44	293	6	10	23	119	1033
08:15	73	368	21	42	26	79	53	346	6	4	26	120	1164
08:30	81	315	17	49	25	59	46	312	6	9	28	112	1059
08:45	70	331	26	50	19	67	34	299	7	3	26	124	1056
Total	284	1361	84	178	90	259	177	1250	25	26	103	475	4312
16:30	65	283	35	19	23	50	53	373	5	7	23	79	1015
16:45	95	299	33	32	33	45	43	371	17	3	31	70	1072
Total	160	582	68	51	56	95	96	744	22	10	54	149	2087
17:00	109	362	36	33	44	59	49	417	8	6	19	55	1197
17:15	106	367	39	35	43	63	43	407	8	16	21	60	1208
17:30	90	382	38	43	48	54	46	389	10	2	25	67	1194
17:45	107	401	34	30	34	96	41	355	8	7	27	41	1181
Total	412	1512	147	141	169	272	179	1568	34	31	92	223	4780
18:00	108	338	26	35	44	85	66	360	6	8	28	62	1166
18:15	105	337	31	26	40	60	51	316	7	5	30	53	1061
Grand Total	1466	5312	418	568	547	945	746	5313	174	113	427	1384	17413
Apprch %	20.4	73.8	5.8	27.6	26.6	45.9	12	85.2	2.8	5.9	22.2	71.9	
Total %	8.4	30.5	2.4	3.3	3.1	5.4	4.3	30.5	1	0.6	2.5	7.9	

Start Time	JAMBOREE ROAD Southbound				UNIVERSITY DRIVE Westbound				JAMBOREE ROAD Northbound				EASTBLUFF DRIVE N Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	152	280	16	448	42	68	37	147	52	293	45	390	13	39	120	172	1157
07:45	89	303	21	413	48	31	63	142	59	355	21	435	13	50	170	233	1223
08:00	60	347	20	427	37	20	54	111	44	293	6	343	10	23	119	152	1033
08:15	73	368	21	462	42	26	79	147	53	346	6	405	4	26	120	150	1164
Total Volume	374	1298	78	1750	169	145	233	547	208	1287	78	1573	40	138	529	707	4577
% App. Total	21.4	74.2	4.5		30.9	26.5	42.6		13.2	81.8	5		5.7	19.5	74.8		
PHF	.615	.882	.929	.947	.880	.533	.737	.930	.881	.906	.433	.904	.769	.690	.778	.759	.936



Start Time	JAMBOREE ROAD Southbound				UNIVERSITY DRIVE Westbound				JAMBOREE ROAD Northbound				EASTBLUFF DRIVE N Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	109	362	36	507	33	44	59	136	49	417	8	474	6	19	55	80	1197
17:15	106	367	39	512	35	43	63	141	43	407	8	458	16	21	60	97	1208
17:30	90	382	38	510	43	48	54	145	46	389	10	445	2	25	67	94	1194
17:45	107	401	34	542	30	34	96	160	41	355	8	404	7	27	41	75	1181
Total Volume	412	1512	147	2071	141	169	272	582	179	1568	34	1781	31	92	223	346	4780
% App. Total	19.9	73	7.1		24.2	29	46.7		10.1	88	1.9		9	26.6	64.5		
PHF	.945	.943	.942	.955	.820	.880	.708	.909	.913	.940	.850	.939	.484	.852	.832	.892	.989



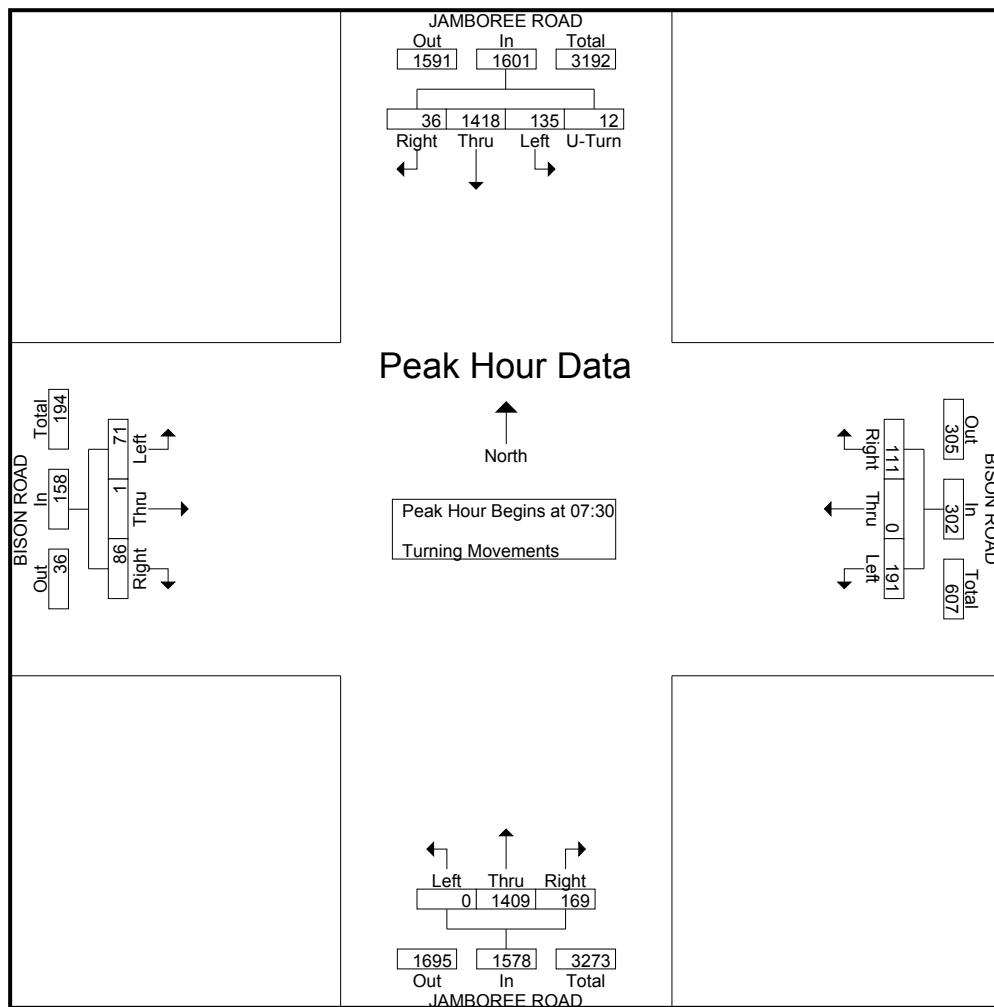
City: NEWPORT BEACH
 N-S- Direction: JAMBOREE ROAD
 E-W Direction: BISON ROAD

File Name : h1503016
 Site Code : 00000000
 Start Date : 3/25/2015
 Page No : 1

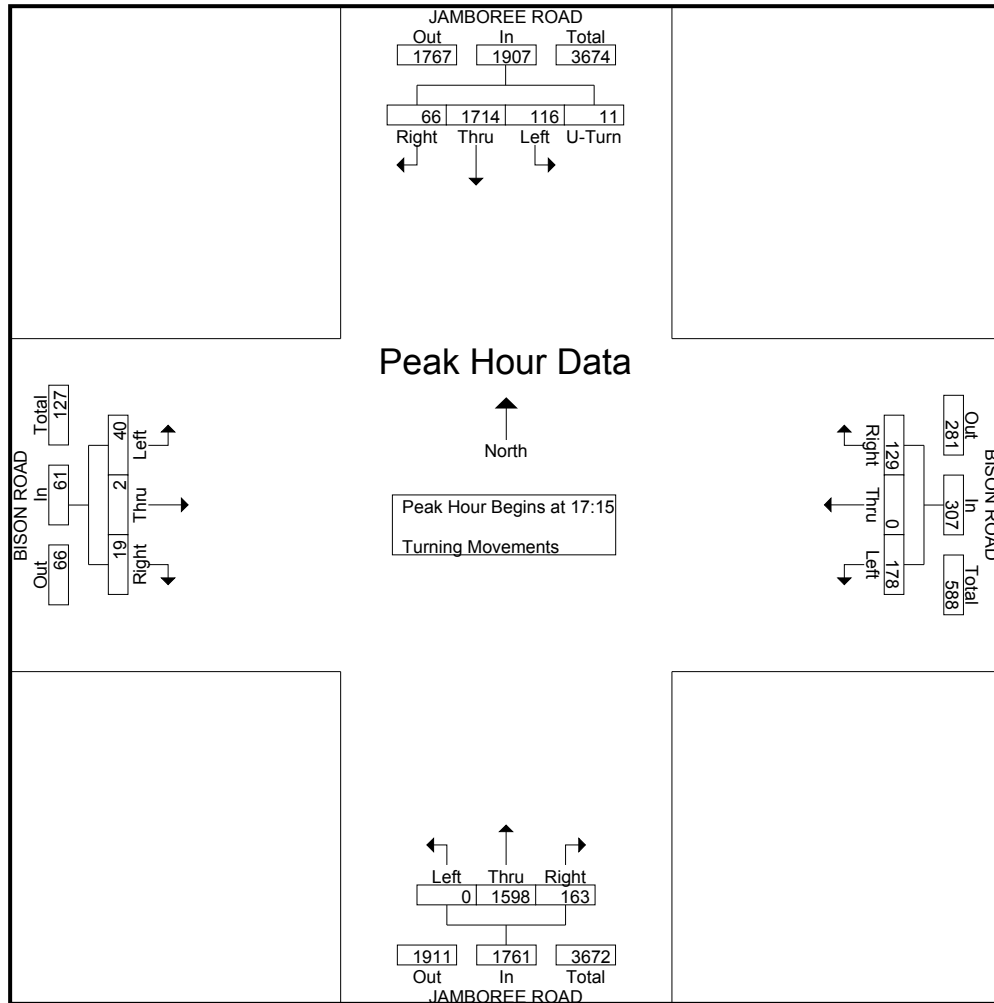
Groups Printed- Turning Movements

Start Time	JAMBOREE ROAD Southbound				BISON ROAD Westbound			JAMBOREE ROAD Northbound			BISON ROAD Eastbound			Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00	10	293	16	0	12	0	23	16	188	0	2	0	14	574
07:15	10	309	22	2	19	0	50	26	241	0	8	0	12	699
07:30	3	328	22	1	36	0	83	41	345	0	21	0	19	899
07:45	15	354	42	4	26	0	50	51	357	0	44	1	20	964
Total	38	1284	102	7	93	0	206	134	1131	0	75	1	65	3136
08:00	11	376	29	1	21	0	29	40	354	0	12	0	16	889
08:15	7	360	42	6	28	0	29	37	353	0	9	0	16	887
08:30	13	347	33	3	23	0	30	39	291	0	11	0	11	801
08:45	8	408	36	6	38	0	36	40	294	0	8	0	24	898
Total	39	1491	140	16	110	0	124	156	1292	0	40	0	67	3475
16:30	14	308	22	2	25	0	46	34	397	0	7	0	4	859
16:45	13	311	38	3	29	0	41	52	445	0	4	0	7	943
Total	27	619	60	5	54	0	87	86	842	0	11	0	11	1802
17:00	10	313	33	1	41	0	54	32	414	0	4	0	9	911
17:15	14	442	27	3	26	0	39	42	466	0	2	0	11	1072
17:30	17	409	33	5	37	0	49	39	396	0	7	1	6	999
17:45	17	477	22	2	30	0	53	43	370	0	4	1	14	1033
Total	58	1641	115	11	134	0	195	156	1646	0	17	2	40	4015
18:00	18	386	34	1	36	0	37	39	366	0	6	0	9	932
18:15	12	397	18	2	32	0	37	33	371	0	10	0	12	924
Grand Total	192	5818	469	42	459	0	686	604	5648	0	159	3	204	14284
Apprch %	2.9	89.2	7.2	0.6	40.1	0	59.9	9.7	90.3	0	43.4	0.8	55.7	
Total %	1.3	40.7	3.3	0.3	3.2	0	4.8	4.2	39.5	0	1.1	0	1.4	

Start Time	JAMBOREE ROAD Southbound					BISON ROAD Westbound				JAMBOREE ROAD Northbound				BISON ROAD Eastbound				Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:30																		
07:30	3	328	22	1	354	36		83	119	41	345	0	386	21	0	19	40	899
07:45	15		42							51	357		408	44	1	20	65	964
08:00	11	376			417													
08:15	7	360	42	6	415	28	0	29	57	37	353	0	390	9	0	16	25	887
Total Volume	36	1418	135	12	1601	111	0	191	302	169	1409	0	1578	86	1	71	158	3639
% App. Total	2.2	88.6	8.4	0.7		36.8	0	63.2		10.7	89.3	0		54.4	0.6	44.9		
PHF	.600	.943	.804	.500	.960	.771	.000	.575	.634	.828	.987	.000	.967	.489	.250	.888	.608	.944



Start Time	JAMBOREE ROAD Southbound					BISON ROAD Westbound				JAMBOREE ROAD Northbound				BISON ROAD Eastbound				Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 17:15																		
17:15	14	442	27	3	486	26	0	39	65	42	466	0	508	2	0	11	13	1072
17:30	17	409	33	5	464	37	0	53	90	39	396	0	435	7	1	14	19	1033
17:45	17	477	22	2	518	30	0	53	83	43	370	0	413	4	1	14	19	1033
18:00	18	386	34	1	439	36	0	37	73	39	366	0	405	6	0	9	15	932
Total Volume	66	1714	116	11	1907	129	0	178	307	163	1598	0	1761	19	2	40	61	4036
% App. Total	3.5	89.9	6.1	0.6		4.2	0	5.8		9.3	90.7	0		31.1	3.3	65.6		
PHF	.917	.898	.853	.550	.920	.872	.000	.840	.892	.948	.857	.000	.867	.679	.500	.714	.803	.941



City: NEWPORT BEACH
 N-S Direction: JAMBOREE ROAD
 E-W Direction: FORD RD- EASTBLUFF DRIVE

File Name : H1404125
 Site Code : 00000000
 Start Date : 5/8/2014
 Page No : 1

Groups Printed- Vehicles

Start Time	JAMBOREE ROAD Southbound			FORD ROAD Westbound			JAMBOREE ROAD Northbound			EASTBLUFF DRIVE Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	15	341	25	5	42	5	15	236	27	47	18	5	781
07:15 AM	23	372	15	5	164	10	25	295	34	70	32	10	1055
07:30 AM	48	460	19	8	175	10	37	330	71	110	89	13	1370
07:45 AM	26	471	39	6	104	19	28	392	85	144	103	17	1434
Total	112	1644	98	24	485	44	105	1253	217	371	242	45	4640
08:00 AM	29	463	51	7	20	7	33	364	18	66	32	7	1097
08:15 AM	27	506	52	10	17	12	26	389	28	34	16	13	1130
08:30 AM	28	479	41	15	28	12	26	329	11	53	22	11	1055
08:45 AM	39	492	61	11	22	13	44	351	17	60	27	13	1150
Total	123	1940	205	43	87	44	129	1433	74	213	97	44	4432
*** BREAK ***													
04:30 PM	40	548	46	7	37	7	30	485	14	58	40	6	1318
04:45 PM	47	517	38	16	61	13	28	460	18	71	43	13	1325
Total	87	1065	84	23	98	20	58	945	32	129	83	19	2643
05:00 PM	66	523	48	7	70	11	34	477	11	87	53	11	1398
05:15 PM	59	511	44	7	62	21	18	480	11	96	54	21	1384
05:30 PM	69	476	43	1	41	13	70	500	15	96	55	13	1392
05:45 PM	54	382	45	10	48	9	56	433	11	83	53	12	1196
Total	248	1892	180	25	221	54	178	1890	48	362	215	57	5370
06:00 PM	43	341	45	5	41	13	44	362	15	105	53	14	1081
06:15 PM	36	327	36	2	26	18	42	379	16	58	32	18	990
Grand Total	649	7209	648	122	958	193	556	6262	402	1238	722	197	19156
Apprch %	7.6	84.8	7.6	9.6	75.3	15.2	7.7	86.7	5.6	57.4	33.5	9.1	
Total %	3.4	37.6	3.4	0.6	5	1	2.9	32.7	2.1	6.5	3.8	1	

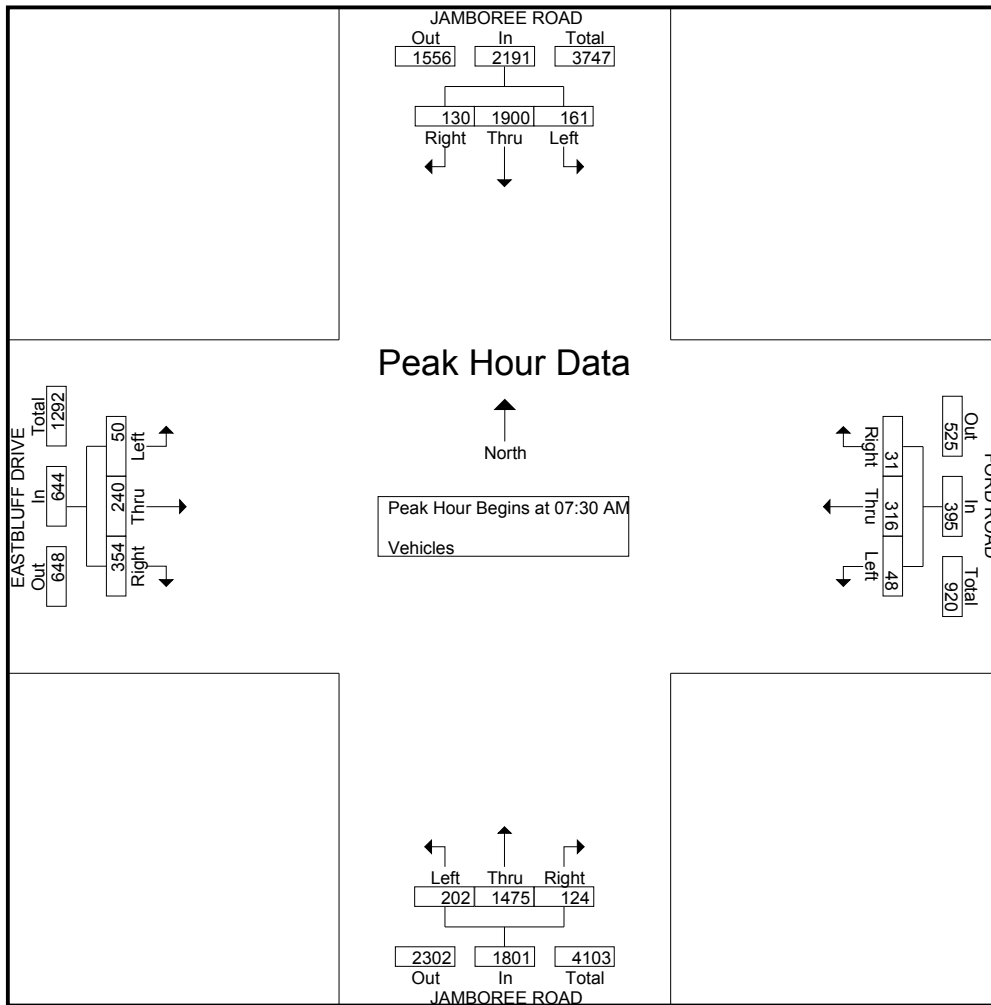
City: NEWPORT BEACH
 N-S Direction: JAMBOREE ROAD
 E-W Direction: FORD RD- EASTBLUFF DRIVE

File Name : H1404125
 Site Code : 00000000
 Start Date : 5/8/2014
 Page No : 2

Start Time	JAMBOREE ROAD Southbound				FORD ROAD Westbound				JAMBOREE ROAD Northbound				EASTBLUFF DRIVE Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
07:30 AM	48	460	19	527	8	175	10	193	37	330	71	438	110	89	13	212	1370
07:45 AM	26	471	39	536	6	104	19	129	28	392	85	505	144	103	17	264	1434
08:00 AM	29	463	51	543	7	20	7	34	33	364	18	415	66	32	7	105	1097
08:15 AM	27	506	52	585	10	17	12	39	26	389	28	443	34	16	13	63	1130
Total Volume	130	1900	161	2191	31	316	48	395	124	1475	202	1801	354	240	50	644	5031
% App. Total	5.9	86.7	7.3		7.8	80	12.2		6.9	81.9	11.2		55	37.3	7.8		
PHF	.677	.939	.774	.936	.775	.451	.632	.512	.838	.941	.594	.892	.615	.583	.735	.610	.877

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

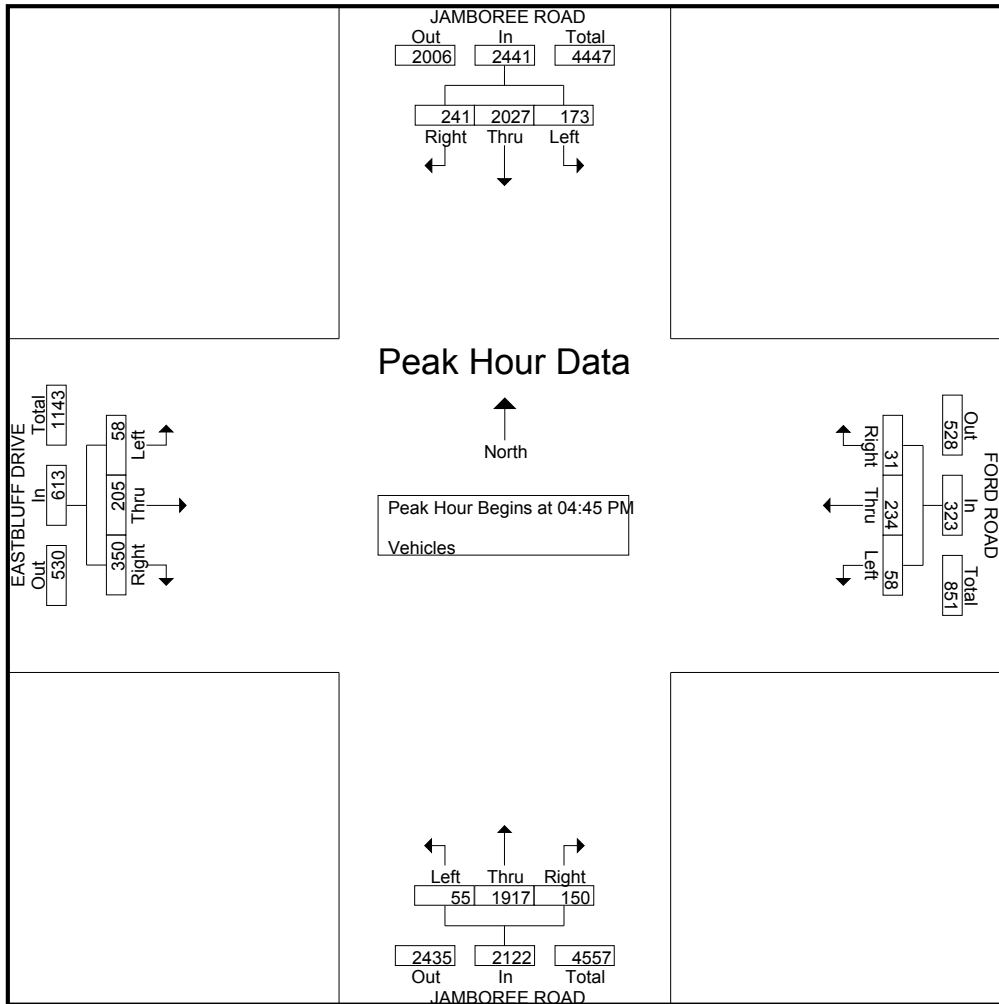
Peak Hour for Entire Intersection Begins at 07:30 AM



City: NEWPORT BEACH
 N-S Direction: JAMBOREE ROAD
 E-W Direction: FORD RD- EASTBLUFF DRIVE

File Name : H1404125
 Site Code : 00000000
 Start Date : 5/8/2014
 Page No : 3

Start Time	JAMBOREE ROAD Southbound				FORD ROAD Westbound				JAMBOREE ROAD Northbound				EASTBLUFF DRIVE Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	47	517	38	602	16	61	13	90	28	460	18	506	71	43	13	127	1325
05:00 PM	66	523	48	637	7	70	11	88	34	477	11	522	87	53	11	151	1398
05:15 PM	59	511	44	614	7	62	21	90	18	480	11	509	96	54	21	171	1384
05:30 PM	69	476	43	588	1	41	13	55	70	500	15	585	96	55	13	164	1392
Total Volume	241	2027	173	2441	31	234	58	323	150	1917	55	2122	350	205	58	613	5499
% App. Total	9.9	83	7.1		9.6	72.4	18		7.1	90.3	2.6		57.1	33.4	9.5		
PHF	.873	.969	.901	.958	.484	.836	.690	.897	.536	.959	.764	.907	.911	.932	.690	.896	.983



City: NEWPORT BEACH
 N-S Direction: JAMBOREE ROAD
 E-W Direction: SAN JOAQUIN HILLS DRIVE

File Name : H1404126
 Site Code : 00005060
 Start Date : 5/21/2014
 Page No : 1

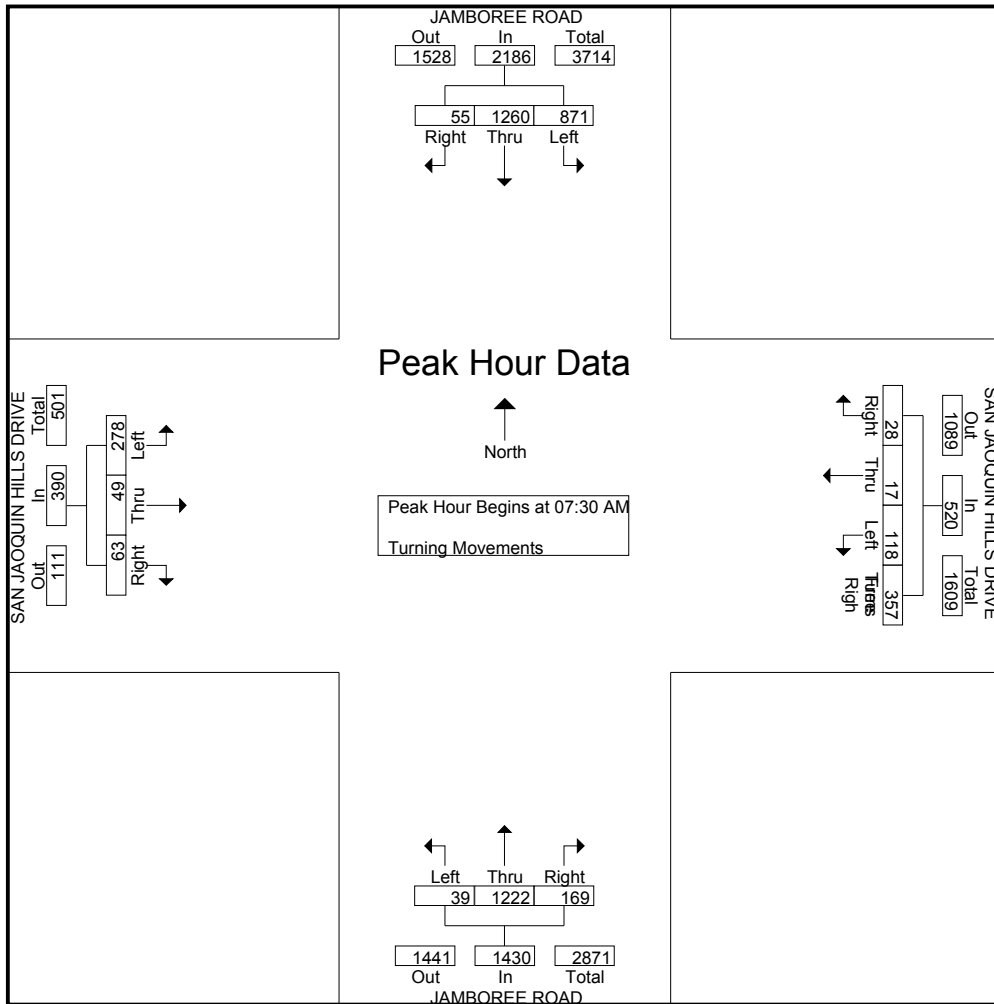
Groups Printed- Turning Movements

Start Time	JAMBOREE ROAD Southbound			SAN JOAQUIN HILLS DRIVE Westbound				JAMBOREE ROAD Northbound			SAN JOAQUIN HILLS DRIVE Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Free Right Turns	Right	Thru	Left	Right	Thru	Left	
07:00 AM	10	235	177	2	4	9	38	23	259	6	5	13	34	815
07:15 AM	6	243	136	4	3	22	60	24	308	6	6	12	61	891
07:30 AM	12	272	215	11	2	25	121	48	348	4	14	5	72	1149
07:45 AM	10	342	250	7	4	25	108	44	313	17	15	20	64	1219
Total	38	1092	778	24	13	81	327	139	1228	33	40	50	231	4074
08:00 AM	20	353	208	4	7	34	64	36	279	7	13	16	60	1101
08:15 AM	13	293	198	6	4	34	64	41	282	11	21	8	82	1057
08:30 AM	11	340	189	5	6	49	78	39	283	4	14	12	63	1093
08:45 AM	10	304	213	1	5	39	75	53	311	3	23	9	64	1110
Total	54	1290	808	16	22	156	281	169	1155	25	71	45	269	4361
*** BREAK ***														
04:30 PM	22	331	118	14	8	49	171	20	320	17	10	14	28	1122
04:45 PM	26	329	107	9	25	56	194	35	297	20	11	4	17	1130
Total	48	660	225	23	33	105	365	55	617	37	21	18	45	2252
05:00 PM	37	347	98	28	17	58	197	24	363	9	12	10	25	1225
05:15 PM	51	422	153	17	12	51	220	36	284	15	15	4	26	1306
05:30 PM	50	408	117	11	11	50	184	21	273	71	13	5	25	1239
05:45 PM	62	440	134	17	9	63	188	29	287	24	9	2	30	1294
Total	200	1617	502	73	49	222	789	110	1207	119	49	21	106	5064
06:00 PM	72	397	114	13	16	53	170	24	279	16	17	12	16	1199
06:15 PM	58	328	113	10	17	39	149	13	250	36	14	11	20	1058
Grand Total	470	5384	2540	159	150	656	2081	510	4736	266	212	157	687	18008
Apprch %	5.6	64.1	30.3	5.2	4.9	21.5	68.3	9.3	85.9	4.8	20.1	14.9	65.1	
Total %	2.6	29.9	14.1	0.9	0.8	3.6	11.6	2.8	26.3	1.5	1.2	0.9	3.8	

City: NEWPORT BEACH
 N-S Direction: JAMBOREE ROAD
 E-W Direction: SAN JOAQUIN HILLS DRIVE

File Name : H1404126
 Site Code : 00005060
 Start Date : 5/21/2014
 Page No : 2

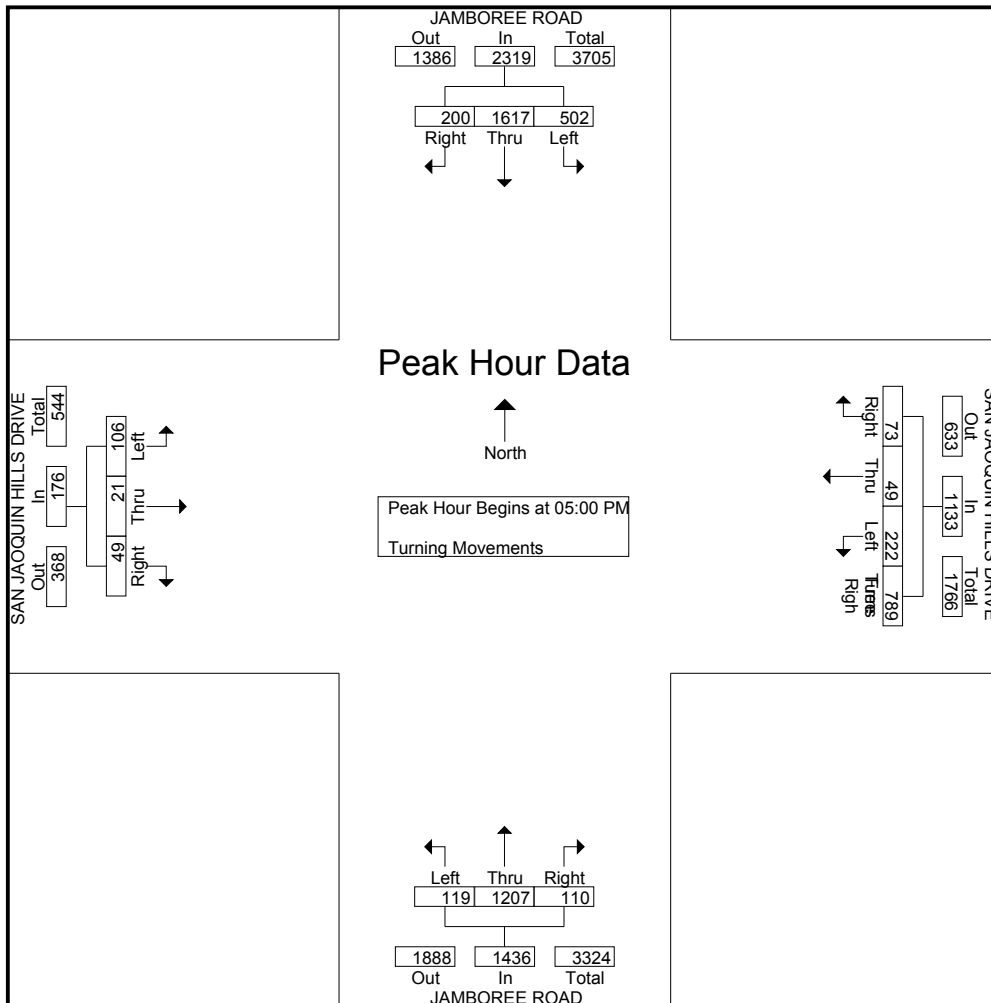
Start Time	JAMBOREE ROAD Southbound				SAN JOAQUIN HILLS DRIVE Westbound					JAMBOREE ROAD Northbound				SAN JOAQUIN HILLS DRIVE Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	Free Right Turns	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:30 AM																		
07:30 AM	12	272	215	499	11	2	25	121	159	48	348	4	400	14	5	72	91	1149
07:45 AM	10	342	250	602	7	4	25	108	144	44	313	17	374	15	20	64	99	1219
08:00 AM	20	353	208	581	4	7	34	64	109	36	279	7	322	13	16	60	89	1101
08:15 AM	13	293	198	504	6	4	34	64	108	41	282	11	334	21	8	82	111	1057
Total Volume	55	1260	871	2186	28	17	118	357	520	169	1222	39	1430	63	49	278	390	4526
% App. Total	2.5	57.6	39.8		5.4	3.3	22.7	68.7		11.8	85.5	2.7		16.2	12.6	71.3		
PHF	.688	.892	.871	.908	.636	.607	.868	.738	.818	.880	.878	.574	.894	.750	.613	.848	.878	.928



City: NEWPORT BEACH
 N-S Direction: JAMBOREE ROAD
 E-W Direction: SAN JOAQUIN HILLS DRIVE

File Name : H1404126
 Site Code : 00005060
 Start Date : 5/21/2014
 Page No : 3

Start Time	JAMBOREE ROAD Southbound				SAN JOAQUIN HILLS DRIVE Westbound					JAMBOREE ROAD Northbound				SAN JOAQUIN HILLS DRIVE Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	Free Right Turns	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. 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	37	347	98	482	28	17	58	197	300	24	363	9	396	12	10	25	47	1225
05:15 PM	51	422	153	626	17	12	51	220	300	36	284	15	335	15	4	26	45	1306
05:30 PM	50	408	117	575	11	11	50	184	256	21	273	71	365	13	5	25	43	1239
05:45 PM	62	440	134	636	17	9	63	188	277	29	287	24	340	9	2	30	41	1294
Total Volume	200	1617	502	2319	73	49	222	789	1133	110	1207	119	1436	49	21	106	176	5064
% App. Total	8.6	69.7	21.6		6.4	4.3	19.6	69.6		7.7	84.1	8.3		27.8	11.9	60.2		
PHF	.806	.919	.820	.912	.652	.721	.881	.897	.944	.764	.831	.419	.907	.817	.525	.883	.936	.969



City: NEWPORT BEACH
 N-S Direction: JAMBOREE ROAD
 E-W Direction: SANTA BARBARA DRIVE

File Name : H1404124
 Site Code : 00000000
 Start Date : 5/8/2014
 Page No : 1

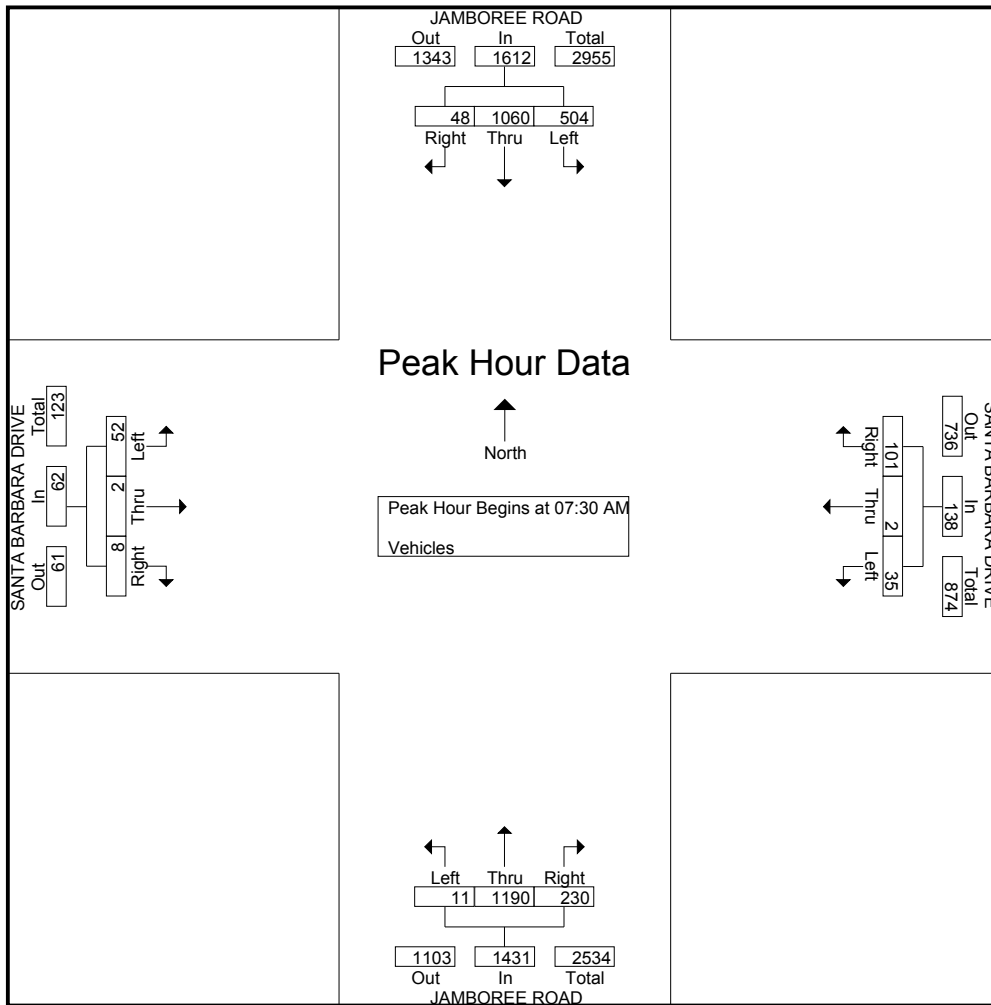
Groups Printed- Vehicles

Start Time	JAMBOREE ROAD Southbound			SANTA BARBARA DRIVE Westbound			JAMBOREE ROAD Northbound			SANTA BARBARA DRIVE Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	2	167	108	23	1	1	43	194	1	1	0	1	542
07:15 AM	2	209	128	20	0	13	44	271	1	1	3	11	703
07:30 AM	6	257	113	22	0	9	57	341	1	2	0	10	818
07:45 AM	12	309	150	30	1	12	58	266	1	3	1	15	858
Total	22	942	499	95	2	35	202	1072	4	7	4	37	2921
08:00 AM	15	253	121	21	0	10	58	285	2	1	1	12	779
08:15 AM	15	241	120	28	1	4	57	298	7	2	0	15	788
08:30 AM	7	244	113	30	1	13	45	286	3	1	2	12	757
08:45 AM	11	271	122	26	0	6	53	274	3	4	3	11	784
Total	48	1009	476	105	2	33	213	1143	15	8	6	50	3108
*** BREAK ***													
04:30 PM	7	332	45	105	2	67	26	249	3	3	2	6	847
04:45 PM	8	367	55	92	1	38	26	277	1	4	0	13	882
Total	15	699	100	197	3	105	52	526	4	7	2	19	1729
05:00 PM	12	359	31	145	2	99	26	257	2	2	2	10	947
05:15 PM	9	463	61	125	4	68	32	254	4	3	0	11	1034
05:30 PM	17	423	56	116	1	70	22	251	6	2	1	6	971
05:45 PM	11	418	44	104	2	39	25	203	3	2	0	6	857
Total	49	1663	192	490	9	276	105	965	15	9	3	33	3809
06:00 PM	5	355	43	123	3	59	25	193	4	5	1	3	819
06:15 PM	11	308	26	81	0	45	18	209	1	4	1	1	705
Grand Total	150	4976	1336	1091	19	553	615	4108	43	40	17	143	13091
Apprch %	2.3	77	20.7	65.6	1.1	33.3	12.9	86.2	0.9	20	8.5	71.5	
Total %	1.1	38	10.2	8.3	0.1	4.2	4.7	31.4	0.3	0.3	0.1	1.1	

City: NEWPORT BEACH
 N-S Direction: JAMBOREE ROAD
 E-W Direction: SANTA BARBARA DRIVE

File Name : H1404124
 Site Code : 00000000
 Start Date : 5/8/2014
 Page No : 2

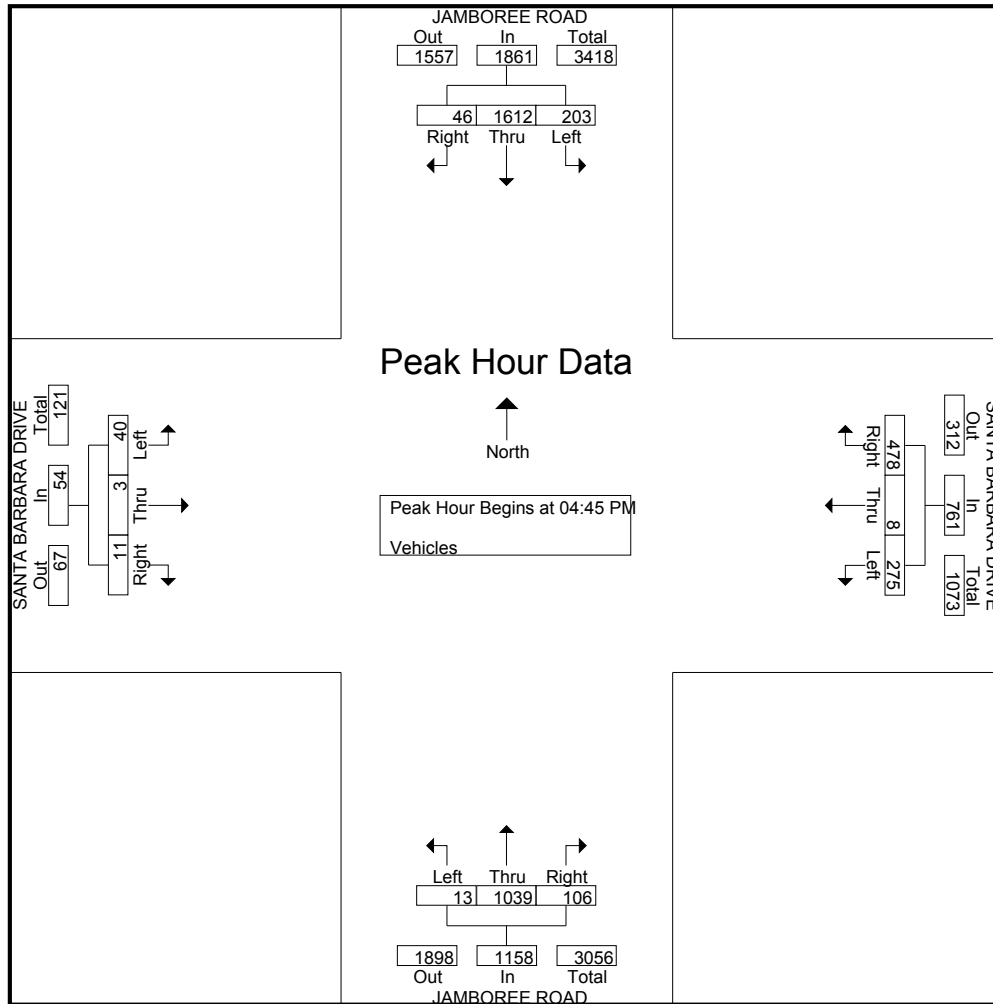
Start Time	JAMBOREE ROAD Southbound				SANTA BARBARA DRIVE Westbound				JAMBOREE ROAD Northbound				SANTA BARBARA DRIVE Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	6	257	113	376	22	0	9	31	57	341	1	399	2	0	10	12	818
07:45 AM	12	309	150	471	30	1	12	43	58	266	1	325	3	1	15	19	858
08:00 AM	15	253	121	389	21	0	10	31	58	285	2	345	1	1	12	14	779
08:15 AM	15	241	120	376	28	1	4	33	57	298	7	362	2	0	15	17	788
Total Volume	48	1060	504	1612	101	2	35	138	230	1190	11	1431	8	2	52	62	3243
% App. Total	3	65.8	31.3		73.2	1.4	25.4		16.1	83.2	0.8		12.9	3.2	83.9		
PHF	.800	.858	.840	.856	.842	.500	.729	.802	.991	.872	.393	.897	.667	.500	.867	.816	.945



City: NEWPORT BEACH
 N-S Direction: JAMBOREE ROAD
 E-W Direction: SANTA BARBARA DRIVE

File Name : H1404124
 Site Code : 00000000
 Start Date : 5/8/2014
 Page No : 3

Start Time	JAMBOREE ROAD Southbound				SANTA BARBARA DRIVE Westbound				JAMBOREE ROAD Northbound				SANTA BARBARA DRIVE Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	8	367	55	430	92	1	38	131	26	277	1	304	4	0	13	17	882
05:00 PM	12	359	31	402	145	2	99	246	26	257	2	285	2	2	10	14	947
05:15 PM	9	463	61	533	125	4	68	197	32	254	4	290	3	0	11	14	1034
05:30 PM	17	423	56	496	116	1	70	187	22	251	6	279	2	1	6	9	971
Total Volume	46	1612	203	1861	478	8	275	761	106	1039	13	1158	11	3	40	54	3834
% App. Total	2.5	86.6	10.9		62.8	1.1	36.1		9.2	89.7	1.1		20.4	5.6	74.1		
PHF	.676	.870	.832	.873	.824	.500	.694	.773	.828	.938	.542	.952	.688	.375	.769	.794	.927



City: NEWPORT BEACH
 N-S Direction: JAMBOREE ROAD
 E-W Direction: COAST HIGHWAY

File Name : H1404120
 Site Code : 00000000
 Start Date : 5/1/2014
 Page No : 1

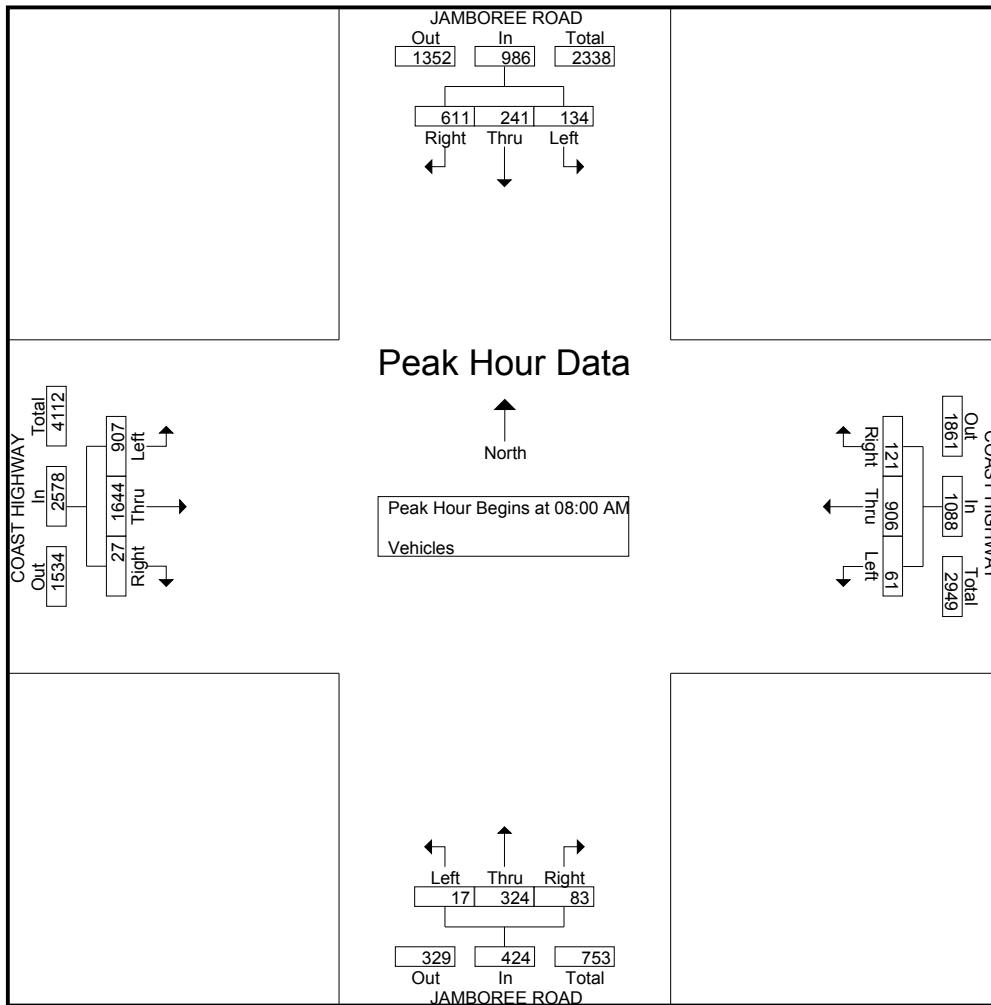
Groups Printed- Vehicles

Start Time	JAMBOREE ROAD Southbound			COAST HIGHWAY Westbound			JAMBOREE ROAD Northbound			COAST HIGHWAY Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	108	44	24	21	111	6	3	54	3	1	298	167	840
07:15 AM	127	37	30	30	174	4	13	95	1	3	343	189	1046
07:30 AM	140	65	38	43	162	5	9	107	0	3	357	238	1167
07:45 AM	165	83	48	17	169	8	21	88	2	5	352	203	1161
Total	540	229	140	111	616	23	46	344	6	12	1350	797	4214
08:00 AM	173	66	32	30	216	16	16	79	4	6	420	216	1274
08:15 AM	136	51	35	29	210	11	9	69	3	8	416	246	1223
08:30 AM	131	50	31	34	273	20	18	94	4	6	395	194	1250
08:45 AM	171	74	36	28	207	14	40	82	6	7	413	251	1329
Total	611	241	134	121	906	61	83	324	17	27	1644	907	5076
*** BREAK ***													
04:30 PM	270	83	43	41	342	27	22	74	5	4	235	138	1284
04:45 PM	286	89	32	44	464	24	15	67	2	4	310	167	1504
Total	556	172	75	85	806	51	37	141	7	8	545	305	2788
05:00 PM	322	116	43	43	482	25	31	73	10	9	312	165	1631
05:15 PM	347	134	49	63	616	32	26	65	10	1	332	157	1832
05:30 PM	367	133	49	49	418	22	11	62	5	5	338	182	1641
05:45 PM	356	103	38	43	368	25	15	64	11	2	287	150	1462
Total	1392	486	179	198	1884	104	83	264	36	17	1269	654	6566
06:00 PM	318	98	31	55	403	38	18	59	8	0	316	142	1486
06:15 PM	233	108	47	30	315	45	15	73	5	1	288	138	1298
Grand Total	3650	1334	606	600	4930	322	282	1205	79	65	5412	2943	21428
Apprch %	65.3	23.9	10.8	10.3	84.2	5.5	18	76.9	5	0.8	64.3	35	
Total %	17	6.2	2.8	2.8	23	1.5	1.3	5.6	0.4	0.3	25.3	13.7	

City: NEWPORT BEACH
 N-S Direction: JAMBOREE ROAD
 E-W Direction: COAST HIGHWAY

File Name : H1404120
 Site Code : 00000000
 Start Date : 5/1/2014
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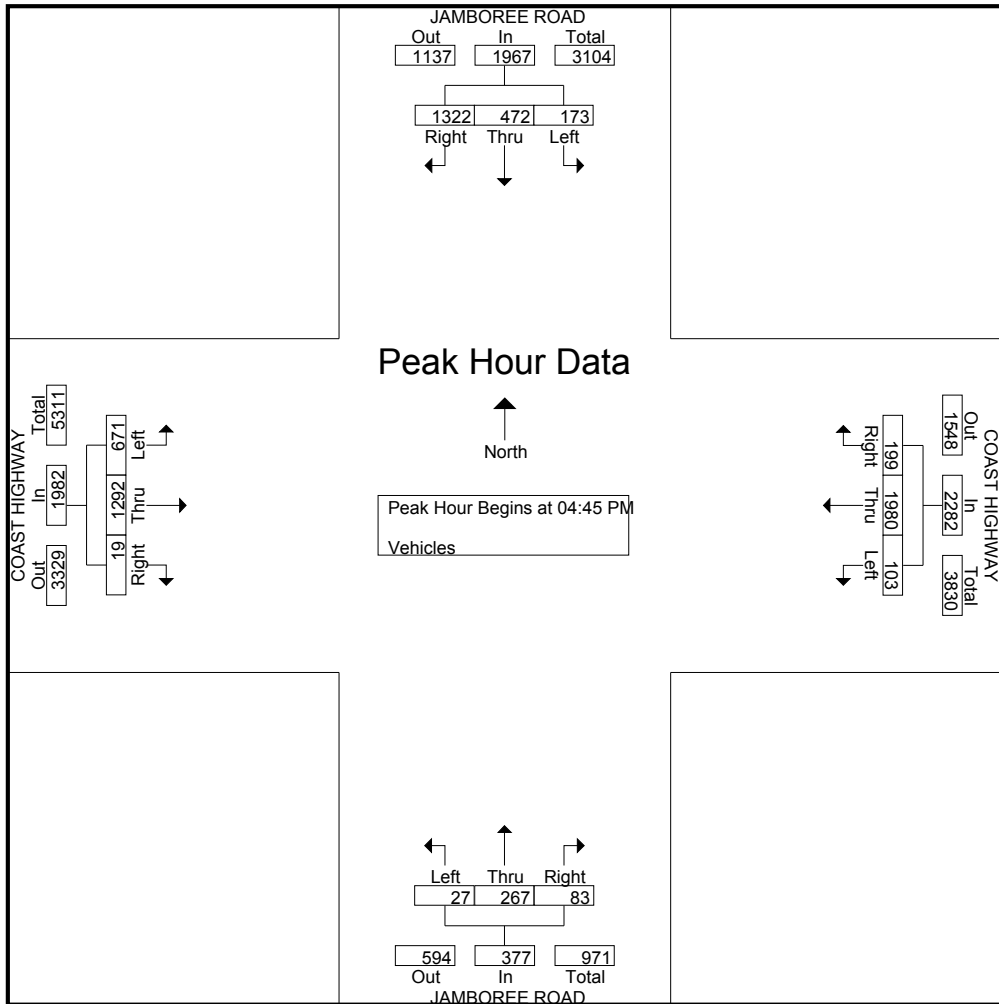
Start Time	JAMBOREE ROAD Southbound				COAST HIGHWAY Westbound				JAMBOREE ROAD Northbound				COAST HIGHWAY Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	173	66	32	271	30	216	16	262	16	79	4	99	6	420	216	642	1274
08:15 AM	136	51	35	222	29	210	11	250	9	69	3	81	8	416	246	670	1223
08:30 AM	131	50	31	212	34	273	20	327	18	94	4	116	6	395	194	595	1250
08:45 AM	171	74	36	281	28	207	14	249	40	82	6	128	7	413	251	671	1329
Total Volume	611	241	134	986	121	906	61	1088	83	324	17	424	27	1644	907	2578	5076
% App. Total	62	24.4	13.6		11.1	83.3	5.6		19.6	76.4	4		1	63.8	35.2		
PHF	.883	.814	.931	.877	.890	.830	.763	.832	.519	.862	.708	.828	.844	.979	.903	.961	.955



City: NEWPORT BEACH
 N-S Direction: JAMBOREE ROAD
 E-W Direction: COAST HIGHWAY

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 Site Code : 00000000
 Start Date : 5/1/2014
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Start Time	JAMBOREE ROAD Southbound				COAST HIGHWAY Westbound				JAMBOREE ROAD Northbound				COAST HIGHWAY Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	286	89	32	407	44	464	24	532	15	67	2	84	4	310	167	481	1504
05:00 PM	322	116	43	481	43	482	25	550	31	73	10	114	9	312	165	486	1631
05:15 PM	347	134	49	530	63	616	32	711	26	65	10	101	1	332	157	490	1832
05:30 PM	367	133	49	549	49	418	22	489	11	62	5	78	5	338	182	525	1641
Total Volume	1322	472	173	1967	199	1980	103	2282	83	267	27	377	19	1292	671	1982	6608
% App. Total	67.2	24	8.8		8.7	86.8	4.5		22	70.8	7.2		1	65.2	33.9		
PHF	.901	.881	.883	.896	.790	.804	.805	.802	.669	.914	.675	.827	.528	.956	.922	.944	.902



City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: BISON AVENUE

File Name : H1404129
 Site Code : 00000000
 Start Date : 5/22/2014
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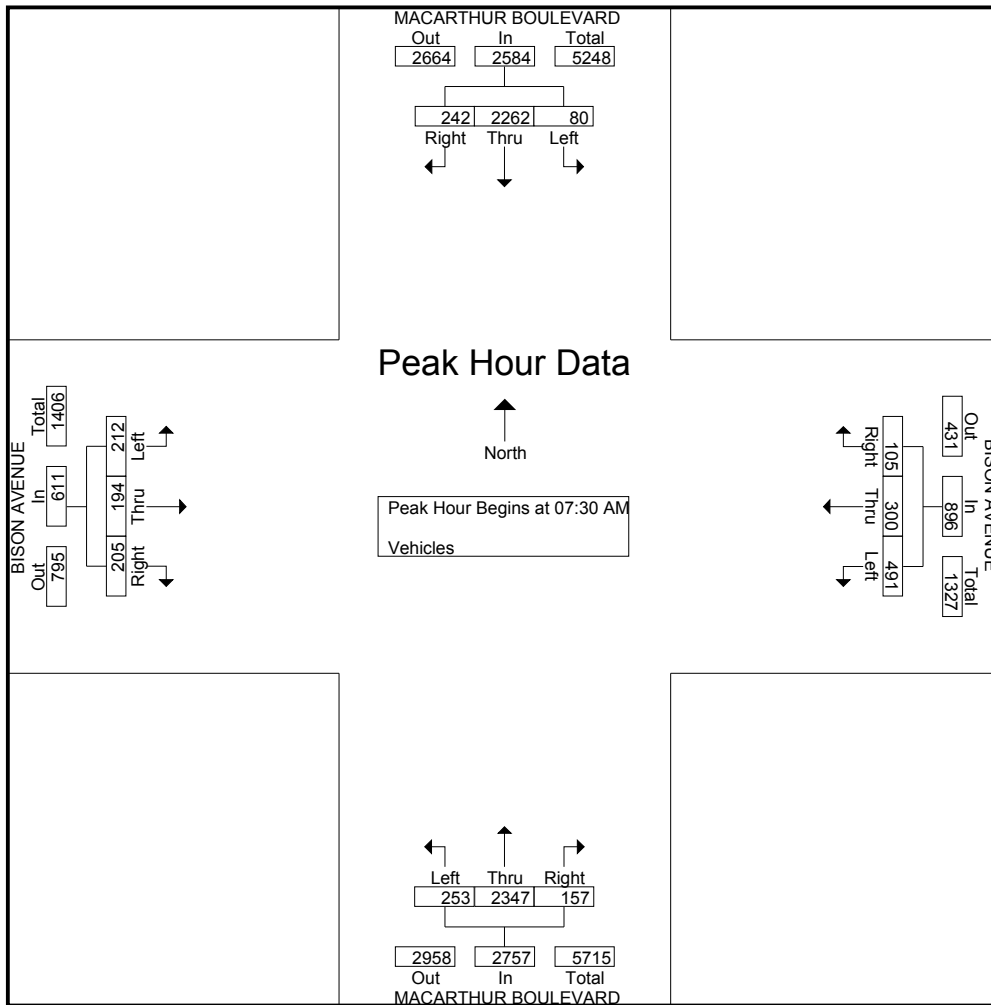
Groups Printed- Vehicles

Start Time	MACARTHUR BOULEVARD Southbound			BISON AVENUE Westbound			MACARTHUR BOULEVARD Northbound			BISON AVENUE Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	64	459	6	22	21	39	21	361	24	34	17	30	1098
07:15 AM	49	518	3	14	47	53	32	452	40	26	22	34	1290
07:30 AM	68	561	14	21	68	85	33	591	91	27	47	55	1661
07:45 AM	59	523	13	32	88	131	37	618	55	70	66	64	1756
Total	240	2061	36	89	224	308	123	2022	210	157	152	183	5805
08:00 AM	64	565	20	18	59	126	56	556	48	58	28	49	1647
08:15 AM	51	613	33	34	85	149	31	582	59	50	53	44	1784
08:30 AM	65	506	25	25	71	138	37	470	41	48	61	51	1538
08:45 AM	55	605	27	32	69	126	41	557	64	61	38	47	1722
Total	235	2289	105	109	284	539	165	2165	212	217	180	191	6691
*** BREAK ***													
04:30 PM	59	682	26	34	42	67	26	639	33	54	42	63	1767
04:45 PM	57	578	19	21	60	96	25	590	44	54	34	51	1629
Total	116	1260	45	55	102	163	51	1229	77	108	76	114	3396
05:00 PM	75	698	20	39	70	69	25	675	52	51	17	68	1859
05:15 PM	68	688	33	22	85	92	28	655	37	57	46	50	1861
05:30 PM	55	612	24	30	54	96	45	577	38	54	43	59	1687
05:45 PM	61	715	25	23	68	86	39	527	39	49	62	37	1731
Total	259	2713	102	114	277	343	137	2434	166	211	168	214	7138
06:00 PM	65	660	41	35	59	104	44	555	29	49	57	42	1740
06:15 PM	69	678	32	33	42	77	39	560	39	33	29	34	1665
Grand Total	984	9661	361	435	988	1534	559	8965	733	775	662	778	26435
Apprch %	8.9	87.8	3.3	14.7	33.4	51.9	5.4	87.4	7.1	35	29.9	35.1	
Total %	3.7	36.5	1.4	1.6	3.7	5.8	2.1	33.9	2.8	2.9	2.5	2.9	

City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: BISON AVENUE

File Name : H1404129
 Site Code : 00000000
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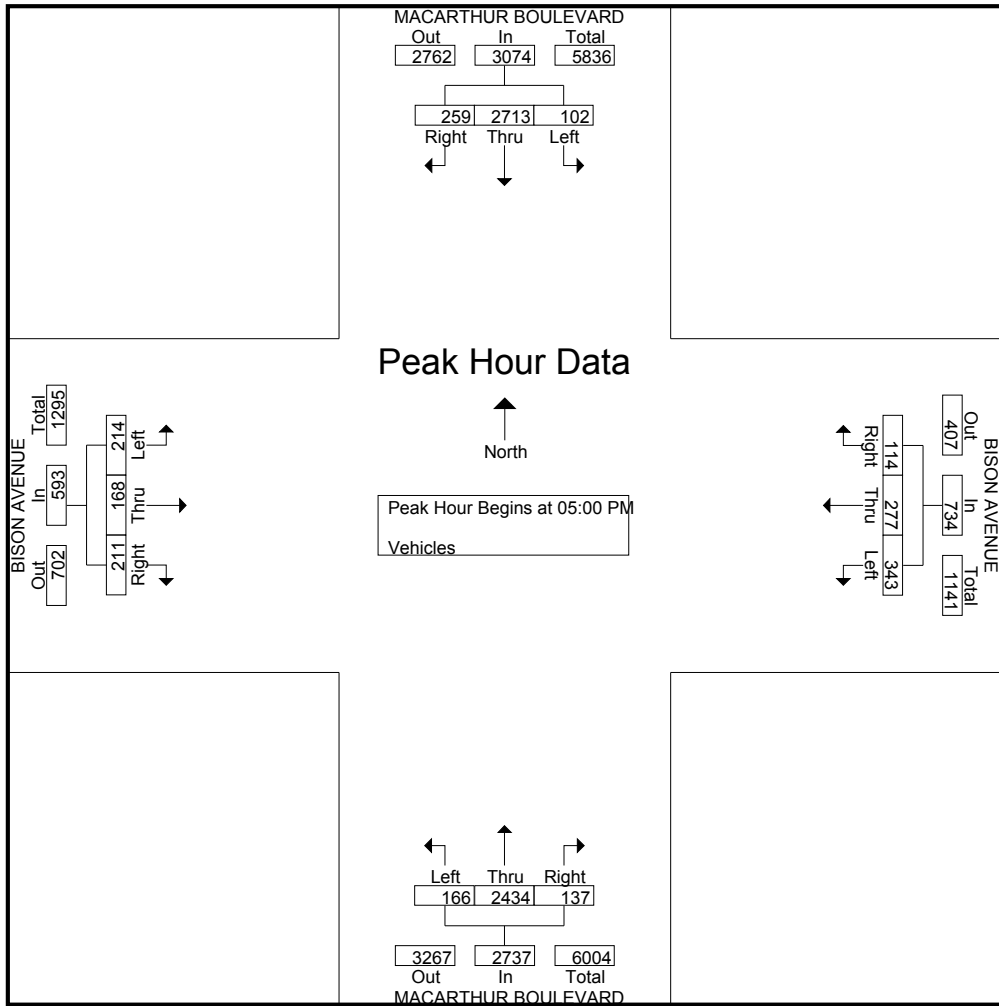
	MACARTHUR BOULEVARD Southbound				BISON AVENUE Westbound				MACARTHUR BOULEVARD Northbound				BISON AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	68	561	14	643	21	68	85	174	33	591	91	715	27	47	55	129	1661
07:45 AM	59	523	13	595	32	88	131	251	37	618	55	710	70	66	64	200	1756
08:00 AM	64	565	20	649	18	59	126	203	56	556	48	660	58	28	49	135	1647
08:15 AM	51	613	33	697	34	85	149	268	31	582	59	672	50	53	44	147	1784
Total Volume	242	2262	80	2584	105	300	491	896	157	2347	253	2757	205	194	212	611	6848
% App. Total	9.4	87.5	3.1		11.7	33.5	54.8		5.7	85.1	9.2		33.6	31.8	34.7		
PHF	.890	.923	.606	.927	.772	.852	.824	.836	.701	.949	.695	.964	.732	.735	.828	.764	.960



City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: BISON AVENUE

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Start Time	MACARTHUR BOULEVARD Southbound				BISON AVENUE Westbound				MACARTHUR BOULEVARD Northbound				BISON AVENUE Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. 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	75	698	20	793	39	70	69	178	25	675	52	752	51	17	68	136	1859
05:15 PM	68	688	33	789	22	85	92	199	28	655	37	720	57	46	50	153	1861
05:30 PM	55	612	24	691	30	54	96	180	45	577	38	660	54	43	59	156	1687
05:45 PM	61	715	25	801	23	68	86	177	39	527	39	605	49	62	37	148	1731
Total Volume	259	2713	102	3074	114	277	343	734	137	2434	166	2737	211	168	214	593	7138
% App. Total	8.4	88.3	3.3		15.5	37.7	46.7		5	88.9	6.1		35.6	28.3	36.1		
PHF	.863	.949	.773	.959	.731	.815	.893	.922	.761	.901	.798	.910	.925	.677	.787	.950	.959



City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: FORD RD / BONITA CYN

File Name : h1404131
 Site Code : 00000000
 Start Date : 5/15/2014
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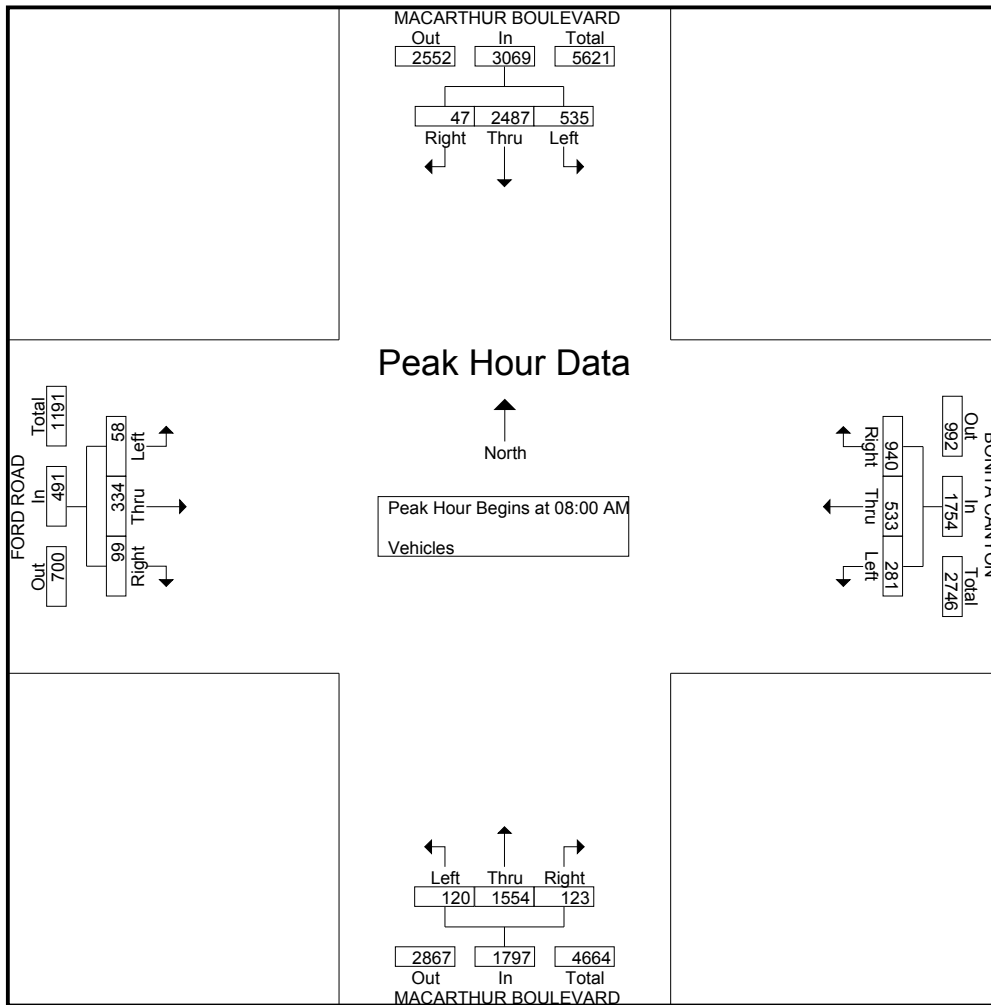
Groups Printed- Vehicles

Start Time	MACARTHUR BOULEVARD Southbound			BONITA CANYON Westbound			MACARTHUR BOULEVARD Northbound			FORD ROAD Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	7	470	98	130	72	43	14	254	8	9	27	9	1141
07:15 AM	7	488	151	181	106	51	29	332	11	10	52	9	1427
07:30 AM	8	515	108	253	50	55	16	376	9	12	76	7	1485
07:45 AM	5	629	137	236	83	57	16	442	8	34	62	14	1723
Total	27	2102	494	800	311	206	75	1404	36	65	217	39	5776
08:00 AM	14	618	153	246	119	84	40	410	19	27	47	17	1794
08:15 AM	12	601	124	236	116	67	21	443	29	19	56	12	1736
08:30 AM	12	623	132	257	180	72	34	333	60	27	97	14	1841
08:45 AM	9	645	126	201	118	58	28	368	12	26	134	15	1740
Total	47	2487	535	940	533	281	123	1554	120	99	334	58	7111
*** BREAK ***													
04:30 PM	12	577	161	197	62	41	140	488	17	16	67	6	1784
04:45 PM	10	562	189	197	77	34	111	484	30	24	79	2	1799
Total	22	1139	350	394	139	75	251	972	47	40	146	8	3583
05:00 PM	13	590	163	226	69	24	203	555	16	20	79	6	1964
05:15 PM	17	533	219	190	69	33	190	451	12	28	84	11	1837
05:30 PM	14	594	224	159	85	38	176	479	13	20	87	6	1895
05:45 PM	15	636	193	163	58	36	138	475	14	22	90	10	1850
Total	59	2353	799	738	281	131	707	1960	55	90	340	33	7546
06:00 PM	23	581	244	182	77	38	134	436	13	13	86	15	1842
06:15 PM	9	533	186	152	69	30	100	358	17	16	64	6	1540
Grand Total	187	9195	2608	3206	1410	761	1390	6684	288	323	1187	159	27398
Apprch %	1.6	76.7	21.8	59.6	26.2	14.2	16.6	79.9	3.4	19.4	71.1	9.5	
Total %	0.7	33.6	9.5	11.7	5.1	2.8	5.1	24.4	1.1	1.2	4.3	0.6	

City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: FORD RD / BONITA CYN

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 Site Code : 00000000
 Start Date : 5/15/2014
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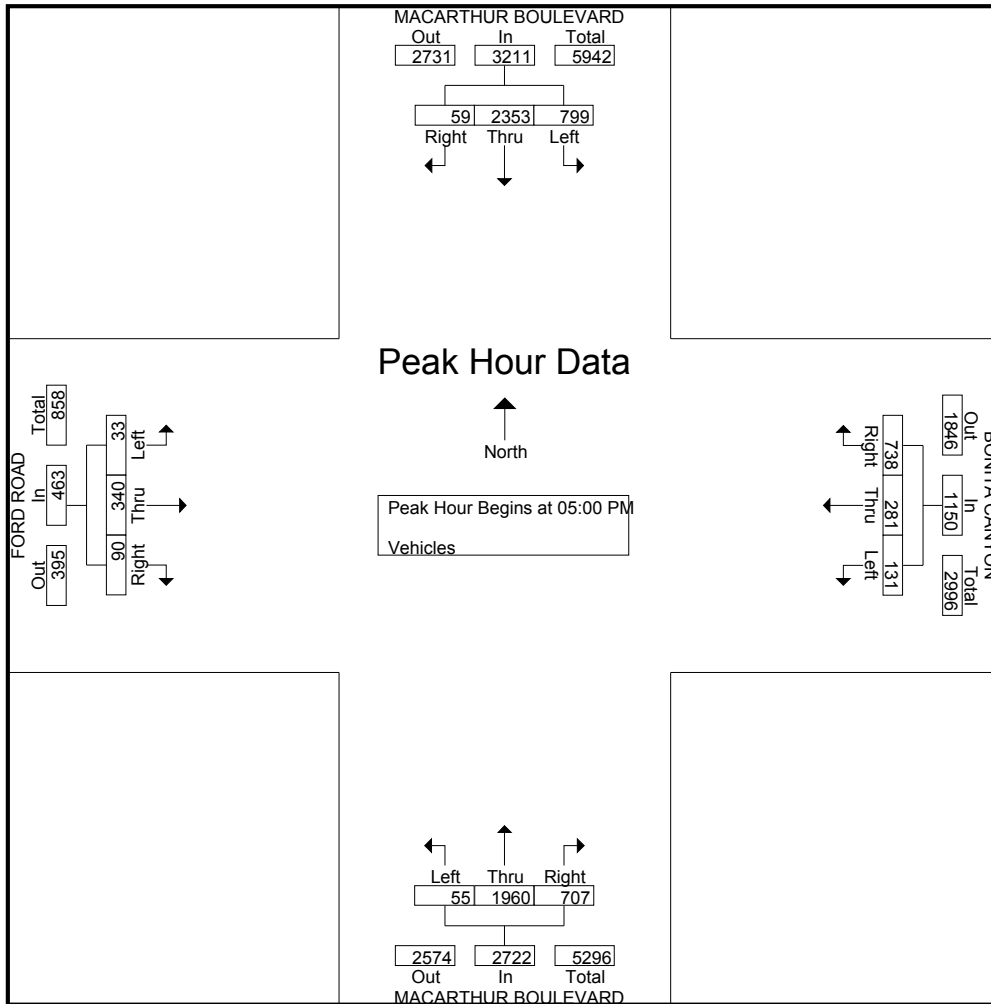
	MACARTHUR BOULEVARD Southbound				BONITA CANYON Westbound				MACARTHUR BOULEVARD Northbound				FORD ROAD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	14	618	153	785	246	119	84	449	40	410	19	469	27	47	17	91	1794
08:15 AM	12	601	124	737	236	116	67	419	21	443	29	493	19	56	12	87	1736
08:30 AM	12	623	132	767	257	180	72	509	34	333	60	427	27	97	14	138	1841
08:45 AM	9	645	126	780	201	118	58	377	28	368	12	408	26	134	15	175	1740
Total Volume	47	2487	535	3069	940	533	281	1754	123	1554	120	1797	99	334	58	491	7111
% App. Total	1.5	81	17.4		53.6	30.4	16		6.8	86.5	6.7		20.2	68	11.8		
PHF	.839	.964	.874	.977	.914	.740	.836	.861	.769	.877	.500	.911	.917	.623	.853	.701	.966



City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: FORD RD / BONITA CYN

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Start Time	MACARTHUR BOULEVARD Southbound				BONITA CANYON Westbound				MACARTHUR BOULEVARD Northbound				FORD ROAD Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. 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	13	590	163	766	226	69	24	319	203	555	16	774	20	79	6	105	1964
05:15 PM	17	533	219	769	190	69	33	292	190	451	12	653	28	84	11	123	1837
05:30 PM	14	594	224	832	159	85	38	282	176	479	13	668	20	87	6	113	1895
05:45 PM	15	636	193	844	163	58	36	257	138	475	14	627	22	90	10	122	1850
Total Volume	59	2353	799	3211	738	281	131	1150	707	1960	55	2722	90	340	33	463	7546
% App. Total	1.8	73.3	24.9		64.2	24.4	11.4		26	72	2		19.4	73.4	7.1		
PHF	.868	.925	.892	.951	.816	.826	.862	.901	.871	.883	.859	.879	.804	.944	.750	.941	.961



City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: SAN JOAQUIN HILL RD

File Name : H1404132
 Site Code : 00000000
 Start Date : 5/15/2014
 Page No : 1

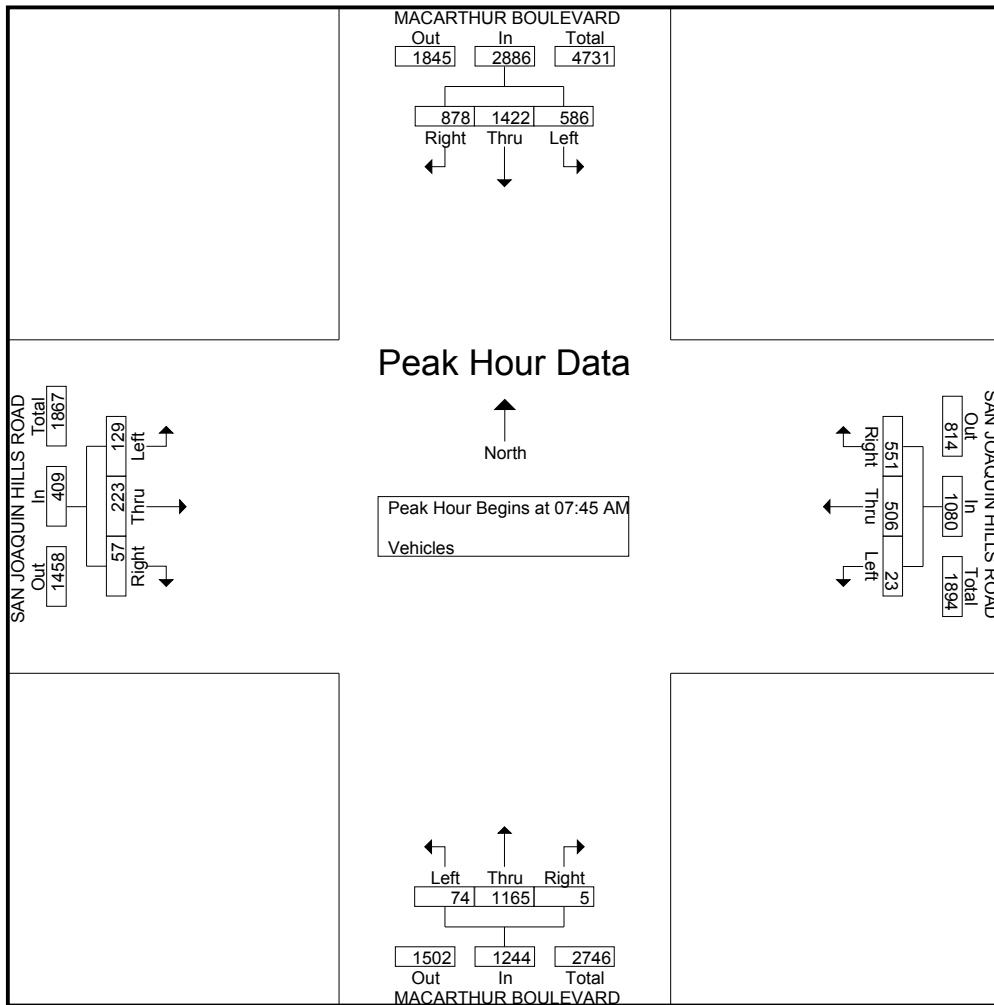
Groups Printed- Vehicles

Start Time	MACARTHUR BOULEVARD Southbound			SAN JOAQUIN HILLS ROAD Westbound			MACARTHUR BOULEVARD Northbound			SAN JOAQUIN HILLS ROAD Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	139	304	89	86	118	0	2	183	19	13	26	20	999
07:15 AM	185	290	117	66	98	2	0	240	24	15	43	21	1101
07:30 AM	194	292	123	126	130	3	1	260	20	8	48	16	1221
07:45 AM	204	332	149	155	140	6	2	296	13	12	66	25	1400
Total	722	1218	478	433	486	11	5	979	76	48	183	82	4721
08:00 AM	264	381	193	142	125	3	1	309	20	17	50	34	1539
08:15 AM	188	368	128	141	126	11	2	287	23	15	54	38	1381
08:30 AM	222	341	116	113	115	3	0	273	18	13	53	32	1299
08:45 AM	206	397	136	101	94	8	2	290	25	19	58	41	1377
Total	880	1487	573	497	460	25	5	1159	86	64	215	145	5596
*** BREAK ***													
04:30 PM	104	326	174	145	48	6	4	367	20	12	94	159	1459
04:45 PM	84	397	146	133	68	7	4	378	12	18	92	101	1440
Total	188	723	320	278	116	13	8	745	32	30	186	260	2899
05:00 PM	75	394	134	128	72	7	4	482	15	24	126	201	1662
05:15 PM	115	434	170	99	61	9	3	417	14	14	96	183	1615
05:30 PM	126	424	166	94	58	10	10	416	15	17	104	145	1585
05:45 PM	133	280	151	99	37	11	7	387	9	12	99	79	1304
Total	449	1532	621	420	228	37	24	1702	53	67	425	608	6166
06:00 PM	114	170	194	115	53	13	4	375	11	17	96	36	1198
06:15 PM	98	177	133	104	78	6	4	349	7	19	69	24	1068
Grand Total	2451	5307	2319	1847	1421	105	50	5309	265	245	1174	1155	21648
Apprch %	24.3	52.7	23	54.8	42.1	3.1	0.9	94.4	4.7	9.5	45.6	44.9	
Total %	11.3	24.5	10.7	8.5	6.6	0.5	0.2	24.5	1.2	1.1	5.4	5.3	

City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: SAN JOAQUIN HILL RD

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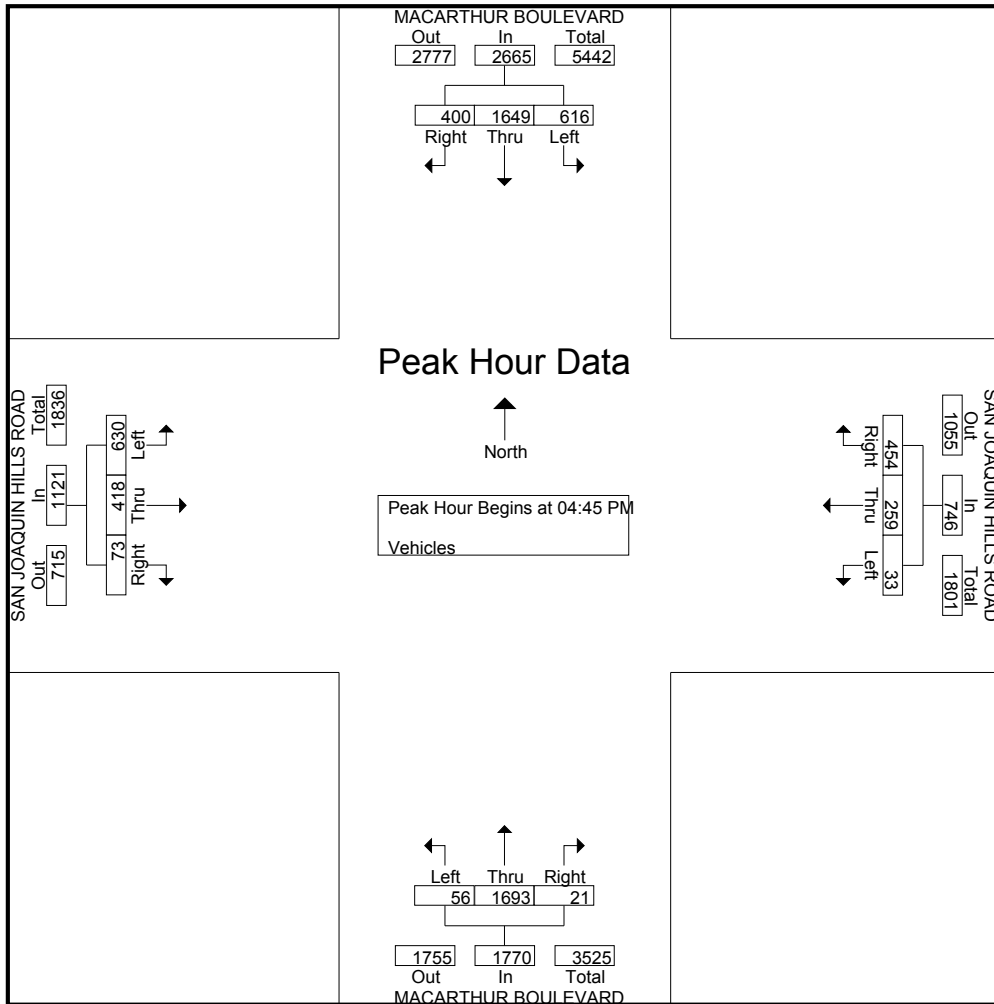
	MACARTHUR BOULEVARD Southbound				SAN JOAQUIN HILLS ROAD Westbound				MACARTHUR BOULEVARD Northbound				SAN JOAQUIN HILLS ROAD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	204	332	149	685	155	140	6	301	2	296	13	311	12	66	25	103	1400
08:00 AM	264	381	193	838	142	125	3	270	1	309	20	330	17	50	34	101	1539
08:15 AM	188	368	128	684	141	126	11	278	2	287	23	312	15	54	38	107	1381
08:30 AM	222	341	116	679	113	115	3	231	0	273	18	291	13	53	32	98	1299
Total Volume	878	1422	586	2886	551	506	23	1080	5	1165	74	1244	57	223	129	409	5619
% App. Total	30.4	49.3	20.3		51	46.9	2.1		0.4	93.6	5.9		13.9	54.5	31.5		
PHF	.831	.933	.759	.861	.889	.904	.523	.897	.625	.943	.804	.942	.838	.845	.849	.956	.913



City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: SAN JOAQUIN HILL RD

File Name : H1404132
 Site Code : 00000000
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Start Time	MACARTHUR BOULEVARD Southbound				SAN JOAQUIN HILLS ROAD Westbound				MACARTHUR BOULEVARD Northbound				SAN JOAQUIN HILLS ROAD Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	84	397	146	627	133	68	7	208	4	378	12	394	18	92	101	211	1440
05:00 PM	75	394	134	603	128	72	7	207	4	482	15	501	24	126	201	351	1662
05:15 PM	115	434	170	719	99	61	9	169	3	417	14	434	14	96	183	293	1615
05:30 PM	126	424	166	716	94	58	10	162	10	416	15	441	17	104	145	266	1585
Total Volume	400	1649	616	2665	454	259	33	746	21	1693	56	1770	73	418	630	1121	6302
% App. Total	15	61.9	23.1		60.9	34.7	4.4		1.2	95.6	3.2		6.5	37.3	56.2		
PHF	.794	.950	.906	.927	.853	.899	.825	.897	.525	.878	.933	.883	.760	.829	.784	.798	.948



City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: SAN MIGUEL DRIVE

File Name : H1404133
 Site Code : 00000000
 Start Date : 5/8/2014
 Page No : 1

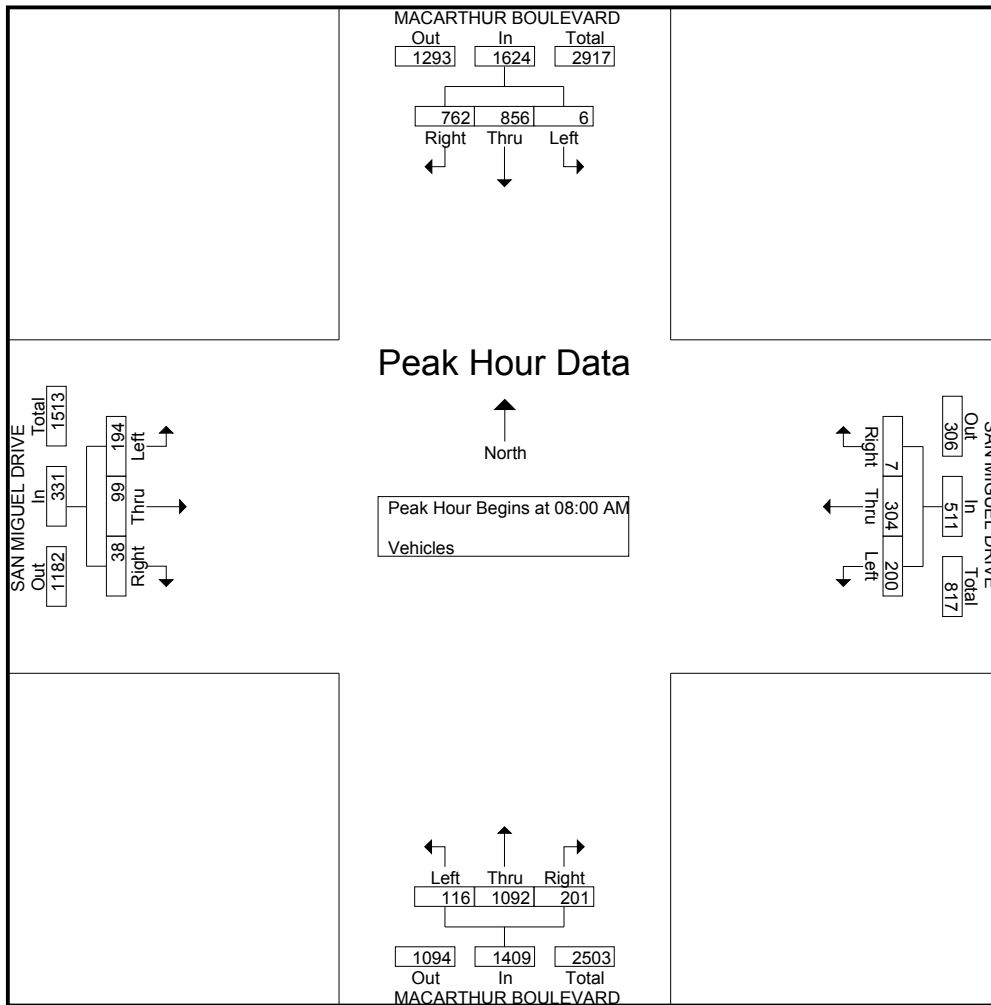
Groups Printed- Vehicles

Start Time	MACARTHUR BOULEVARD Southbound			SAN MIGUEL DRIVE Westbound			MACARTHUR BOULEVARD Northbound			SAN MIGUEL DRIVE Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	72	218	0	2	23	24	34	135	13	4	9	23	557
07:15 AM	100	216	2	0	21	33	41	218	17	5	15	20	688
07:30 AM	109	197	0	2	39	46	67	277	28	6	16	38	825
07:45 AM	160	238	1	0	74	54	80	272	19	5	9	33	945
Total	441	869	3	4	157	157	222	902	77	20	49	114	3015
08:00 AM	168	237	3	2	71	61	59	302	25	10	25	50	1013
08:15 AM	182	213	2	1	68	52	56	298	35	9	21	34	971
08:30 AM	207	169	0	1	75	44	39	237	20	12	26	49	879
08:45 AM	205	237	1	3	90	43	47	255	36	7	27	61	1012
Total	762	856	6	7	304	200	201	1092	116	38	99	194	3875
*** BREAK ***													
04:30 PM	110	257	2	7	51	58	58	263	20	36	120	186	1168
04:45 PM	115	265	0	2	56	58	51	208	22	27	125	183	1112
Total	225	522	2	9	107	116	109	471	42	63	245	369	2280
05:00 PM	107	335	3	10	37	65	62	247	15	41	144	253	1319
05:15 PM	110	311	1	3	44	36	66	248	20	36	105	222	1202
05:30 PM	124	299	3	4	77	51	61	253	19	29	102	202	1224
05:45 PM	125	272	3	7	69	52	67	204	18	35	88	191	1131
Total	466	1217	10	24	227	204	256	952	72	141	439	868	4876
06:00 PM	109	264	3	5	51	47	30	229	23	30	88	172	1051
06:15 PM	97	280	1	2	43	34	42	213	21	23	65	160	981
Grand Total	2100	4008	25	51	889	758	860	3859	351	315	985	1877	16078
Apprch %	34.2	65.4	0.4	3	52.4	44.6	17	76.1	6.9	9.9	31	59.1	
Total %	13.1	24.9	0.2	0.3	5.5	4.7	5.3	24	2.2	2	6.1	11.7	

City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: SAN MIGUEL DRIVE

File Name : H1404133
 Site Code : 00000000
 Start Date : 5/8/2014
 Page No : 2

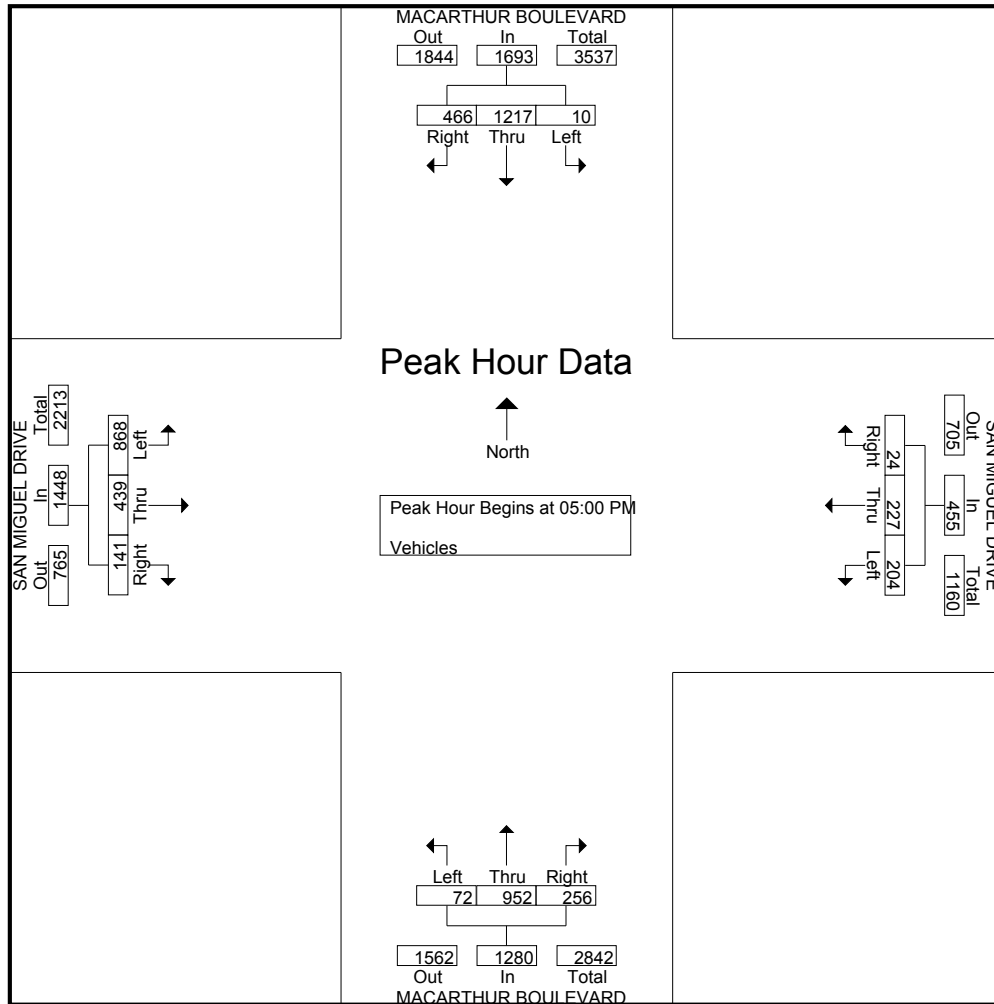
Start Time	MACARTHUR BOULEVARD Southbound				SAN MIGUEL DRIVE Westbound				MACARTHUR BOULEVARD Northbound				SAN MIGUEL DRIVE Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	168	237	3	408	2	71	61	134	59	302	25	386	10	25	50	85	1013
08:15 AM	182	213	2	397	1	68	52	121	56	298	35	389	9	21	34	64	971
08:30 AM	207	169	0	376	1	75	44	120	39	237	20	296	12	26	49	87	879
08:45 AM	205	237	1	443	3	90	43	136	47	255	36	338	7	27	61	95	1012
Total Volume	762	856	6	1624	7	304	200	511	201	1092	116	1409	38	99	194	331	3875
% App. Total	46.9	52.7	0.4		1.4	59.5	39.1		14.3	77.5	8.2		11.5	29.9	58.6		
PHF	.920	.903	.500	.916	.583	.844	.820	.939	.852	.904	.806	.906	.792	.917	.795	.871	.956



City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: SAN MIGUEL DRIVE

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Start Time	MACARTHUR BOULEVARD Southbound				SAN MIGUEL DRIVE Westbound				MACARTHUR BOULEVARD Northbound				SAN MIGUEL DRIVE Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. 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	107	335	3	445	10	37	65	112	62	247	15	324	41	144	253	438	1319
05:15 PM	110	311	1	422	3	44	36	83	66	248	20	334	36	105	222	363	1202
05:30 PM	124	299	3	426	4	77	51	132	61	253	19	333	29	102	202	333	1224
05:45 PM	125	272	3	400	7	69	52	128	67	204	18	289	35	88	191	314	1131
Total Volume	466	1217	10	1693	24	227	204	455	256	952	72	1280	141	439	868	1448	4876
% App. Total	27.5	71.9	0.6		5.3	49.9	44.8		20	74.4	5.6		9.7	30.3	59.9		
PHF	.932	.908	.833	.951	.600	.737	.785	.862	.955	.941	.900	.958	.860	.762	.858	.826	.924



City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: COAST HIGHWAY

File Name : h1404121
 Site Code : 00000000
 Start Date : 5/1/2014
 Page No : 1

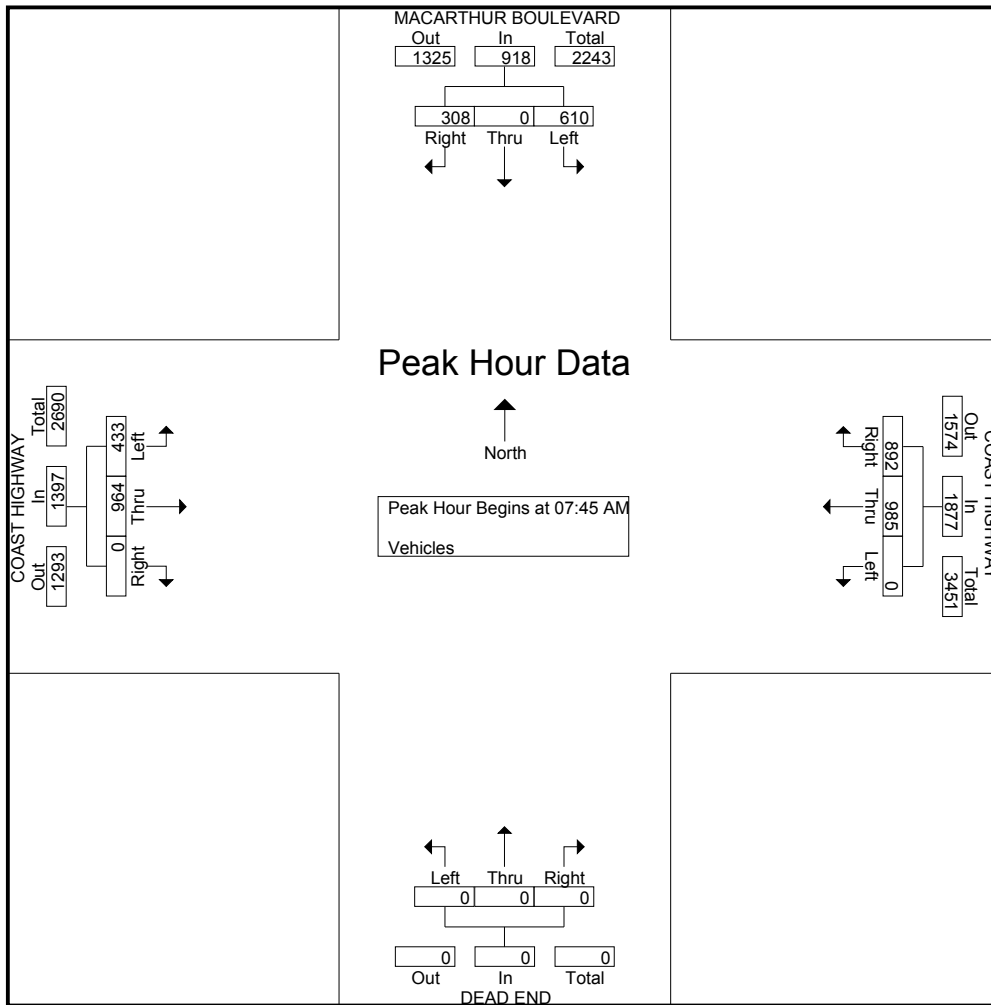
Groups Printed- Vehicles

Start Time	MACARTHUR BOULEVARD Southbound			COAST HIGHWAY Westbound			DEAD END Northbound			COAST HIGHWAY Eastbound			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	38	0	181	150	153	0	0	0	0	0	171	68	761
07:15 AM	58	0	190	213	209	0	0	0	0	0	178	77	925
07:30 AM	67	0	143	200	177	0	0	0	0	0	228	123	938
07:45 AM	73	0	160	247	199	0	0	0	0	0	189	108	976
Total	236	0	674	810	738	0	0	0	0	0	766	376	3600
08:00 AM	82	0	151	206	257	0	0	0	0	0	295	128	1119
08:15 AM	94	0	136	225	234	0	0	0	0	0	216	110	1015
08:30 AM	59	0	163	214	295	0	0	0	0	0	264	87	1082
08:45 AM	69	0	165	137	210	0	0	0	0	0	240	94	915
Total	304	0	615	782	996	0	0	0	0	0	1015	419	4131
*** BREAK ***													
04:30 PM	74	0	198	184	268	0	0	0	0	0	319	100	1143
04:45 PM	70	0	199	166	247	0	0	0	0	0	320	104	1106
Total	144	0	397	350	515	0	0	0	0	0	639	204	2249
05:00 PM	90	0	203	154	278	0	0	0	0	0	344	103	1172
05:15 PM	98	0	228	163	290	0	0	0	0	0	312	94	1185
05:30 PM	81	0	185	141	243	0	0	0	0	0	310	110	1070
05:45 PM	87	0	203	133	249	0	0	0	0	0	329	134	1135
Total	356	0	819	591	1060	0	0	0	0	0	1295	441	4562
06:00 PM	73	0	240	119	232	0	0	0	0	0	274	106	1044
06:15 PM	64	0	209	139	246	0	0	0	0	0	283	129	1070
Grand Total	1177	0	2954	2791	3787	0	0	0	0	0	4272	1675	16656
Apprch %	28.5	0	71.5	42.4	57.6	0	0	0	0	0	71.8	28.2	
Total %	7.1	0	17.7	16.8	22.7	0	0	0	0	0	25.6	10.1	

City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: COAST HIGHWAY

File Name : h1404121
 Site Code : 00000000
 Start Date : 5/1/2014
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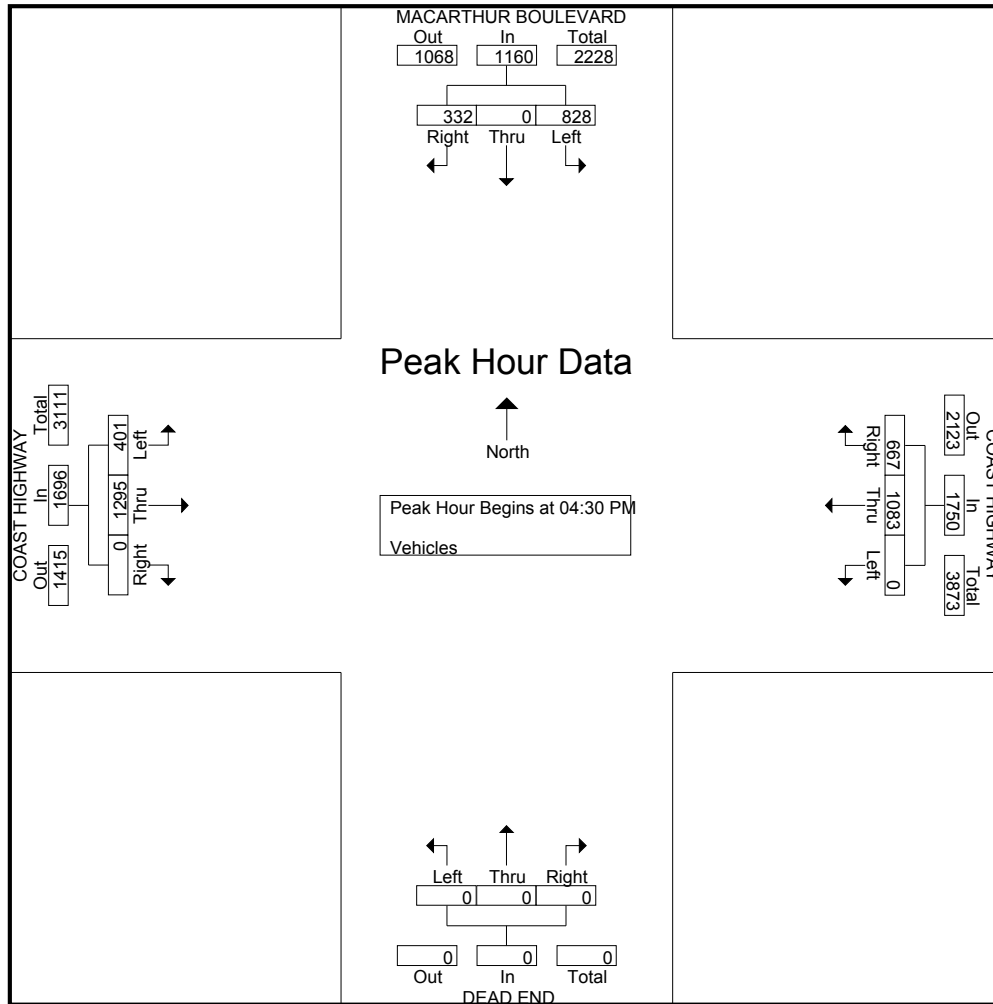
Start Time	MACARTHUR BOULEVARD Southbound				COAST HIGHWAY Westbound				DEAD END Northbound				COAST HIGHWAY Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	73	0	160	233	247	199	0	446	0	0	0	0	0	189	108	297	976
08:00 AM	82	0	151	233	206	257	0	463	0	0	0	0	0	295	128	423	1119
08:15 AM	94	0	136	230	225	234	0	459	0	0	0	0	0	216	110	326	1015
08:30 AM	59	0	163	222	214	295	0	509	0	0	0	0	0	264	87	351	1082
Total Volume	308	0	610	918	892	985	0	1877	0	0	0	0	0	964	433	1397	4192
% App. Total	33.6	0	66.4		47.5	52.5	0		0	0	0		0	69	31		
PHF	.819	.000	.936	.985	.903	.835	.000	.922	.000	.000	.000	.000	.000	.817	.846	.826	.937



City: NEWPORT BEACH
 N-S Direction: MACARTHUR BOULEVARD
 E-W Direction: COAST HIGHWAY

File Name : h1404121
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Start Time	MACARTHUR BOULEVARD Southbound				COAST HIGHWAY Westbound				DEAD END Northbound				COAST HIGHWAY Eastbound				Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	74	0	198	272	184	268	0	452	0	0	0	0	0	319	100	419	1143
04:45 PM	70	0	199	269	166	247	0	413	0	0	0	0	0	320	104	424	1106
05:00 PM	90	0	203	293	154	278	0	432	0	0	0	0	0	344	103	447	1172
05:15 PM	98	0	228	326	163	290	0	453	0	0	0	0	0	312	94	406	1185
Total Volume	332	0	828	1160	667	1083	0	1750	0	0	0	0	0	1295	401	1696	4606
% App. Total	28.6	0	71.4		38.1	61.9	0		0	0	0		0	76.4	23.6		
PHF	.847	.000	.908	.890	.906	.934	.000	.966	.000	.000	.000	.000	.000	.941	.964	.949	.972



City: NEWPORT BEACH
 N-S Direction: MARGUERITE AVENUE
 E-W Direction: COAST HIGHWAY

File Name : H1404117
 Site Code : 00000000
 Start Date : 5/1/2014
 Page No : 1

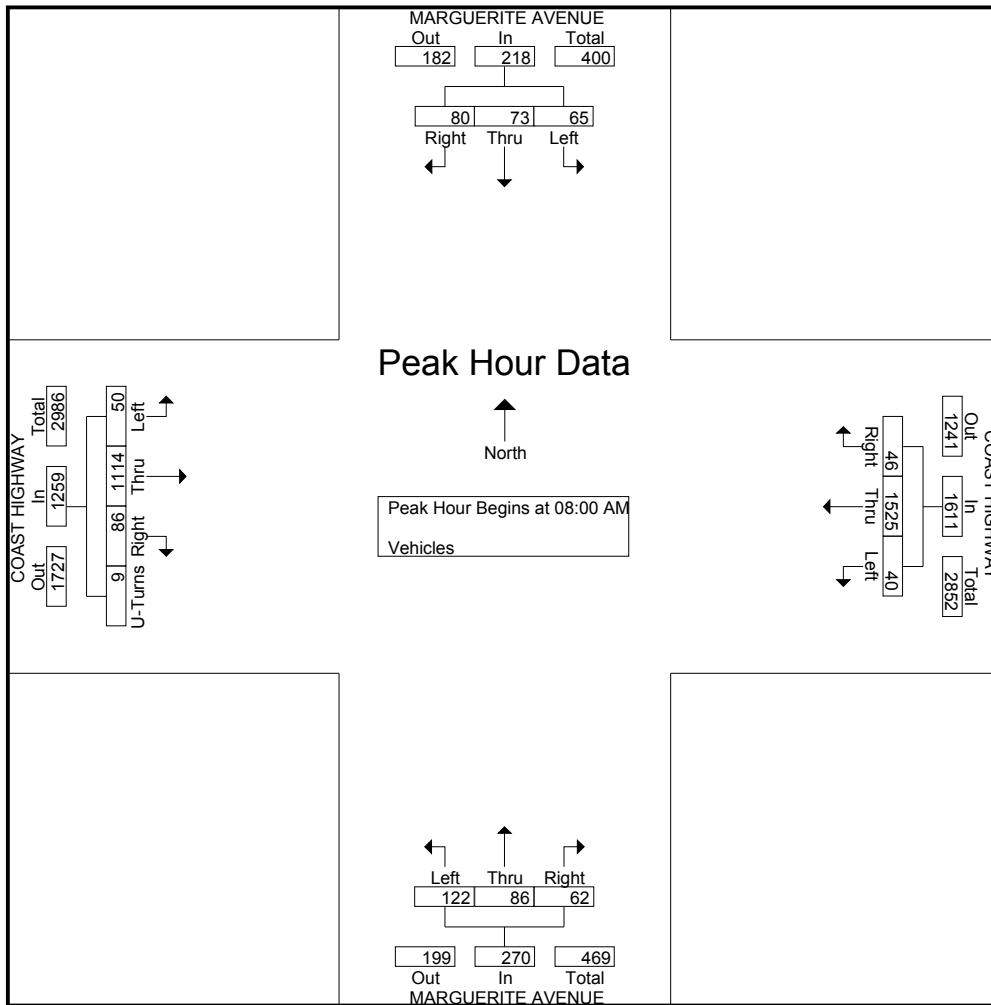
Groups Printed- Vehicles

Start Time	MARGUERITE AVENUE Southbound			COAST HIGHWAY Westbound			MARGUERITE AVENUE Northbound			COAST HIGHWAY Eastbound				Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	U-Turns	
07:00 AM	15	12	8	3	262	5	4	11	18	16	258	3	2	617
07:15 AM	10	5	7	11	331	6	7	8	26	15	280	7	3	716
07:30 AM	13	8	8	12	341	5	7	14	23	22	325	8	1	787
07:45 AM	14	12	19	9	350	11	8	24	40	25	231	8	5	756
Total	52	37	42	35	1284	27	26	57	107	78	1094	26	11	2876
08:00 AM	13	22	11	12	424	10	13	27	29	22	323	7	2	915
08:15 AM	22	29	16	11	367	11	19	27	26	18	224	13	3	786
08:30 AM	21	9	19	10	394	11	17	17	33	22	326	13	3	895
08:45 AM	24	13	19	13	340	8	13	15	34	24	241	17	1	762
Total	80	73	65	46	1525	40	62	86	122	86	1114	50	9	3358
*** BREAK ***														
04:30 PM	20	18	14	6	316	21	15	22	38	23	340	8	2	843
04:45 PM	14	24	23	6	336	16	15	20	34	18	402	18	1	927
Total	34	42	37	12	652	37	30	42	72	41	742	26	3	1770
05:00 PM	25	26	12	7	299	26	20	23	41	27	351	8	1	866
05:15 PM	21	24	26	6	309	15	20	24	40	28	420	17	0	950
05:30 PM	15	30	29	8	278	17	25	26	47	22	341	13	3	854
05:45 PM	17	22	18	12	295	22	19	21	42	30	404	18	3	923
Total	78	102	85	33	1181	80	84	94	170	107	1516	56	7	3593
06:00 PM	20	27	20	3	263	13	24	18	39	36	336	14	1	814
06:15 PM	18	19	24	3	260	8	18	14	47	24	366	17	1	819
Grand Total	282	300	273	132	5165	205	244	311	557	372	5168	189	32	13230
Apprch %	33	35.1	31.9	2.4	93.9	3.7	21.9	28	50.1	6.5	89.7	3.3	0.6	
Total %	2.1	2.3	2.1	1	39	1.5	1.8	2.4	4.2	2.8	39.1	1.4	0.2	

City: NEWPORT BEACH
 N-S Direction: MARGUERITE AVENUE
 E-W Direction: COAST HIGHWAY

File Name : H1404117
 Site Code : 00000000
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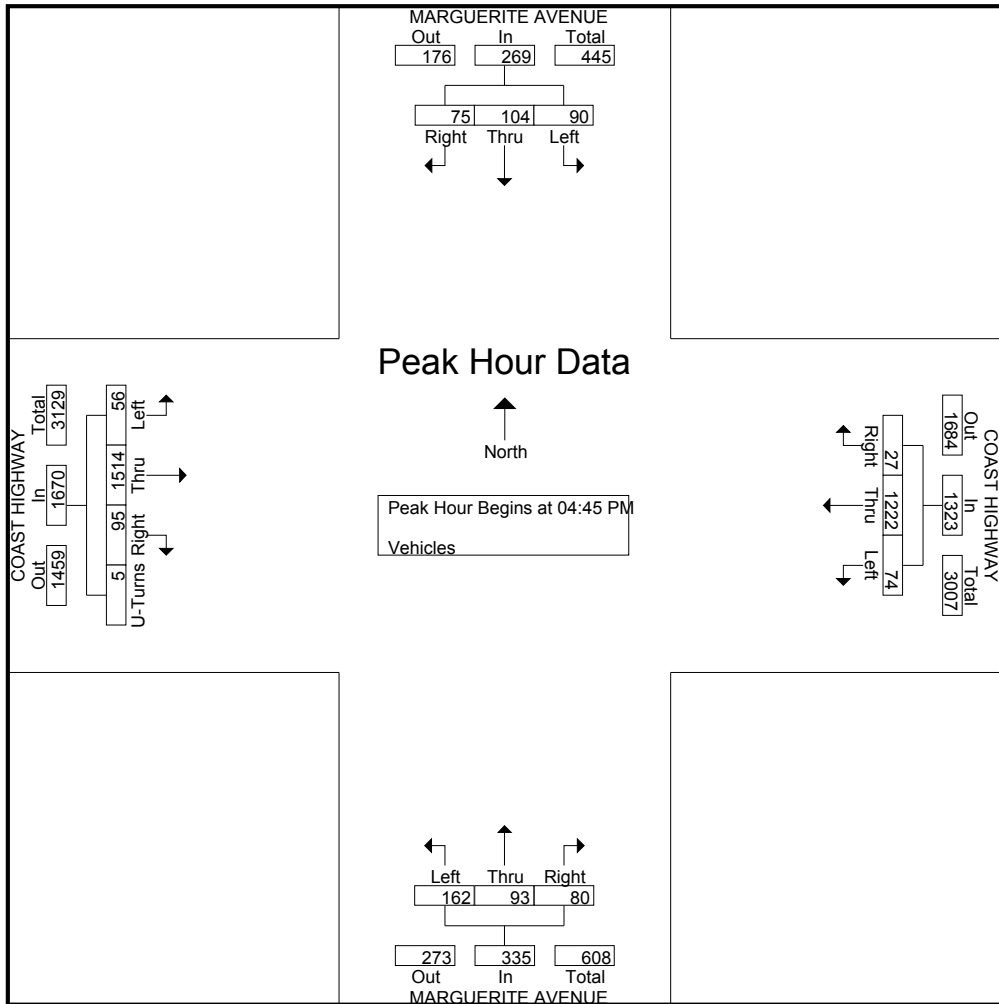
Start Time	MARGUERITE AVENUE Southbound				COAST HIGHWAY Westbound				MARGUERITE AVENUE Northbound				COAST HIGHWAY Eastbound					Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	U-Turns	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 08:00 AM																		
08:00 AM	13	22	11	46	12	424	10	446	13	27	29	69	22	323	7	2	354	915
08:15 AM	22	29	16	67	11	367	11	389	19	27	26	72	18	224	13	3	258	786
08:30 AM	21	9	19	49	10	394	11	415	17	17	33	67	22	326	13	3	364	895
08:45 AM	24	13	19	56	13	340	8	361	13	15	34	62	24	241	17	1	283	762
Total Volume	80	73	65	218	46	1525	40	1611	62	86	122	270	86	1114	50	9	1259	3358
% App. Total	36.7	33.5	29.8		2.9	94.7	2.5		23	31.9	45.2		6.8	88.5	4	0.7		
PHF	.833	.629	.855	.813	.885	.899	.909	.903	.816	.796	.897	.938	.896	.854	.735	.750	.865	.917



City: NEWPORT BEACH
 N-S Direction: MARGUERITE AVENUE
 E-W Direction: COAST HIGHWAY

File Name : H1404117
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 Start Date : 5/1/2014
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Start Time	MARGUERITE AVENUE Southbound				COAST HIGHWAY Westbound				MARGUERITE AVENUE Northbound				COAST HIGHWAY Eastbound					Int. Total
	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	U-Turns	App. Total	
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:45 PM																		
04:45 PM	14	24	23	61	6	336	16	358	15	20	34	69	18	402	18	1	439	927
05:00 PM	25	26	12	63	7	299	26	332	20	23	41	84	27	351	8	1	387	866
05:15 PM	21	24	26	71	6	309	15	330	20	24	40	84	28	420	17	0	465	950
05:30 PM	15	30	29	74	8	278	17	303	25	26	47	98	22	341	13	3	379	854
Total Volume	75	104	90	269	27	1222	74	1323	80	93	162	335	95	1514	56	5	1670	3597
% App. Total	27.9	38.7	33.5		2	92.4	5.6		23.9	27.8	48.4		5.7	90.7	3.4	0.3		
PHF	.750	.867	.776	.909	.844	.909	.712	.924	.800	.894	.862	.855	.848	.901	.778	.417	.898	.947





APPENDIX B

Regional Growth Percentages

CITY OF NEWPORT BEACH

REGIONAL TRAFFIC ANNUAL GROWTH RATE

COAST HIGHWAY

East city limit to MacArthur Boulevard	1%
MacArthur Boulevard to Jamboree Road	1%
Jamboree Road to Newport Boulevard	1%
Newport Boulevard to west city limit	1%

IRVINE AVENUE

All	1%
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JAMBOREE ROAD

Coast Highway to San Joaquin Hills Road	1%
San Joaquin Hills Road to Bison	1%
Bison to Bristol	1%
Bristol to Campus	1%

MACARTHUR BOULEVARD

Coast Highway to San Joaquin Hills Road	1%
San Joaquin Hills Road to north city limit	1%

NEWPORT BOULEVARD

Coast Highway to north city limit	1%
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Street segments not listed are assumed to have 0% regional growth.



APPENDIX C

Existing (2016) Intersection Level of Service Worksheets

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.636
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 63 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for different traffic scenarios. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table with 12 columns. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns. Rows include Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.708
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 78 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for volume and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table with 12 columns for saturation flow. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis. Rows include Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Jamboree (NS) at MacArthur (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Jamboree (NS) at University Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.612
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 59 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Jamboree (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.493
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow related metrics like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics like Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Jamboree (NS) at Eastbluf/Ford (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.645
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 64 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Jamboree (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.663
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 68 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic components and their values.

Saturation Flow Module: Table with 12 columns representing saturation flow values.

Capacity Analysis Module: Table with 12 columns representing capacity analysis values.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Jamboree (NS) at Santa Barbara (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.511
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for different volume adjustments. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table with 12 columns for saturation flow. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis. Rows include Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Jamboree (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.363
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with 12 columns representing different volume and adjustment factors.

Saturation Flow Module table with 12 columns representing saturation flow and adjustment factors.

Capacity Analysis Module table with 12 columns representing volume/saturation and critical moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 MacArthur (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.660
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 67 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 MacArthur (NS) at Ford/Bonita Canyon (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors.

Saturation Flow Module: Table with 12 columns representing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 MacArthur (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.623
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 60 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors.

Saturation Flow Module: Table with 12 columns representing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns representing volume/saturation and critical moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 MacArthur (NS) at San Miguel (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for volume and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume, and OvlAdjVol.

Saturation Flow Module: Table with 13 columns for saturation flow and adjustment factors. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis. Rows include Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 MacArthur (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.542
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for different traffic directions. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table with 12 columns for different traffic directions. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for different traffic directions. Rows include Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Marguerite (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.708
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 78 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.698
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 76 Level of Service: B

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include North Bound, South Bound, East Bound, West Bound movements and their respective controls and rights.

Volume Module: Table showing various volume adjustments like Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module: Table showing Sat/Lane, Adjustment, Lanes, Final Sat. values for different approaches.

Capacity Analysis Module: Table showing Vol/Sat and Crit Moves values.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.674
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 70 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for different traffic scenarios. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table with 12 columns. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns. Rows include Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Jamboree (NS) at MacArthur (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.677
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 70 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors.

Saturation Flow Module: Table with 13 columns representing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 13 columns representing capacity analysis metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Jamboree (NS) at University Dr (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Jamboree (NS) at Bison (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Jamboree (NS) at Eastbluf/Ford (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.689
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 73 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Jamboree (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.521
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Jamboree (NS) at Santa Barbara (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Jamboree (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.680
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns representing capacity analysis factors like Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 MacArthur (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.648
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 65 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for volume and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume, and OvlAdjVol.

Saturation Flow Module: Table with 12 columns for saturation flow and adjustment factors. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis. Rows include Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 MacArthur (NS) at Ford/Bonita Canyon (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.717
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 81 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and their values.

Saturation Flow Module: Table with 12 columns representing saturation flow values.

Capacity Analysis Module: Table with 12 columns representing capacity analysis values.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 MacArthur (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.773
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic scenarios and their respective volume values.

Saturation Flow Module: Table with 12 columns representing saturation flow values for various lanes and conditions.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics like Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 MacArthur (NS) at San Miguel (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for volume and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume, and OvlAdjVol.

Saturation Flow Module: Table with 12 columns for saturation flow and adjustment factors. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis. Rows include Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 MacArthur (NS) at Pacific Coast Highway (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Marguerite (NS) at Pacific Coast Highway (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.



APPENDIX D

Approved Trip Generation Analysis



2677 North Main Street
Suite 520
Santa Ana, CA 92705
714.597.8060
www.dksassociates.com

MEMORANDUM

DATE: March 2nd, 2016
TO: Socheata Chhouk
FROM: Jeff Heald, PE
Mario Gutierrez, EIT
SUBJECT: **OCMA - Residential Project, Trip Generation Analysis** P# 14078-003

DKS Associates is pleased to provide this trip generation analysis for the proposed high-rise condominium project which will consist of 100 residential units. The project is located at 850 San Clemente Drive in Newport Beach, California. The existing site currently contains the Orange County Museum of Arts (OCMA) and the museum's administrative offices. Per the proposed site plan, the project would replace the OCMA building. However, the museum's administrative offices are proposed to stay in operation. This trip generation analysis has been prepared consistent with discussions with the City staff of Newport Beach and methodologies from the Institute of Transportation Engineers (ITE) manuals.

This memorandum summarizes the proposed trip generation associated with the proposed development and the applied trip credits associated with the existing museum.

Existing Use Trip Credit

The City of Newport Beach has allowed the applicant to adjust the proposed development's trip generation by applying an existing use trip credit for the museum use. DKS estimated the museum's trip generation based on empirical traffic data collected from recent surveys conducted at the museum's driveway. The empirical traffic count data, which identified the amount of traffic entering and exiting the project site during two (2) 24-hour periods, is provided in Appendix A. Based on the driveway counts, the driveway experiences an average daily traffic (ADT) of 264 trips on Thursday, January 28 and 285 trips on Friday, February 19.

It should be noted that the analyzed driveway serves both the museum and its administrative offices. Therefore, DKS also surveyed the driveway traffic split between the museum and the offices. Based on driveway traffic split observations, it is estimated that 41% on Thursday and 62% on Friday of daily traffic entering and exiting the driveway is associated with the museum use. The driveway traffic split data is provided in Appendix B.

The museum offers free admission day on Fridays. The survey results indicate higher museum visitors during the Friday survey date than the Thursday survey date. To be conservative, the lower trip generation survey day will be used for the museum's existing trip credit.



DKS estimated the museum’s trip generation by applying the 41% estimation to the driveway ADT and the driveway AM/PM peak hour trips. A summary of the estimated vehicle trips from the museum is presented in Table 1. As shown, the museum is estimated to generate approximately 108 trip-ends per day, with 4 (3 inbound, 1 outbound) trips during the AM peak hour and 5 (1 inbound, 4 outbound) trips during the PM peak hour.

Table 1 – Museum Trip Generation Estimates

Land Use	Size		Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
<i>Trips</i>									
Museum	24	TSF	108	3	1	4	1	4	5
Total Trips			108	3	1	4	1	4	5

Proposed Trip Generation

Per the Institute of Transportation Engineers’ (ITE) *Trip Generation*, 9th Edition, trip generation estimates for the proposed project were developed using ITE trip rates. A summary of the trip generation rates and resulting net new vehicle trips from the proposed project and the applied existing use trip credit are presented in Table 2. As shown, the proposed development is projected to generate approximately 310 net new trip-ends per day, with 30 (3 inbound, 27 outbound) net new trips during the AM peak hour and 33 (23 inbound, 10 outbound) net new trips during the PM peak hour.

Table 2 –Project Trip Generation Estimates

Land Use	ITE Code	Size		Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
<i>Rates</i>										
High-Rise Condominium	232	per	DU	4.18	0.06	0.28	0.34	0.24	0.14	0.38
<i>Trips</i>										
Condominiums (Proposed)		100	DU	418	6	28	34	24	14	38
Museum (Existing Use)		24	TSF	(108)	(3)	(1)	(4)	(1)	(4)	(5)
Net New Project Trips				310	3	27	30	23	10	33

Attachments

Appendix A: Driveway Counts

Appendix B: Driveway Traffic Split Observations



APPENDIX A

24-Hour Driveway Counts

VOLUME
850 San Clemente Dr

Day: Thursday
Date: 1/28/2016

City: Newport Beach
Project #: CA16_1026_001e

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	132	132	264		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
0:00			0	0	0	12:00			2	1	3
0:15			0	0	0	12:15			2	7	9
0:30			0	0	0	12:30			1	11	12
0:45			0	0	0	12:45		4	9	5	24
1:00			0	0	0	13:00			2	9	11
1:15			0	0	0	13:15			3	5	8
1:30			0	0	0	13:30			2	3	5
1:45			0	0	0	13:45		2	9	5	22
2:00			0	0	0	14:00			3	1	4
2:15			0	0	0	14:15			2	4	6
2:30			0	0	0	14:30			3	1	4
2:45			0	0	0	14:45		1	9	2	8
3:00			0	0	0	15:00			1	2	3
3:15			1	0	1	15:15			2	4	6
3:30			1	2	3	15:30			4	9	13
3:45			0	2	0	15:45		1	8	6	21
4:00			0	0	0	16:00			2	6	8
4:15			0	0	0	16:15			0	1	1
4:30			0	0	0	16:30			0	2	2
4:45			0	0	0	16:45		1	3	1	10
5:00			4	2	6	17:00			0	7	7
5:15			2	2	4	17:15			1	1	2
5:30			3	0	3	17:30			0	1	1
5:45			1	10	1	17:45		0	1	1	10
6:00			0	4	4	18:00			0	0	0
6:15			0	0	0	18:15			1	0	1
6:30			0	0	0	18:30			0	2	2
6:45			1	1	0	18:45		1	2	1	3
7:00			1	0	1	19:00			1	1	2
7:15			0	1	1	19:15			0	0	0
7:30			0	0	0	19:30			0	0	0
7:45			0	1	0	19:45		0	1	0	1
8:00			2	0	2	20:00			0	0	0
8:15			1	1	2	20:15			0	0	0
8:30			3	0	3	20:30			0	0	0
8:45			2	8	1	20:45		0	0	0	0
9:00			9	0	9	21:00			0	0	0
9:15			8	1	9	21:15			0	0	0
9:30			3	0	3	21:30			0	0	0
9:45			13	33	3	21:45		0	0	0	0
10:00			11	1	12	22:00			0	0	0
10:15			2	1	3	22:15			0	0	0
10:30			3	3	6	22:30			0	0	0
10:45			2	18	0	22:45		0	0	0	0
11:00			4	2	6	23:00			0	0	0
11:15			7	0	7	23:15			0	0	0
11:30			2	1	3	23:30			0	0	0
11:45			4	17	7	23:45		0	0	0	0
TOTALS			90	33	123	TOTALS			42	99	141
SPLIT %			73.2%	26.8%	46.6%	SPLIT %			29.8%	70.2%	53.4%

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	132	132	264		
AM Peak Hour			9:15	11:45	9:15	PM Peak Hour			12:45	12:15	12:15
AM Pk Volume			35	26	40	PM Pk Volume			11	32	41
Pk Hr Factor			0.673	0.591	0.625	Pk Hr Factor			0.688	0.727	0.854
7 - 9 Volume	0	0	9	3	12	4 - 6 Volume	0	0	4	20	24
7 - 9 Peak Hour			8:00	8:00	8:00	4 - 6 Peak Hour			16:00	16:15	16:00
7 - 9 Pk Volume	0	0	8	2	10	4 - 6 Pk Volume	0	0	3	11	13
Pk Hr Factor	0.000	0.000	0.667	0.500	0.833	Pk Hr Factor	0.000	0.000	0.375	0.393	0.406

VOLUME

850 San Clemente Dr.

Day: Friday
Date: 2/19/2016

City: Newport Beach
Project #: CA16_1034_001

DAILY TOTALS					NB	SB	EB	WB	Total					
					0	0	142	143	285					
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00			0	0	0	12:00			3	2	5			
00:15			0	0	0	12:15			5	3	8			
00:30			0	0	0	12:30			3	1	4			
00:45			0	0	0	12:45			7	18	4	10	28	
01:00			0	0	0	13:00			1	4	5			
01:15			0	0	0	13:15			3	8	11			
01:30			0	0	0	13:30			5	3	8			
01:45			0	0	0	13:45			2	11	6	21	8	32
02:00			0	0	0	14:00			1	5	6			
02:15			0	0	0	14:15			7	3	10			
02:30			0	0	0	14:30			3	5	8			
02:45			0	0	0	14:45			2	13	0	13	2	26
03:00			0	0	0	15:00			5	0	5			
03:15			0	0	0	15:15			3	1	4			
03:30			0	0	0	15:30			4	4	8			
03:45			0	0	0	15:45			3	15	5	10	8	25
04:00			0	0	0	16:00			2	7	9			
04:15			0	0	0	16:15			3	4	7			
04:30			0	0	0	16:30			1	2	3			
04:45			0	0	0	16:45			2	8	1	14	3	22
05:00			4	0	4	17:00			2	2	4			
05:15			1	0	1	17:15			4	6	10			
05:30			2	0	2	17:30			4	4	8			
05:45			1	8	1	17:45			2	12	2	14	4	26
06:00			1	6	7	18:00			2	4	6			
06:15			1	1	2	18:15			2	0	2			
06:30			0	1	1	18:30			1	4	5			
06:45			0	2	0	18:45			1	6	3	11	4	17
07:00			0	0	0	19:00			0	2	2			
07:15			0	0	0	19:15			0	1	1			
07:30			3	0	3	19:30			0	1	1			
07:45			1	4	1	19:45			0	3	7	3	7	
08:00			2	4	6	20:00			1	3	4			
08:15			0	0	0	20:15			1	0	1			
08:30			4	1	5	20:30			0	1	1			
08:45			3	9	0	20:45			1	3	1	5	2	8
09:00			1	0	1	21:00			0	1	1			
09:15			7	3	10	21:15			0	0	0			
09:30			1	2	3	21:30			0	0	0			
09:45			2	11	3	21:45			0	0	1	0	1	
10:00			1	1	2	22:00			0	0	0			
10:15			0	0	0	22:15			0	0	0			
10:30			2	0	2	22:30			0	0	0			
10:45			6	9	1	22:45			0	0	0			
11:00			4	2	6	23:00			1	0	1			
11:15			5	5	10	23:15			0	1	1			
11:30			1	2	3	23:30			0	0	0			
11:45			2	12	2	23:45			0	1	0	1	0	2
TOTALS			55	36	91	TOTALS			87	107	194			
SPLIT %			60.4%	39.6%	31.9%	SPLIT %			44.8%	55.2%	68.1%			

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	142	143	285		
AM Peak Hour			10:30	11:00	10:45	PM Peak Hour			12:00	13:15	12:45
AM Pk Volume			17	11	26	PM Pk Volume			18	22	35
Pk Hr Factor			0.708	0.550	0.650	Pk Hr Factor			0.643	0.688	0.795
7 - 9 Volume	0	0	13	6	19	4 - 6 Volume	0	0	20	28	48
7 - 9 Peak Hour			08:00	07:45	08:00	4 - 6 Peak Hour			16:45	16:00	17:00
7 - 9 Pk Volume	0	0	9	6	14	4 - 6 Pk Volume	0	0	12	14	26
Pk Hr Factor	0.000	0.000	0.563	0.375	0.583	Pk Hr Factor	0.000	0.000	0.750	0.500	0.650



APPENDIX B

Driveway Traffic Split Observations

TABLE B-1
Trip Generation¹

Time	Museum			Office			Miscellaneous ²		
	In	Out	Total	In	Out	Total	In	Out	Total
11:00 AM - 12:00 PM	0	5	5	3	3	6	14	2	16
12:00 PM - 1:00 PM	6	20	26	1	2	3	2	2	4
1:00 PM - 2:00 PM	5	12	17	3	4	7	1	6	7
2:00 PM - 3:00 PM	3	3	6	3	1	4	3	4	7
3:00 PM - 4:00 PM	2	5	7	1	3	4	5	13	18
4:00 PM - 5:00 PM	0	0	0	0	7	8	2	3	5
Totals	16	45	61	11	20	32	27	30	57
			41%			21%			38%

Total 1/28/16 ADT = 264
41% of ADT = 108

¹ Observations conducted on January 28, 2016. Museum activities held at this date include visionaries walk through/lunch meeting (10am-2pm) and Paularino Elementary School visit (2:30pm - 3:30 pm).

² Miscellaneous trips are vehicles that entered/exited the project site without visiting the office or museum, including tour bus visit.

TABLE B-2
Trip Generation¹

Time	Museum			Office			Miscellaneous ²		
	In	Out	Total	In	Out	Total	In	Out	Total
10:00 AM - 11:00 AM	8	2	10	8	0	0	1	0	1
11:00 AM - 12:00 PM	5	3	8	2	2	4	5	6	11
12:00 PM - 1:00 PM	10	7	17	4	1	5	4	2	6
1:00 PM - 2:00 PM	9	10	19	1	4	5	1	7	8
2:00 PM - 3:00 PM	10	7	17	3	2	5	0	4	4
3:00 PM - 4:00 PM	12	8	20	0	0	0	3	2	5
4:00 PM - 5:00 PM	5	7	12	1	3	4	2	4	6
Totals	59	44	103	19	12	23	16	25	41
			62%			14%			24%

Total 2/19/16 ADT = 285
62% of ADT = 177

¹ Observations conducted on February 19, 2016. It should be noted that this date was 'Free Admission Day.'

² Miscellaneous trips are vehicles that entered/exited the project site without visiting the office or museum.



APPENDIX E

Existing (2016) Plus Project Intersection Level of Service Worksheets

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.636
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 63 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, Crit Moves, and other capacity-related metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.708
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 78 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, Crit Moves, and other capacity metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Jamboree (NS) at MacArthur (EW)

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

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, OvlAdjVol.

Table with columns: Saturation Flow Module, Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns: Capacity Analysis Module, Vol/Sat, OvlAdjV/S, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Jamboree (NS) at University Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.612
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 59 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves, etc.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Jamboree (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.495
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, Crit Moves, and other capacity metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Jamboree (NS) at Eastbluf/Ford (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.646
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 64 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume categories and 13 rows of adjustment factors.

Saturation Flow Module: Table with 13 columns and 5 rows showing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 13 columns and 3 rows showing capacity analysis metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Jamboree (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.665
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 68 Level of Service: B

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Volume Module: Table with columns: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Table with columns: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with columns: Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Jamboree (NS) at Santa Barbara (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns representing saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns representing capacity analysis factors like Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Jamboree (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.363
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and 12 rows of adjustment factors.

Saturation Flow Module: Table with 12 columns and 5 rows showing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns and 3 rows showing capacity analysis metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 MacArthur (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.660
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 67 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 MacArthur (NS) at Ford/Bonita Canyon (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns representing saturation flow and adjustment factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns representing capacity analysis factors like Vol/Sat, Crit Moves, etc.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 MacArthur (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.624
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, Crit Moves, and other capacity metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 MacArthur (NS) at San Miguel (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 MacArthur (NS) at Pacific Coast Highway (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic flow metrics and 12 rows of data including Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow metrics and 4 rows of data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics and 2 rows of data including Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Marguerite (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.708
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 78 Level of Service: C

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Volume Module:
Base Vol: 124 88 63 66 74 82 51 1136 97 41 1556 47
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 124 88 63 66 74 82 51 1136 97 41 1556 47
Added Vol: 0 0 0 0 0 0 0 0 4 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 124 88 63 66 74 82 51 1140 97 41 1556 47
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 124 88 63 66 74 82 51 1140 97 41 1556 47
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 124 88 63 66 74 82 51 1140 97 41 1556 47
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 124 88 63 66 74 82 51 1140 97 41 1556 47

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 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 0.58 0.42 1.00 0.47 0.53 1.00 2.00 1.00 1.00 1.94 0.06
Final Sat.: 1600 932 668 1600 759 841 1600 3200 1600 1600 3106 94

Capacity Analysis Module:
Vol/Sat: 0.08 0.09 0.09 0.04 0.10 0.10 0.03 0.36 0.06 0.03 0.50 0.50
Crit Moves: **** **** **** ****

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.699
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 76 Level of Service: B

Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table showing various volume adjustments like Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table showing Sat/Lane, Adjustment, Lanes, and Final Sat values.

Capacity Analysis Module: Table showing Vol/Sat and Crit Moves values.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.674
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 70 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, Crit Moves, and other capacity metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Jamboree (NS) at MacArthur (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.678
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level Of Service: B

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Volume Module:
Base Vol: 254 964 97 627 1086 203 153 1353 466 285 612 397
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 254 964 97 627 1086 203 153 1353 466 285 612 397
Added Vol: 2 2 0 0 5 0 0 0 4 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 256 966 97 627 1091 203 153 1353 470 285 612 397
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: 256 966 97 627 1091 203 153 1353 0 285 612 397
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 256 966 97 627 1091 203 153 1353 0 285 612 397
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: 256 966 97 627 1091 203 153 1353 0 285 612 397
OvlAdjVol: 188

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 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 3.00 3.00 1.00 2.00 3.00 1.00 2.00 3.00 1.00
Final Sat.: 3200 6400 1600 4800 4800 1600 3200 4800 1600 3200 4800 1600

Capacity Analysis Module:
Vol/Sat: 0.08 0.15 0.06 0.13 0.23 0.13 0.05 0.28 0.00 0.09 0.13 0.25
OvlAdjV/S: 0.12
Crit Moves: ****

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Jamboree (NS) at University Dr (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and 12 rows of adjustment factors.

Saturation Flow Module: Table with 12 columns and 5 rows showing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns and 3 rows showing capacity analysis metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Jamboree (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.493
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors.

Saturation Flow Module: Table with 12 columns representing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Jamboree (NS) at Eastbluf/Ford (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.690
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 74 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and their values.

Saturation Flow Module: Table with 12 columns representing saturation flow values.

Capacity Analysis Module: Table with 12 columns representing capacity analysis values.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Jamboree (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.525
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns representing saturation flow and adjustment factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns representing capacity analysis factors like Vol/Sat, Crit Moves, etc.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Jamboree (NS) at Santa Barbara (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, Crit Moves, and other capacity metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Jamboree (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.681
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic scenarios. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume.

Saturation Flow Module: Table with 12 columns. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns. Rows include Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 MacArthur (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.648
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 65 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 MacArthur (NS) at Ford/Bonita Canyon (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.718
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 81 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic flow metrics and 12 rows of data including Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow metrics and 4 rows of data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics and 3 rows of data including Vol/Sat, Crit Moves, and Level of Service.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 MacArthur (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.773
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 101 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic volumes and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 MacArthur (NS) at San Miguel (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 MacArthur (NS) at Pacific Coast Highway (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and 12 rows of adjustment factors.

Saturation Flow Module: Table with 12 columns and 4 rows showing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns and 2 rows showing volume per saturation and critical moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Marguerite (NS) at Pacific Coast Highway (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, Crit Moves, and other capacity metrics.



APPENDIX F

Approved Projects

Traffic Phasing Data
Projects Less Than 100% Complete

Project Number	Project Name	Percent
148	FASHION ISLAND EXPANSION	40 %
154	TEMPLE BAT YAHM EXPANSION	65 %
910	NEWPORT DUNES	0 %
945	HOAG HOSPITAL PHASE III	0 %
949	ST. MARK PRESBYTERIAN CHU	77 %
955	2300 NEWPORT BLVD	0 %
958	HOAG HEALTH CENTER	85 %
959	NORTH NEWPORT CENTER	0 %
960	SANTA BARBARA CONDO (MARR	33 %
962	328 OLD NEWPORT MEDICAL O	0 %
965	MARINER'S POINTE 23,015 S	0 %
966	4221 DOLPHIN STRIKER - 13	55 %
967	SAN JOAQUIN HILLS PLZA RE	0 %
968	UPTOWN NEWPORT (PHASE 2)	0 %
969	UPTOWN NEWPORT (PHASE 1)	0 %
970	MARINA PARK	0 %
971	BACK BAY LANDING 300 ECH	0 %
972	WESTCLIFF DRIVE MEDICAL P	0 %
973	LIDO HOUSE HOTEL TRAFFIC	0 %
974	NEWPORT EXECUTIVE CTR	0 %
975	EBB TIDE RESIDENTIAL	0 %
976	ENC PRE-SCHOOL	0 %

**Traffic Phasing Ordinance
Approved Projects 80% Volume Summary
Intersection Report**

	<u>Int. Number</u> 5045				<u>Int. Name</u> JAMBOREE RD / SAN JOAQUIN HILLS RD											
	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	76	151		51		69	7	46	106					13		38
PM	109	140	4	86		97	13	51	89			4		11		75

	<u>Int. Number</u> 5055				<u>Int. Name</u> JAMBOREE RD / COAST HWY E											
	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM		128	105	48				6		122	61	44			47	1
PM	2	98	144	81			2	8	2	89	104	40		2	77	2

	<u>Int. Number</u> 5070				<u>Int. Name</u> SAN JOAQUIN HILLS RD / MACARTHUR BLVD											
	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	6	72	43	5	2	4		1	4	67	38	5			5	
PM	10	49	97	6	2	8		1	8	40	92	6			6	

	<u>Int. Number</u> 4980				<u>Int. Name</u> EASTBLUFF DR / FORD RD JAMBOREE RD											
	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	99	144		1		95	4		144					1		
PM	162	119	2	6	2	156	4		119				2	6		

Traffic Phasing Ordinance Approved Projects 80% Volume Summary Intersection Report

	<u>Int. Number</u>		<u>Int. Name</u>													
	4985		FORD RD / MACARTHUR BLVD													
	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	38	67	4	3		32	6		67		1	3		2	1	
PM	93	40	3	10		83	11		39	1	1	2		7	3	

	<u>Int. Number</u>		<u>Int. Name</u>													
	4995		BISON AVE / MACARTHUR BLVD													
	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	27	51	7	17	1	20	6		49	2	2	5	1	16	1	
PM	83	38	8	9	4	63	17		28	10	4	2	1	5	4	

	<u>Int. Number</u>		<u>Int. Name</u>													
	4765		JAMBOREE RD / EASTBLUFF DR / UNIVERSITY DR													
	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	84	203				80	4		203							
PM	213	137		7		206	7		137					7		

	<u>Int. Number</u>		<u>Int. Name</u>													
	4870		JAMBOREE RD / BISON AVE													
	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	82	141		2		77	5	2	139					1		1
PM	149	117	1	7		145	4	12	104			1		5		1

Traffic Phasing Ordinance Approved Projects 80% Volume Summary Intersection Report

	<u>Int. Number</u>				<u>Int. Name</u>												
	7135				MACARTHUR BLVD / SAN MIGUEL DR												
	1 Hr Peak Totals				1 Hr Peak												
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
AM	6	4	12	6	1	5		1	4		1	1	10		6		
PM	12	8	29	12	6	6		1	5	2	3	15	12		12		

	<u>Int. Number</u>				<u>Int. Name</u>												
	5310				JAMBOREE RD / SANTA BARBARA DR												
	1 Hr Peak Totals				1 Hr Peak												
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
AM	66	117		37		63	3	3	114					23		13	
PM	112	97		18		100	12	8	90					10		9	

	<u>Int. Number</u>				<u>Int. Name</u>												
	5335				MACARTHUR BLVD / COAST HWY E												
	1 Hr Peak Totals				1 Hr Peak												
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
AM		13	21	31				10		3	4	17			29	2	
PM		7	33	22				3		4	5	28			17	5	

	<u>Int. Number</u>				<u>Int. Name</u>												
	5440				COAST HWY E / BAYSIDE DR												
	1 Hr Peak Totals				1 Hr Peak												
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
AM	6	106	135	95	1	6		62	3	41	72	63			80	15	
PM	9	185	157	123	3	6		98	7	80	71	83	2		92	30	

Traffic Phasing Ordinance Approved Projects 80% Volume Summary Intersection Report

	<u>Int. Number</u>		<u>Int. Name</u>													
	6615		COAST HWY E / MARGUERITE AVE													
	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM			16	24								16			24	
PM			22	8								22			8	

	<u>Int. Number</u>		<u>Int. Name</u>													
	4275		JAMBOREE RD / MACARTHUR BLVD													
	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	19	40	68	385		10	9	11	19	10	7	61		74	274	37
PM	97	57	293	195		19	78	41	8	8	8	285		33	139	23

**Traffic Phasing Ordinance
Approved Projects 80% Volume Summary
Intersection Report**

	<u>Int. Number</u>				<u>Int. Name</u>											
	3060				COAST HWY W / DOVER DR BAYSHORE DR											
	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM		59	135	135				40		19	28	107			91	44
PM		93	160	191				54		39	42	119			137	54



APPENDIX G

Future (2021) Plus Approved Plus Growth Intersection Level of Service Worksheets - TPO

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.687
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 73 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic metrics and 12 rows of data including Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow metrics and 4 rows of data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics and 3 rows of data including Vol/Sat, Crit Moves, and a summary row.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.779
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 103 Level of Service: C

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Table with columns: Saturation Flow Module, Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns: Capacity Analysis Module, Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Jamboree (NS) at MacArthur (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.657
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 66 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Jamboree (NS) at University Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.671
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 69 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors.

Saturation Flow Module: Table with 12 columns representing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Jamboree (NS) at Bison (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume components like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow components like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns representing capacity analysis components like Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Jamboree (NS) at Eastbluf/Ford (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.699
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 76 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Jamboree (NS) at San Joaquin (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic volumes and adjustment factors.

Saturation Flow Module: Table with 12 columns representing saturation flow rates and adjustments.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Jamboree (NS) at Santa Barbara (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for volume and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Table with 12 columns for saturation flow and adjustment factors. Rows include Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity and critical moves. Rows include Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Jamboree (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.405
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow and adjustment factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns representing capacity analysis factors like Vol/Sat, Crit Moves, etc.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 MacArthur (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.696
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 75 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors.

Saturation Flow Module: Table with 12 columns representing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 MacArthur (NS) at Ford/Bonita Canyon (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.665
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 68 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, Crit Moves, and other capacity metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 MacArthur (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.655
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 66 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 MacArthur (NS) at San Miguel (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 MacArthur (NS) at Pacific Coast Highway (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for traffic volume and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume.

Saturation Flow Module: Table with 12 columns for saturation flow and adjustment factors. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis. Rows include Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Marguerite (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.742
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 88 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, Crit Moves, and other capacity metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.775
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 102 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic flow metrics and 12 rows of adjustment factors.

Saturation Flow Module: Table with 12 columns and 4 rows showing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns and 3 rows showing capacity analysis metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.819
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 126 Level of Service: D

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include North Bound, South Bound, East Bound, West Bound movements and their respective parameters.

Volume Module: Table showing traffic volume calculations including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table showing saturation flow parameters such as Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table showing capacity analysis parameters including Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Jamboree (NS) at MacArthur (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.797
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 112 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Jamboree (NS) at University Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.632
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 62 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Jamboree (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.549
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors.

Saturation Flow Module: Table with 12 columns representing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns representing capacity analysis factors.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Jamboree (NS) at Eastbluf/Ford (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.750
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 91 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic flow metrics and 12 rows of data including Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow metrics and 4 rows of data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics and 2 rows of data including Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Jamboree (NS) at San Joaquin (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different traffic metrics and 13 rows of data including Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns representing saturation flow metrics and 5 rows of data including Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns representing capacity analysis metrics and 3 rows of data including Vol/Sat, Crit Moves, etc.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Jamboree (NS) at Santa Barbara (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors.

Saturation Flow Module: Table with 12 columns representing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns representing capacity analysis factors.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Jamboree (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.753
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 92 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, Crit Moves, and other capacity metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 MacArthur (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.680
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors.

Saturation Flow Module: Table with 12 columns representing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 MacArthur (NS) at Ford/Bonita Canyon (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.762
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 96 Level of Service: C

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Volume Module: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Vol/Sat, Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 MacArthur (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.823
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 129 Level of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns representing capacity analysis factors like Vol/Sat, Crit Moves, etc.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 MacArthur (NS) at San Miguel (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Table with 12 columns representing different traffic scenarios. Rows include Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, and OvlAdjVol.

Table with 12 columns representing different traffic scenarios. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Table with 12 columns representing different traffic scenarios. Rows include Capacity Analysis Module, Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 MacArthur (NS) at Pacific Coast Highway (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and 12 rows of adjustment factors.

Saturation Flow Module: Table with 12 columns and 4 rows showing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns and 2 rows showing capacity analysis metrics.

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City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Marguerite (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.780
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 104 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, Crit Moves, and other capacity metrics.



APPENDIX H

TPO Analysis One Percent Threshold Calculation Worksheets

AM Peak Hour

Volume Type	TPO One Percent Threshold Analysis Required												Total Volume
	Northbound			Southbound			Eastbound			Westbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1. Dover Dr./Coast Hwy													
Base (Existing + Growth)	25	47	44	940	46	189	158	1993	23	19	1316	747	5546
Approved Project Trips	0	0	0	40	0	19	28	107	0	0	91	44	329
Total Base Volume (Base + Approved)	25	47	44	980	46	208	186	2100	23	19	1407	791	5876
Total Approach Volume of Base		116			1234			2309			2217		
1% of Base Volume		1.16			12.34			23.09			22.17		
Project Trip at Approaches	0	0	0	0	0	0	0	1	0	0	4	1	
2. Bayside Dr./Coast Hwy.													
Base (Existing + Growth)	369	16	46	27	8	38	36	2675	402	98	1487	34	5235
Approved Project Trips	1	6	0	62	3	41	72	63	0	0	80	15	343
Total Base Volume (Base + Approved)	370	22	46	89	11	79	108	2738	402	98	1567	49	5579
Total Approach Volume of Base		438			179			3248			1714		
1% of Base Volume		4.38			1.79			32.48			17.14		
Project Trip at Approaches	0	0	0	0	0	0	0	1	0	0	6	0	
3. Jamboree Dr./MacArthur Blvd.													
Base (Existing + Growth)	393	1133	239	318	727	183	67	369	179	204	1546	571	5929
Approved Project Trips	74	274	37	7	61	0	0	10	9	11	19	10	512
Total Base Volume (Base + Approved)	467	1407	276	325	788	183	67	379	188	215	1565	581	6441
Total Approach Volume of Base		2150			1296			634			2361		
1% of Base Volume		21.5			12.96			6.34			23.61		
Project Trip at Approaches	4	6	0	0	1	0	0	0	1	0	0	0	
4. Jamboree Rd./Eastbluff/University													
Base (Existing + Growth)	83	1365	221	83	1377	397	534	139	40	235	146	171	4790
Approved Project Trips	0	80	4	0	203	0	0	0	0	0	0	0	287
Total Base Volume (Base + Approved)	83	1445	225	83	1580	397	534	139	40	235	146	171	5078
Total Approach Volume of Base		1753			2060			713			552		
1% of Base Volume		17.53			20.6			7.13			5.52		
Project Trip at Approaches	0	10	0	0	1	0	0	0	0	0	0	0	
5. Jamboree Rd./Bison Ave.													
Base (Existing + Growth)	0	1494	180	155	1504	38	72	0	87	193	0	112	3835
Approved Project Trips	0	77	5	2	139	0	0	1	0	1	0	1	226
Total Base Volume (Base + Approved)	0	1571	185	157	1643	38	72	1	87	194	0	113	4061
Total Approach Volume of Base		1756			1838			160			307		
1% of Base Volume		17.56			18.38			1.6			3.07		
Project Trip at Approaches	0	10	0	0	1	0	0	0	0	0	0	0	
6. Jamboree Rd./Eastbluff/Ford Rd.													
Base (Existing + Growth)	216	1580	132	172	2035	140	51	245	361	49	322	32	5335
Approved Project Trips	0	95	4	0	144	0	0	0	0	1	0	0	244
Total Base Volume (Base + Approved)	216	1675	136	172	2179	140	51	245	361	50	322	32	5579
Total Approach Volume of Base		2027			2491			657			404		
1% of Base Volume		20.27			24.91			6.57			4.04		
Project Trip at Approaches	1	10	0	0	1	0	0	0	0	0	0	0	
7. Jamboree Rd./San Joaquin Hills Rd.													
Base (Existing + Growth)	42	1308	181	932	1349	59	284	50	64	120	17	29	4435
Approved Project Trips	0	69	7	46	106	0	0	4	0	13	0	38	283
Total Base Volume (Base + Approved)	42	1377	188	978	1455	59	284	54	64	133	17	67	4718
Total Approach Volume of Base		1607			2492			402			217		
1% of Base Volume		16.07			24.92			4.02			2.17		
Project Trip at Approaches	0	10	0	0	1	0	0	0	0	0	0	0	
8. Jamboree Rd./Santa Barbara Dr.													
Base (Existing + Growth)	12	1275	247	540	1135	51	53	2	8	36	2	103	3464
Approved Project Trips	0	63	3	3	114	0	0	0	0	23	0	13	219
Total Base Volume (Base + Approved)	12	1338	250	543	1249	51	53	2	8	59	2	116	3683
Total Approach Volume of Base		1600			1843			63			177		
1% of Base Volume		16			18.43			0.63			1.77		
Project Trip at Approaches	0	0	1	1	0	0	0	0	0	6	0	10	
9. Jamboree Rd./Coast Hwy.													
Base (Existing + Growth)	18	347	89	144	258	654	18	347	89	65	970	129	3128
Approved Project Trips	0	0	2	6	0	122	61	44	0	0	47	1	283
Total Base Volume (Base + Approved)	18	347	91	150	258	776	79	391	89	65	1017	130	3411
Total Approach Volume of Base		456			1184			559			1212		
1% of Base Volume		4.56			11.84			5.59			12.12		
Project Trip at Approaches	0	0	0	0	0	6	1	0	0	0	0	0	

10. MacArthur Blvd./Bison Ave.													
Base (Existing + Growth)	271	2514	168	86	2422	259	216	198	209	501	306	107	7257
Approved Project Trips	1	20	6	0	49	2	2	5	1	16	1	0	103
Total Base Volume (Base + Approved)	272	2534	174	86	2471	261	218	203	210	517	307	107	7360
Total Approach Volume of Base		2980			2818			631			931		
1% of Base Volume		29.8			28.18			6.31			9.31		
Project Trip at Approaches	0	1	1	0	0	0	0	0	0	0	0	0	

11. MacArthur Blvd./Ford Rd./Bonita													
Base (Existing + Growth)	128	1664	131	573	2664	50	59	341	101	287	544	959	7501
Approved Project Trips	0	32	6	0	67	0	1	3	0	2	1	0	112
Total Base Volume (Base + Approved)	128	1696	137	573	2731	50	60	344	101	289	545	959	7613
Total Approach Volume of Base		1961			3354			505			1793		
1% of Base Volume		19.61			33.54			5.05			17.93		
Project Trip at Approaches	0	3	1	0	0	0	0	0	0	0	0	0	

12. MacArthur Blvd./San Joaquin Hills													
Base (Existing + Growth)	79	1247	5	628	1523	941	132	227	58	23	516	562	5941
Approved Project Trips	2	4	0	1	4	67	38	5	0	0	50	0	171
Total Base Volume (Base + Approved)	81	1251	5	629	1527	1008	170	232	58	23	566	562	6112
Total Approach Volume of Base		1337			3164			460			1151		
1% of Base Volume		13.37			31.64			4.6			11.51		
Project Trip at Approaches	0	0	0	0	0	1	4	1	1	0	0	0	

13. MacArthur Blvd./San Miguel Dr.													
Base (Existing + Growth)	124	1170	215	6	917	816	198	101	39	204	310	7	4107
Approved Project Trips	1	5	0	1	4	0	1	1	10	0	6	0	29
Total Base Volume (Base + Approved)	125	1175	215	7	921	816	199	102	49	204	316	7	4136
Total Approach Volume of Base		1515			1744			350			527		
1% of Base Volume		15.15			17.44			3.5			5.27		
Project Trip at Approaches	0	0	0	0	1	0	0	0	3	0	0	0	

14. MacArthur Blvd./Coast Hwy.													
Base (Existing + Growth)	0	0	0	653	0	330	464	1032	0	0	1055	956	4490
Approved Project Trips	0	0	0	10	0	3	4	17	0	0	29	2	65
Total Base Volume (Base + Approved)	0	0	0	663	0	333	468	1049	0	0	1084	958	4555
Total Approach Volume of Base		0			996			1517			2042		
1% of Base Volume		0			9.96			15.17			20.42		
Project Trip at Approaches	0	0	0	4	0	0	0	0	0	0	0	0	

15. Marguerite Ave./Coast Hwy.													
Base (Existing + Growth)	124	88	63	66	74	82	54	1193	102	43	1634	49	3572
Approved Project Trips	0	0	0	0	0	0	0	16	0	0	24	0	40
Total Base Volume (Base + Approved)	124	88	63	66	74	82	54	1209	102	43	1658	49	3612
Total Approach Volume of Base		275			222			1365			1750		
1% of Base Volume		2.75			2.22			13.65			17.5		
Project Trip at Approaches	0	0	0	0	0	0	0	4	0	0	0	0	

PM Peak Hour

Volume Type	TPO One Percent Threshold Analysis Required												Total Volume
	Northbound			Southbound			Eastbound			Westbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1. Dover Dr./Coast Hwy													
Base (Existing + Growth)	17	33	52	874	51	141	130	1613	24	53	2243	1278	6509
Approved Project Trips	0	0	0	54	0	39	42	119	0	0	137	54	445
Total Base Volume (Base + Approved)	17	33	52	928	51	180	172	1732	24	53	2380	1332	6954
Total Approach Volume of Base		102			1159			1928			3765		
1% of Base Volume		1.02			11.59			19.28			37.65		
Project Trip at Approaches	0	0	0	1	0	0	0	4	0	0	2	1	
2. Bayside Dr./Coast Hwy.													
Base (Existing + Growth)	469	26	42	34	23	55	48	2073	514	72	3216	38	6610
Approved Project Trips	3	6	0	98	7	80	71	83	2	0	92	30	472
Total Base Volume (Base + Approved)	472	32	42	132	30	135	119	2156	516	72	3308	68	7082
Total Approach Volume of Base		546			297			2791			3448		
1% of Base Volume		5.46			2.97			27.91			34.48		
Project Trip at Approaches	0	0	0	0	0	0	0	5	0	0	3	0	
3. Jamboree Dr./MacArthur Blvd.													
Base (Existing + Growth)	267	1012	102	658	1140	213	161	1421	489	299	643	417	6822
Approved Project Trips	33	139	23	8	285	0	0	19	78	41	8	8	642
Total Base Volume (Base + Approved)	300	1151	125	666	1425	213	161	1440	567	340	651	425	7464
Total Approach Volume of Base		1576			2304			2168			1416		
1% of Base Volume		15.76			23.04			21.68			14.16		
Project Trip at Approaches	2	2	0	0	5	0	0	0	4	0	0	0	
4. Jamboree Rd./Eastbluff/University													
Base (Existing + Growth)	36	1663	190	155	1603	437	225	93	31	275	171	142	5021
Approved Project Trips	0	206	7	0	137	0	0	0	0	7	0	0	357
Total Base Volume (Base + Approved)	36	1869	197	155	1740	437	225	93	31	282	171	142	5378
Total Approach Volume of Base		2102			2332			349			595		
1% of Base Volume		21.02			23.32			3.49			5.95		
Project Trip at Approaches	0	4	0	0	8	0	0	0	0	0	0	0	
5. Jamboree Rd./Bison Ave.													
Base (Existing + Growth)	0	1695	173	134	1818	70	40	0	19	180	0	130	4259
Approved Project Trips	0	145	4	12	104	0	0	1	0	5	0	1	272
Total Base Volume (Base + Approved)	0	1840	177	146	1922	70	40	1	19	185	0	131	4531
Total Approach Volume of Base		2017			2138			60			316		
1% of Base Volume		20.17			21.38			0.6			3.16		
Project Trip at Approaches	0	4	0	0	8	0	0	0	0	0	0	0	
6. Jamboree Rd./Eastbluff/Ford Rd.													
Base (Existing + Growth)	59	2053	161	185	2171	258	59	209	357	59	239	32	5842
Approved Project Trips	2	156	4	0	119	0	0	0	2	6	0	0	289
Total Base Volume (Base + Approved)	61	2209	165	185	2290	258	59	209	359	65	239	32	6131
Total Approach Volume of Base		2435			2733			627			336		
1% of Base Volume		24.35			27.33			6.27			3.36		
Project Trip at Approaches	1	4	0	0	8	0	0	0	1	0	0	0	
7. Jamboree Rd./San Joaquin Hills Rd.													
Base (Existing + Growth)	127	1293	118	538	1731	214	108	21	50	226	50	74	4550
Approved Project Trips	0	97	13	51	89	0	0	4	0	11	0	75	340
Total Base Volume (Base + Approved)	127	1390	131	589	1820	214	108	25	50	237	50	149	4890
Total Approach Volume of Base		1648			2623			183			436		
1% of Base Volume		16.48			26.23			1.83			4.36		
Project Trip at Approaches	0	4	0	1	8	0	0	0	0	0	0	1	
8. Jamboree Rd./Santa Barbara Dr.													
Base (Existing + Growth)	14	1113	113	217	1726	49	41	3	11	281	8	488	4064
Approved Project Trips	0	100	12	8	90	0	0	0	0	10	0	9	229
Total Base Volume (Base + Approved)	14	1213	125	225	1816	49	41	3	11	291	8	497	4293
Total Approach Volume of Base		1352			2090			55			796		
1% of Base Volume		13.52			20.9			0.55			7.96		
Project Trip at Approaches	0	0	5	8	0	0	0	0	0	3	0	4	
9. Jamboree Rd./Coast Hwy.													
Base (Existing + Growth)	29	286	89	185	505	1415	718	1383	20	110	2121	213	7074
Approved Project Trips	0	0	2	8	2	89	104	40	0	2	77	2	326
Total Base Volume (Base + Approved)	29	286	91	193	507	1504	822	1423	20	112	2198	215	7400
Total Approach Volume of Base		406			2204			2265			2525		
1% of Base Volume		4.06			22.04			22.65			25.25		
Project Trip at Approaches	0	0	0	0	0	3	5	0	0	0	0	0	

10. MacArthur Blvd./Bison Ave.													
Base (Existing + Growth)	177	2607	147	109	2905	277	218	171	215	350	283	116	7575
Approved Project Trips	4	63	17	0	28	10	4	2	1	5	4	0	138
Total Base Volume (Base + Approved)	181	2670	164	109	2933	287	222	173	216	355	287	116	7713
Total Approach Volume of Base		3015			3329			611			758		
1% of Base Volume		30.15			33.29			6.11			7.58		
Project Trip at Approaches	0	1	1	0	1	0	0	0	0	1	0	0	
11. MacArthur Blvd./Ford Rd./Bonita													
Base (Existing + Growth)	59	2099	757	856	2520	63	34	347	92	134	287	753	8001
Approved Project Trips	0	83	11	0	39	1	1	3	0	7	3	0	148
Total Base Volume (Base + Approved)	59	2182	768	856	2559	64	35	350	92	141	290	753	8149
Total Approach Volume of Base		3009			3479			477			1184		
1% of Base Volume		30.09			34.79			4.77			11.84		
Project Trip at Approaches	0	1	1	0	2	0	0	0	0	1	0	0	
12. MacArthur Blvd./San Joaquin Hills													
Base (Existing + Growth)	60	1813	22	659	1766	428	643	426	74	34	264	463	6652
Approved Project Trips	2	8	0	1	8	40	92	6	0	0	6	0	163
Total Base Volume (Base + Approved)	62	1821	22	660	1774	468	735	432	74	34	270	463	6815
Total Approach Volume of Base		1905			2902			1241			767		
1% of Base Volume		19.05			29.02			12.41			7.67		
Project Trip at Approaches	1	0	0	0	0	4	2	1	1	0	1	0	
13. MacArthur Blvd./San Miguel Dr.													
Base (Existing + Growth)	77	1020	274	11	1303	499	885	448	144	208	232	24	5125
Approved Project Trips	6	6	0	1	5	2	3	15	12	0	12	0	62
Total Base Volume (Base + Approved)	83	1026	274	12	1308	501	888	463	156	208	244	24	5187
Total Approach Volume of Base		1383			1821			1507			476		
1% of Base Volume		13.83			18.21			15.07			4.76		
Project Trip at Approaches	2	1	0	0	1	0	0	0	0	0	0	0	
14. MacArthur Blvd./Coast Hwy.													
Base (Existing + Growth)	0	0	0	887	0	356	429	1387	0	0	1160	714	4933
Approved Project Trips	0	0	0	3	0	4	5	28	0	0	17	5	62
Total Base Volume (Base + Approved)	0	0	0	890	0	360	434	1415	0	0	1177	719	4995
Total Approach Volume of Base		0			1250			1849			1896		
1% of Base Volume		0			12.5			18.49			18.96		
Project Trip at Approaches	0	0	0	1	0	0	0	0	0	0	0	3	
15. Marguerite Ave./Coast Hwy.													
Base (Existing + Growth)	165	95	82	92	106	77	60	1621	107	79	1308	29	3821
Approved Project Trips	0	0	0	0	0	0	0	22	0	0	8	0	30
Total Base Volume (Base + Approved)	165	95	82	92	106	77	60	1643	107	79	1316	29	3851
Total Approach Volume of Base		342			275			1810			1424		
1% of Base Volume		3.42			2.75			18.1			14.24		
Project Trip at Approaches	0	0	0	0	0	0	0	1	0	0	3	0	



APPENDIX I

Future (2021) Plus Approved Plus Growth Plus Project Intersection Level of Service Worksheets - TPO

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.687
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 73 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			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	1	1	0	1	2	0	2	1	0	3

Volume Module:

Base Vol:	25	47	44	940	46	189	150	1898	22	18	1253	711
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	25	47	44	940	46	189	158	1993	23	19	1316	747
Added Vol:	0	0	0	0	0	0	0	1	0	0	4	1
PasserByVol:	0	0	0	40	0	19	28	107	0	0	91	44
Initial Fut:	25	47	44	980	46	208	186	2101	23	19	1411	792
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:	25	47	44	980	46	208	186	2101	23	19	1411	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	47	44	980	46	208	186	2101	23	19	1411	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:	25	47	44	980	46	208	186	2101	23	19	1411	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	1.03	0.97	3.00	1.00	1.00	2.00	2.97	0.03	1.00	3.00	1.00
Final Sat.:	1600	1653	1547	4800	1600	1600	3200	4748	52	1600	4800	1600

Capacity Analysis Module:

Vol/Sat:	0.02	0.03	0.03	0.20	0.03	0.13	0.06	0.44	0.44	0.01	0.29	0.00
Crit Moves:	****			****			****			****		

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.779
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 103 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, Crit Moves, and other capacity metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Jamboree (NS) at MacArthur (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.658
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 67 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume metrics and 12 rows of data.

Saturation Flow Module: Table with 12 columns representing saturation flow metrics and 4 rows of data.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics and 4 rows of data.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Jamboree (NS) at University Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.671
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 69 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for volume and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume.

Saturation Flow Module: Table with 12 columns for saturation flow and adjustment factors. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis. Rows include Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Jamboree (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.532
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, Crit Moves, and other capacity-related metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Jamboree (NS) at Eastbluf/Ford (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.699
 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			Split Phase			Split Phase		
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	1	0	3	1	1	1	1	1	1

Volume Module:

Base Vol:	206	1505	126	164	1938	133	51	245	361	49	322	32
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	216	1580	132	172	2035	140	51	245	361	49	322	32
Added Vol:	1	10	0	0	1	0	0	0	0	0	0	0
PasserByVol:	0	95	4	0	144	0	0	0	0	1	0	0
Initial Fut:	217	1685	136	172	2180	140	51	245	361	50	322	32
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:	217	1685	136	172	2180	140	51	245	0	50	322	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1685	136	172	2180	140	51	245	0	50	322	32
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:	217	1685	136	172	2180	140	51	245	0	50	322	32

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3200	4441	359	1600	4800	1600	1600	3200	1600	1600	3200	1600

Capacity Analysis Module:

Vol/Sat:	0.07	0.38	0.38	0.11	0.45	0.09	0.03	0.08	0.00	0.03	0.10	0.02
Crit Moves:	****			****			****			****		

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Jamboree (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.726
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				Split Phase				Split Phase			
Rights:	Ignore				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:	1	0	3	0	1	2	0	3	0	1	1	0	1	1	1	0

Volume Module:

Base Vol:	40	1246	172	888	1285	56	284	50	64	120	17	29
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	1308	181	932	1349	59	284	50	64	120	17	29
Added Vol:	0	10	0	0	1	0	0	0	0	0	0	1
PasserByVol:	0	69	7	46	106	0	0	4	0	13	0	38
Initial Fut:	42	1387	188	978	1456	59	284	54	64	133	17	68
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	1387	0	978	1456	0	284	54	64	133	17	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	1387	0	978	1456	0	284	54	64	133	17	68
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	1387	0	978	1456	0	284	54	64	133	17	68

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	3200	1600	1600	3200	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.03	0.29	0.00	0.31	0.30	0.00	0.09	0.03	0.04	0.04	0.01	0.04
Crit Moves:	****			****			****			****		

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Jamboree (NS) at Santa Barbara (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.560
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:	1	0	3	0	1	2	0	1	0	1	1	0

Volume Module:

Base Vol:	11	1214	235	514	1081	49	53	2	8	36	2	103
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	1275	247	540	1135	51	53	2	8	36	2	103
Added Vol:	0	0	1	1	0	0	0	0	0	6	0	10
PasserByVol:	0	63	3	3	114	0	0	0	0	23	0	13
Initial Fut:	12	1338	251	544	1249	51	53	2	8	65	2	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:	12	1338	251	544	1249	51	53	2	8	65	2	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	1338	251	544	1249	51	53	2	8	65	2	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:	12	1338	251	544	1249	51	53	2	8	65	2	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:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	1.00	1.00	1.94	0.06	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	1600	1600	1600	3104	96	1600

Capacity Analysis Module:

Vol/Sat:	0.01	0.28	0.16	0.17	0.26	0.03	0.03	0.00	0.01	0.02	0.02	0.08
Crit Moves:	****			****			****			****		

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Jamboree (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.405
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic flow metrics and 12 rows of data including Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns and 4 rows of data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns and 2 rows of data including Vol/Sat and Crit Moves.

OCMA Residential Development Traffic Impact Study
 City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

 Intersection #10 MacArthur (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.696
 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:	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	1	2	0	4	0	1	1

Volume Module:

Base Vol:	258	2394	160	82	2307	247	216	198	209	501	306	107	
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	271	2514	168	86	2422	259	216	198	209	501	306	107	
Added Vol:	0	1	1	0	0	0	0	0	0	0	0	0	
PasserByVol:	1	20	6	0	49	2	2	5	1	16	1	0	
Initial Fut:	272	2535	175	86	2471	261	218	203	210	517	307	107	
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:	272	2535	0	86	2471	261	218	203	0	517	307	107	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	272	2535	0	86	2471	261	218	203	0	517	307	107	
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:	272	2535	0	86	2471	261	218	203	0	517	307	107	
OvlAdjVol:							152				64		

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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:	0.08	0.40	0.00	0.03	0.39	0.16	0.07	0.06	0.00	0.16	0.10	0.07	
OvlAdjV/S:							0.10				0.04		
Crit Moves:	****						****	****			****		

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 MacArthur (NS) at Ford/Bonita Canyon (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.665
 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:	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	1	2	0	4	0	1	1

Volume Module:

Base Vol:	122	1585	125	546	2537	48	59	341	101	287	544	959
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	1664	131	573	2664	50	59	341	101	287	544	959
Added Vol:	0	3	1	0	0	0	0	0	0	0	0	0
PasserByVol:	0	32	6	0	67	0	1	3	0	2	1	0
Initial Fut:	128	1699	138	573	2731	50	60	344	101	289	545	959
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:	128	1699	0	573	2731	0	60	344	101	289	545	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	1699	0	573	2731	0	60	344	101	289	545	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:	128	1699	0	573	2731	0	60	344	101	289	545	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	0.27	0.00	0.18	0.43	0.00	0.02	0.11	0.06	0.09	0.17	0.00
Crit Moves:	****			****			****			****		

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 MacArthur (NS) at San Joaquin (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic flow metrics and 12 rows of data including Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow metrics and 4 rows of data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics and 2 rows of data including Vol/Sat and Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 MacArthur (NS) at San Miguel (EW)

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			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	3	0	1	1	0	1	1	0	2	0

Volume Module:

Base Vol:	118	1114	205	6	873	777	198	101	39	204	310	7
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	1170	215	6	917	816	198	101	39	204	310	7
Added Vol:	0	0	0	0	1	0	0	0	3	0	0	0
PasserByVol:	1	5	0	1	4	0	1	1	10	0	6	0
Initial Fut:	125	1175	215	7	922	816	199	102	52	204	316	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	1175	215	7	922	816	199	102	52	204	316	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	1175	215	7	922	816	199	102	52	204	316	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	1175	215	7	922	816	199	102	52	204	316	7
OvlAdjVol:	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:	2.00	3.00	1.00	2.00	3.00	1.00	3.00	1.32	0.68	2.00	1.96	0.04
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2119	1081	3200	3131	69

Capacity Analysis Module:

Vol/Sat:	0.04	0.24	0.13	0.00	0.19	0.51	0.04	0.05	0.05	0.06	0.10	0.10
OvlAdjV/S:	0.47											
Crit Moves:	****			****			****			****		

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 MacArthur (NS) at Pacific Coast Highway (EW)

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			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:	0	0	0	2	0	0	2	0	3	0	0	3

Volume Module:

Base Vol:	0	0	0	622	0	314	442	983	0	0	1005	910
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	0	0	0	653	0	330	464	1032	0	0	1055	956
Added Vol:	0	0	0	4	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	10	0	3	4	17	0	0	29	2
Initial Fut:	0	0	0	667	0	333	468	1049	0	0	1084	958
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	0	0	667	0	0	468	1049	0	0	1084	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	667	0	0	468	1049	0	0	1084	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	0	0	667	0	0	468	1049	0	0	1084	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	2.00	0.00	1.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	3200	4800	0	0	4800	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.00	0.15	0.22	0.00	0.00	0.23	0.00
Crit Moves:				***			***			***		

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Marguerite (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.742
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:	Prot+Permit			Prot+Permit			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	0	1	0	0	1	0	2	1	0	1

Volume Module:

Base Vol:	124	88	63	66	74	82	51	1136	97	41	1556	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	124	88	63	66	74	82	54	1193	102	43	1634	49
Added Vol:	0	0	0	0	0	0	0	4	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	16	0	0	24	0
Initial Fut:	124	88	63	66	74	82	54	1213	102	43	1658	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	124	88	63	66	74	82	54	1213	102	43	1658	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	88	63	66	74	82	54	1213	102	43	1658	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	124	88	63	66	74	82	54	1213	102	43	1658	49

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	0.58	0.42	1.00	0.47	0.53	1.00	2.00	1.00	1.00	1.94	0.06
Final Sat.:	1600	932	668	1600	759	841	1600	3200	1600	1600	3107	93

Capacity Analysis Module:

Vol/Sat:	0.08	0.09	0.09	0.04	0.10	0.10	0.03	0.38	0.06	0.03	0.53	0.53
Crit Moves:	****			****			****			****		

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.776
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:	Split Phase			Split Phase			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	1	1	0	1	2	0	2	1	0	3

Volume Module:

Base Vol:	17	33	52	874	51	141	124	1536	23	50	2136	1217
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	17	33	52	874	51	141	130	1613	24	53	2243	1278
Added Vol:	0	0	0	1	0	0	0	4	0	0	2	1
PasserByVol:	0	0	0	54	0	39	42	119	0	0	137	54
Initial Fut:	17	33	52	929	51	180	172	1736	24	53	2382	1333
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:	17	33	52	929	51	180	172	1736	24	53	2382	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	33	52	929	51	180	172	1736	24	53	2382	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:	17	33	52	929	51	180	172	1736	24	53	2382	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	1.00	1.00	3.00	1.00	1.00	2.00	2.96	0.04	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	4800	1600	1600	3200	4734	66	1600	4800	1600

Capacity Analysis Module:

Vol/Sat:	0.01	0.02	0.03	0.19	0.03	0.11	0.05	0.37	0.37	0.03	0.50	0.00
Crit Moves:			****	****			****			****		

OCMA Residential Development Traffic Impact Study
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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.819
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 126 Level of Service: D

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include North Bound, South Bound, East Bound, West Bound movements and their respective controls and rights.

Volume Module: Table showing traffic volume calculations including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module: Table showing saturation flow calculations including Sat/Lane, Adjustment, Lanes, and Final Sat for each movement.

Capacity Analysis Module: Table showing capacity analysis calculations including Vol/Sat and Crit Moves for each movement.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Jamboree (NS) at MacArthur (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.799
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 113 Level of Service: C

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, OvlAdjVol.

Table with columns: Saturation Flow Module, Sat/Lane, Adjustment, Lanes, Final Sat.

Table with columns: Capacity Analysis Module, Vol/Sat, OvlAdjV/S, Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Jamboree (NS) at University Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.633
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 62 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and their values.

Saturation Flow Module: Table with 12 columns representing saturation flow values and adjustments.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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*****
Intersection #5 Jamboree (NS) at Bison (EW)
*****
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:          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 1614 165 128 1731 67 40 0 19 180 0 130
Growth Adj:    1.05 1.05 1.05 1.05 1.05 1.05 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0 1695 173 134 1818 70 40 0 19 180 0 130
Added Vol:     0 4 0 0 8 0 0 0 0 0 0 0
PasserByVol:  0 145 4 12 104 0 0 0 0 5 0 1
Initial Fut:   0 1844 177 146 1930 70 40 0 19 185 0 131
User Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:       1.00 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 1844 177 146 1930 70 40 0 19 185 0 131
Reduct Vol:    0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol:   0 1844 177 146 1930 70 40 0 19 185 0 131
PCE Adj:       1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:       1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:   0 1844 177 146 1930 70 40 0 19 185 0 131
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:      1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment:    1.00 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 2.74 0.26 2.00 3.00 1.00 1.00 0.00 1.00 2.00 0.00 2.00
Final Sat.:    0 4379 421 3200 4800 1600 1600 0 1600 3200 0 3200
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:       0.00 0.42 0.42 0.05 0.40 0.04 0.03 0.00 0.01 0.06 0.00 0.04
Crit Moves:    ****          ****          ****          ****
*****

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Jamboree (NS) at Eastbluf/Ford (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.751
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 91 Level of Service: C

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Volume Module:
Base Vol: 56 1955 153 176 2068 246 59 209 357 59 239 32
Growth Adj: 1.05 1.05 1.05 1.05 1.05 1.05 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 59 2053 161 185 2171 258 59 209 357 59 239 32
Added Vol: 1 4 0 0 8 0 0 0 1 0 0 0
PasserByVol: 2 156 4 0 119 0 0 0 2 6 0 0
Initial Fut: 62 2213 165 185 2298 258 59 209 360 65 239 32
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: 62 2213 165 185 2298 258 59 209 0 65 239 32
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 62 2213 165 185 2298 258 59 209 0 65 239 32
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: 62 2213 165 185 2298 258 59 209 0 65 239 32

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 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 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 3200 4468 332 1600 4800 1600 1600 3200 1600 1600 3200 1600

Capacity Analysis Module:
Vol/Sat: 0.02 0.50 0.50 0.12 0.48 0.16 0.04 0.07 0.00 0.04 0.07 0.02
Crit Moves: **** **** **** ****

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Jamboree (NS) at San Joaquin (EW)

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:	Ignore			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:	1	0	3	0	1	2	0	3	0	1	1	1
	0	1	0	1	0	1	0	1	1	0	1	1

Volume Module:

Base Vol:	121	1231	112	512	1649	204	108	21	50	226	50	74
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	127	1293	118	538	1731	214	108	21	50	226	50	74
Added Vol:	0	4	0	1	8	0	0	0	0	0	0	1
PasserByVol:	0	97	13	51	89	0	0	4	0	11	0	75
Initial Fut:	127	1394	131	590	1828	214	108	25	50	237	50	150
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	127	1394	0	590	1828	0	108	25	50	237	50	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	127	1394	0	590	1828	0	108	25	50	237	50	150
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	127	1394	0	590	1828	0	108	25	50	237	50	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:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	3200	1600	1600	3200	1600	1600

Capacity Analysis Module:

Vol/Sat:	0.08	0.29	0.00	0.18	0.38	0.00	0.03	0.02	0.03	0.07	0.03	0.09
Crit Moves:	****			****			****			****		

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Jamboree (NS) at Santa Barbara (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.726
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 83 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors.

Saturation Flow Module: Table with 12 columns representing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Jamboree (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.754
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 93 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			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	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	3	0	3	2	0	4

Volume Module:

Base Vol:	28	272	85	176	481	1348	684	1317	19	105	2020	203
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	29	286	89	185	505	1415	718	1383	20	110	2121	213
Added Vol:	0	0	0	0	0	3	5	0	0	0	0	0
PasserByVol:	0	0	2	8	2	89	104	40	0	2	77	2
Initial Fut:	29	286	91	193	507	1507	827	1423	20	112	2198	215
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:	29	286	91	193	507	0	827	1423	20	112	2198	215
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	286	91	193	507	0	827	1423	20	112	2198	215
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:	29	286	91	193	507	0	827	1423	20	112	2198	215

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.52	0.48	1.00	2.00	1.00	3.00	3.94	0.06	2.00	4.00	1.00
Final Sat.:	1600	2425	775	1600	3200	1600	4800	6312	88	3200	6400	1600

Capacity Analysis Module:

Vol/Sat:	0.02	0.12	0.12	0.12	0.16	0.00	0.17	0.23	0.23	0.04	0.34	0.13
Crit Moves:	****			****			****			****		

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 MacArthur (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.681
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			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	1	2	0	4	0	1	1

Volume Module:

Base Vol:	169	2483	140	104	2767	264	218	171	215	350	283	116	
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	177	2607	147	109	2905	277	218	171	215	350	283	116	
Added Vol:	0	1	1	0	1	0	0	0	0	1	0	0	
PasserByVol:	4	63	17	0	28	10	4	2	1	5	4	0	
Initial Fut:	181	2671	165	109	2934	287	222	173	216	356	287	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	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:	181	2671	0	109	2934	287	222	173	0	356	287	116	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	181	2671	0	109	2934	287	222	173	0	356	287	116	
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:	181	2671	0	109	2934	287	222	173	0	356	287	116	
OvlAdjVol:							176				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	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:	0.06	0.42	0.00	0.03	0.46	0.18	0.07	0.05	0.00	0.11	0.09	0.07	
OvlAdjV/S:							0.11				0.04		
Crit Moves:	****				****				****				

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 MacArthur (NS) at Ford/Bonita Canyon (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.762
 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			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	1	2	0	4	0	1	1

Volume Module:

Base Vol:	56	1999	721	815	2400	60	34	347	92	134	287	753
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	2099	757	856	2520	63	34	347	92	134	287	753
Added Vol:	0	1	1	0	2	0	0	0	0	1	0	0
PasserByVol:	0	83	11	0	39	1	1	3	0	7	3	0
Initial Fut:	59	2183	769	856	2561	64	35	350	92	142	290	753
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:	59	2183	0	856	2561	0	35	350	92	142	290	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	2183	0	856	2561	0	35	350	92	142	290	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:	59	2183	0	856	2561	0	35	350	92	142	290	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:	0.02	0.34	0.00	0.27	0.40	0.00	0.01	0.11	0.06	0.04	0.09	0.00
Crit Moves:	****			****			****			****		

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City of Newport Beach

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 MacArthur (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.824
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 130 Level Of Service: D

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Volume Module:
Base Vol: 57 1727 21 628 1682 408 643 426 74 34 264 463
Growth Adj: 1.05 1.05 1.05 1.05 1.05 1.05 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 60 1813 22 659 1766 428 643 426 74 34 264 463
Added Vol: 1 0 0 0 0 4 2 1 1 0 1 0
PasserByVol: 2 8 0 1 8 40 92 6 0 0 6 0
Initial Fut: 63 1821 22 660 1774 472 737 433 75 34 271 463
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: 63 1821 22 660 1774 0 737 433 75 34 271 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 63 1821 22 660 1774 0 737 433 75 34 271 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: 63 1821 22 660 1774 0 737 433 75 34 271 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 1.00 2.00 3.00 1.00 3.00 2.56 0.44 1.00 2.00 1.00
Final Sat.: 3200 4800 1600 3200 4800 1600 4800 4091 709 1600 3200 1600

Capacity Analysis Module:
Vol/Sat: 0.02 0.38 0.01 0.21 0.37 0.00 0.15 0.11 0.11 0.02 0.08 0.00
Crit Moves: **** **** **** ****

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 MacArthur (NS) at San Miguel (EW)

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			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	3	0	1	0	3	0	1	1	0	2

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	73	971	261	10	1241	475	885	448	144	208	232	24
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	77	1020	274	11	1303	499	885	448	144	208	232	24
Added Vol:	2	1	0	0	1	0	0	0	0	0	0	0
PasserByVol:	6	6	0	1	5	2	3	15	12	0	12	0
Initial Fut:	85	1027	274	12	1309	501	888	463	156	208	244	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	1027	274	12	1309	501	888	463	156	208	244	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	1027	274	12	1309	501	888	463	156	208	244	24
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	1027	274	12	1309	501	888	463	156	208	244	24
OvlAdjVol:	205											

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	2.00	3.00	1.00	3.00	1.50	0.50	2.00	1.82	0.18
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2394	806	3200	2913	287

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.03	0.21	0.17	0.00	0.27	0.31	0.19	0.19	0.19	0.07	0.08	0.08
OvlAdjV/S:	0.13											
Crit Moves:	****	****					****	****				

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 MacArthur (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.660
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			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	0	2	0	0	2	0	3	0	0	3

Volume Module:

Base Vol:	0	0	0	845	0	339	409	1321	0	0	1105	680
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	0	0	0	887	0	356	429	1387	0	0	1160	714
Added Vol:	0	0	0	1	0	0	0	0	0	0	0	3
PasserByVol:	0	0	0	3	0	4	5	28	0	0	17	5
Initial Fut:	0	0	0	891	0	360	434	1415	0	0	1177	722
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	0	0	891	0	0	434	1415	0	0	1177	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	891	0	0	434	1415	0	0	1177	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	0	0	891	0	0	434	1415	0	0	1177	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	2.00	0.00	1.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	3200	4800	0	0	4800	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.28	0.00	0.00	0.14	0.29	0.00	0.00	0.25	0.00
Crit Moves:				***			***			***		

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Marguerite (NS) at Pacific Coast Highway (EW)

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:	Prot+Permit			Prot+Permit			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	0	1	0	0	1	0	2	1	0	1

Volume Module:

Base Vol:	165	95	82	92	106	77	57	1544	102	75	1246	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	165	95	82	92	106	77	60	1621	107	79	1308	29
Added Vol:	0	0	0	0	0	0	0	1	0	0	3	0
PasserByVol:	0	0	0	0	0	0	0	22	0	0	8	0
Initial Fut:	165	95	82	92	106	77	60	1644	107	79	1319	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	165	95	82	92	106	77	60	1644	107	79	1319	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	165	95	82	92	106	77	60	1644	107	79	1319	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	165	95	82	92	106	77	60	1644	107	79	1319	29

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	0.54	0.46	1.00	0.58	0.42	1.00	2.00	1.00	1.00	1.96	0.04
Final Sat.:	1600	859	741	1600	927	673	1600	3200	1600	1600	3130	70

Capacity Analysis Module:

Vol/Sat:	0.10	0.11	0.11	0.06	0.11	0.11	0.04	0.51	0.07	0.05	0.42	0.42
Crit Moves:	****			****			****			****		



APPENDIX J

Cumulative Projects

Cumulative Project List - January 2016

Projects of significant size to have a potential cumulative impact

Banning Ranch	4520 W. Coast Hwy	1,375 d.u., 75,000 g.s.f. commercial retail, 75-room accommodations, parks, and open space.
The Towers at Koll Center	4400 Von Karman Ave	New: <ul style="list-style-type: none"> • 260 residential d.u. • 3,019 g.s.f. commercial • 1 acre park
Balboa Marina West Expansion	Southwest corner of Bayside Dr at E. Coast Hwy	New: 16,274 g.s.f. restaurant, 200 g.s.f. office, and 36 marina berths
ExplorOcean	600 E. Bay Ave, 209 Washington St, 600 and 608 Balboa Blvd, and 200 Palm St	New: <ul style="list-style-type: none"> • 70,295 s.f. ocean literacy facility • 6,500 s.f. floating classroom (waterside) Existing: <ul style="list-style-type: none"> • 26,219 s.f. Commercial • 63-metered space surface parking lot
Autonation Dealership	320-600 W. Coast Hwy	New: 38,588 s.f. auto sales Existing: <ul style="list-style-type: none"> • 12,770 s.f. specialty retail • 1,160 s.f. auto sales
One Newport Hotel at Uptown Newport	4311 Jamboree Rd	New: <ul style="list-style-type: none"> • 180-room hotel • 15,000 s.f. specialty retail • 3,300 s.f. high-turnover (sit down) restaurant
Orange County Museum of Arts	850 San Clemente	New: 100 d.u. condos Existing: 24,000 g.s.f. museum
Newport Coast		See Staff for update.

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Last Update: 1/26/2016

Table 2

Project Trip Generation¹

Land Use	Quantity	Units ²	Peak Hour						Daily
			Morning			Evening			
			Inbound	Outbound	Total	Inbound	Outbound	Total	
Trip Generation Rates									
Quality Restaurant ³		TSF	0.66	0.15	0.81	5.02	2.47	7.49	89.95
Office		TSF	1.37	0.19	1.56	0.25	1.24	1.49	11.03
Marina		Berth	0.03	0.05	0.08	0.11	0.08	0.19	2.96
Existing Trips Generated⁴									
Yacht Brokerage	1.2	TSF	2	0	2	0	1	1	13
Proposed Trips Generated									
Quality Restaurant ⁵	16.274	TSF	11	2	13	82	40	122	1,464
- Pass-By ⁶			0	0	0	-36	-18	-54	-54
Office	0.200	TSF	0	0	0	0	0	0	2
Marina	36	Berth	1	2	3	4	3	7	107
Subtotal			12	4	16	50	25	75	1,519
Net New Trips			10	4	14	50	24	74	1,506

¹ Source: Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012, Land Use Categories 931, 710, and 420.

² TSF = Thousand Square Feet

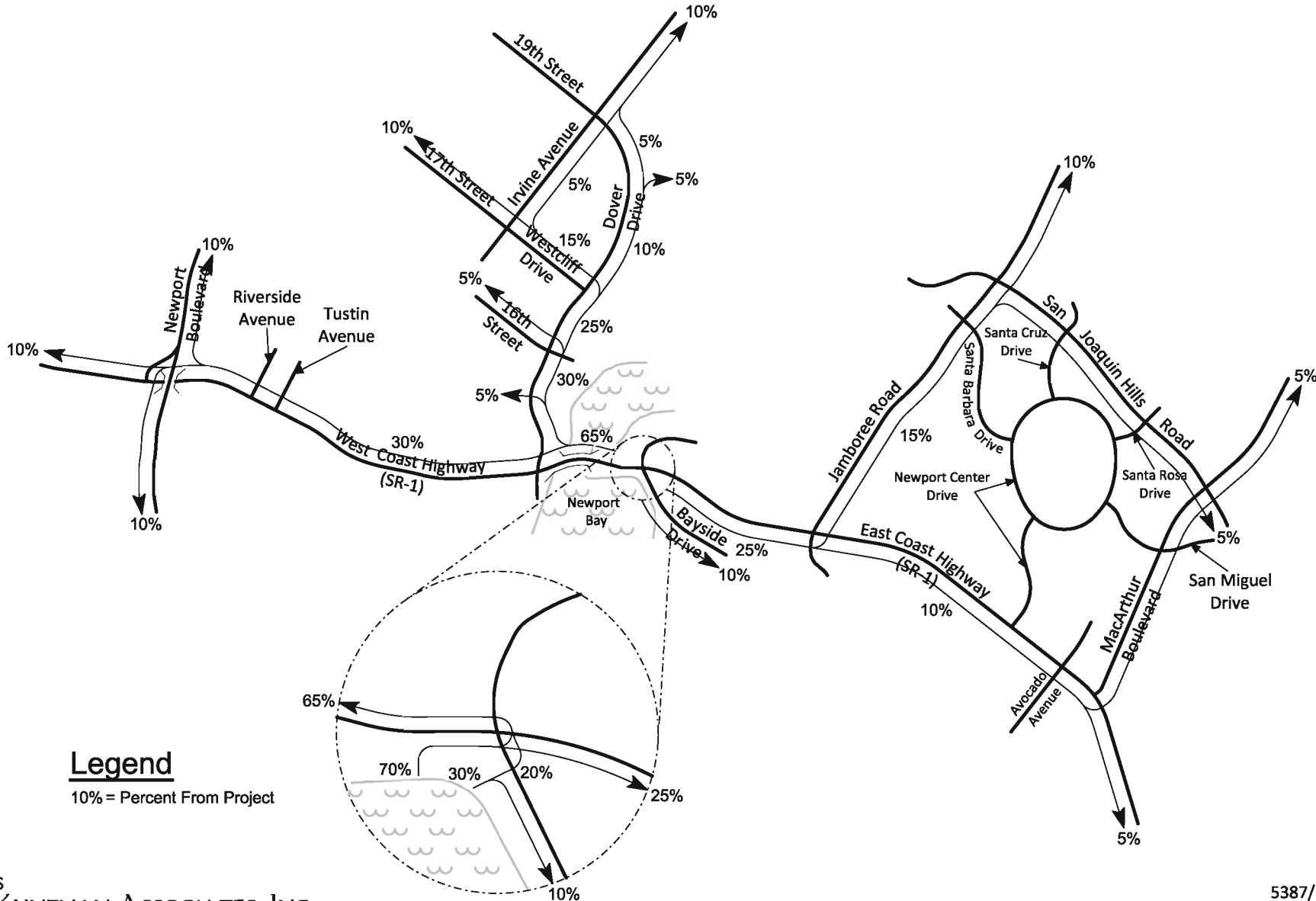
³ Institute of Transportation Engineers, Trip Generation, does not provide inbound/outbound splits for the peak hour of adjacent street traffic (one hour between 7:00 AM - 9:00 AM) for the Quality Restaurant land use. Therefore, the inbound/outbound splits for the AM peak hour of generator were used.

⁴ The marina restrooms generate nominal trips. The yacht brokerage and marina restrooms will be accommodated within the new development.

⁵ The quality restaurant will include patio/etc. that is ancillary to the restaurant. The building total is 19,400 square feet.

⁶ The traffic volumes have been reduced by 44% for the quality restaurant as a result of pass-by trips obtained from the Institute of Transportation Engineers, Trip Generation Handbook, 2nd Edition, 2004.

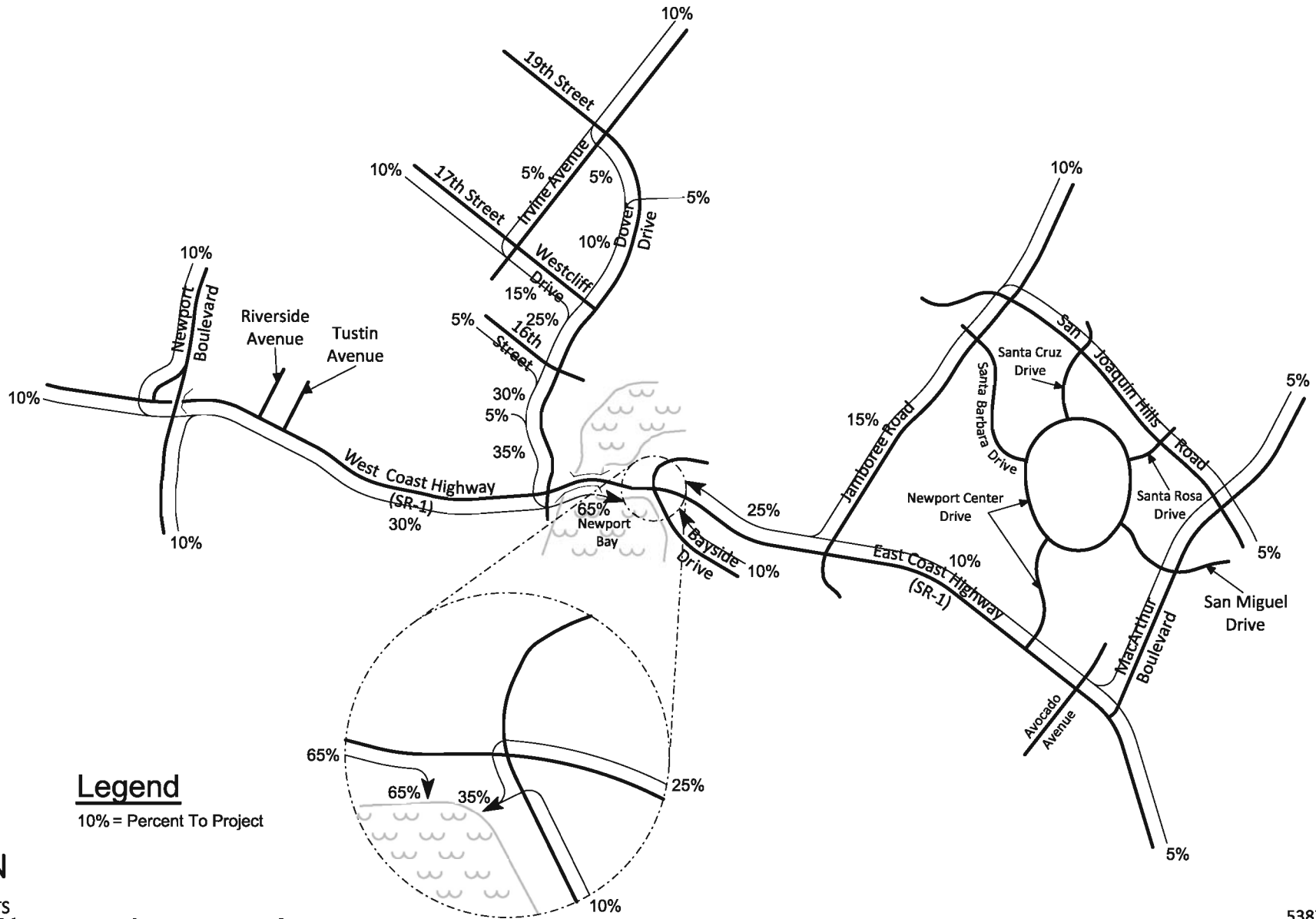
Figure 9
Project Outbound Trip Distribution



Legend
10% = Percent From Project



Figure 10
Project Inbound Trip Distribution



Legend
10% = Percent To Project



**TABLE 2
SUMMARY OF PROJECT TRIP GENERATION
NEWPORT BANNING RANCH**

TRIP RATES

Land Use	ITE Code	Trips per	Trip Generation Rates						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Single-Family Detached Housing	210	DU	9.57	0.19	0.56	0.75	0.64	0.37	1.01
Residential Condominium/Townhouse	230	DU	5.81	0.07	0.37	0.44	0.35	0.17	0.52
Resort Hotel ¹	330	Room	4.90	0.22	0.09	0.31	0.18	0.24	0.42
Park ²	412	Acre	2.28	0.01	0.00	0.01	0.02	0.04	0.06
Soccer Complex	488	Field	71.33	0.70	0.70	1.40	14.26	6.41	20.67
Tennis Courts	490	Court	31.04	0.84	0.84	1.68	1.94	1.94	3.88
Shopping Center ³	820	KSF	Equation - See Below						

PROJECT TRIP GENERATION

Project Area	Land Use	Units		Trip Generation Estimates						
				Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
South Family Village	Single-Family Detached Housing	141	DU	1,349	27	79	106	90	52	142
	Park	28	Acre	64	0	0	0	1	1	2
	Soccer Complex	4	Fields	285	3	3	6	57	26	83
	Tennis Courts	6	Courts	186	5	5	10	12	12	24
	Subtotal			1,884	35	87	122	160	91	251
Resort Colony	Residential Condominium/Townhouse	87	DU	505	6	32	38	30	15	45
	Resort Hotel	75	Rooms	368	17	7	24	14	18	32
	Subtotal			873	23	39	62	44	33	77
North Family Village	Single-Family Detached Housing	282	DU	2,699	54	158	212	180	104	284
	Residential Condominium/Townhouse	135	DU	784	9	50	59	47	23	70
	Subtotal			3,483	63	208	271	227	127	354
Urban Colony	Residential Condominium/Townhouse	730	DU	4,241	51	270	321	256	124	380
	Shopping Center	75.0	KSF	5,634	79	51	130	257	268	525
	Subtotal			9,875	130	321	451	513	392	905
Total Before Internal Capture/Pass-by				16,115	251	655	906	944	643	1,587
Internal Capture ⁴				1,126				55	55	110
Pass-By Reduction for Shopping Center (10%) ⁵								23	24	47
Total Project Trips				14,989	251	655	906	866	564	1,430

Source: Institute of Transportation Engineers publication "Trip Generation", 8th Edition

DU = Dwelling Unit, KSF = 1,000 Square Feet

¹ ITE Land Use Category 330 Resort Hotel does not provide a daily trip rate. ITE Land Use Category 311 - All Suites Hotel was used for daily trips.

² Trip generation is based on ITE Land Use County Park (Land Use 412) because this category includes peak hour trip rates.

³ Trip rates for Shopping Center are derived from the following regression equations: T = Trip Ends, X = units in KSF

ADT: $\ln(T) = 0.65 \ln(X) + 5.83$

AM Peak Hour: $\ln(T) = 0.59 \ln(X) + 2.32$

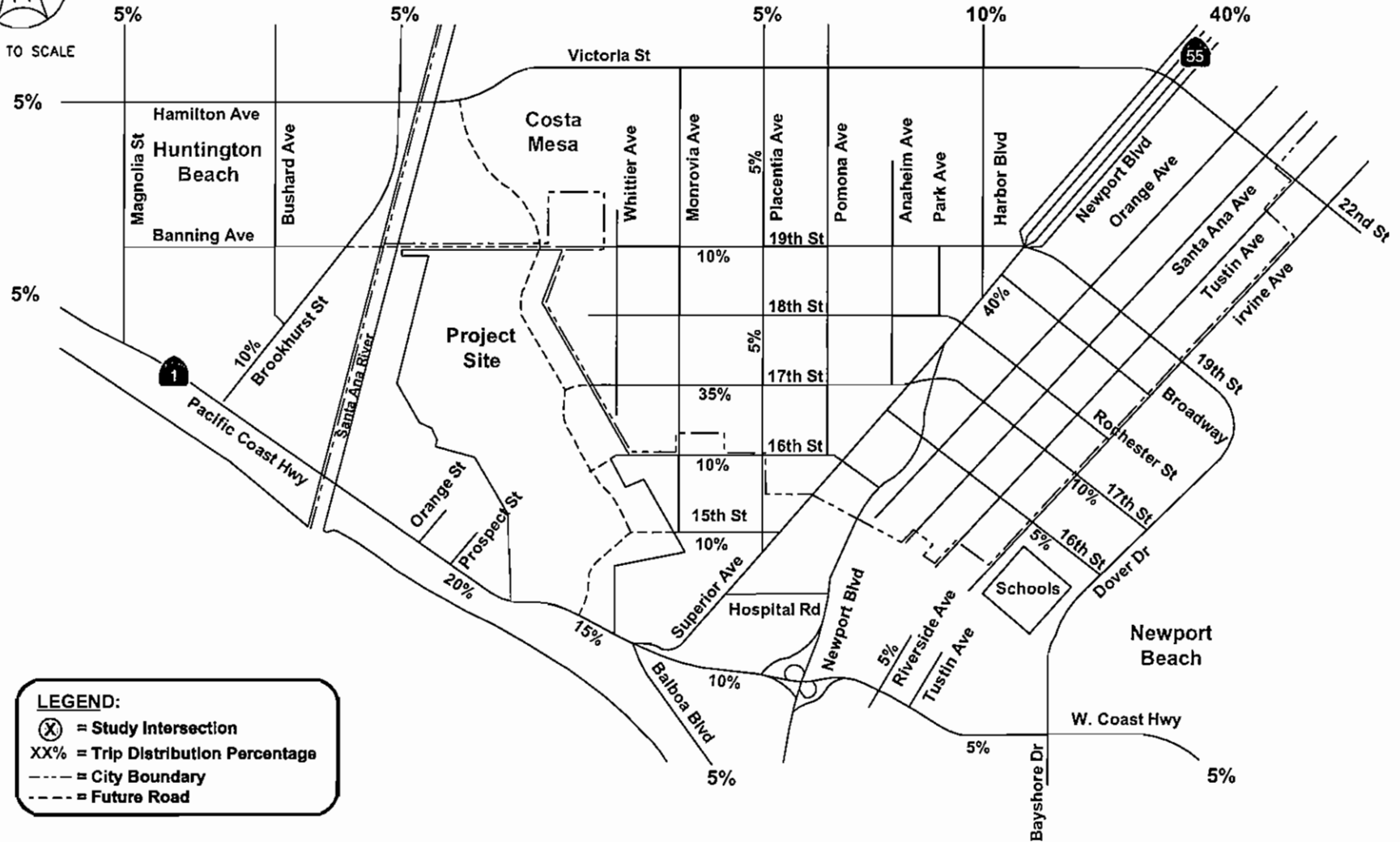
PM Peak Hour: $\ln(T) = 0.67 \ln(X) + 3.37$

⁴ Source: Institute of Transportation Engineers (ITE) publication "Trip Generation Handbook". See Internal Capture Worksheets in Appendix C.

⁵ Note: The ITE publication "Trip Generation Handbook" indicates pass-by for a shopping center is 34% in the PM peak hour. 10% is assumed here, for a conservative approach. Pass-by reduction is taken on balance of retail trips, after Internal Capture reduction



NOT TO SCALE



- 29 -

**FIGURE 9
PROJECT TRIP DISTRIBUTION**

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Kimley-Horn and Associates, Inc.

NEWPORT BANNING RANCH

TRIP GENERATION RATES¹

LAND USE	UNITS ²	PEAK HOUR				DAILY
		AM		PM		
		IN	OUT	IN	OUT	
Condominium/Townhouse	DU	0.17	0.49	0.47	0.36	8.10
Multi Family Dwelling	DU	0.90	0.42	0.43	0.20	6.47
Single Family Detached Residential	DU	0.20	0.70	0.70	0.40	11.00
State Park (gross acres)	AC	0.21	0.90	0.29	0.31	19.15

0.09
Verify trip gen.

¹ Source: City of Newport Beach Trip Generation Rates

² DU = Dwelling Units
AC = Acres

TABLE 12-2

PROJECT TRIP GENERATION

TAZ	PLANNING AREA	LAND USE	QUANTITY	UNITS ¹	PEAK HOUR				DAILY
					AM		PM		
					IN	OUT	IN	OUT	
1	1A	Condominium/Townhouse	121	DU	21	59	57	44	980
	1B	Single Family Detached Residential	36	DU	7	25	25	14	396
	1C	Condominium/Townhouse	888	DU	151	435	417	320	7,193
	2A	Single Family Detached Residential	206	DU	41	144	144	82	2,266
	13C	Multi Family Dwelling	116	DU	104	49	50	23	751
	13D	Multi Family Dwelling	116	DU	104	49	50	23	751
	13E	Multi Family Dwelling	116	DU	104	49	50	23	751
TOTAL FOR TAZ 1					532	810	793	529	13,088
2	3A	Single Family Detached Residential	347	DU	69	243	243	139	3,817
	3B	Single Family Detached Residential	450	DU	90	315	315	180	4,950
	4B	Single Family Detached Residential	587	DU	117	411	411	235	6,457
	13A	Multi Family Dwelling	117	DU	105	49	50	23	757
	13B	Multi Family Dwelling	117	DU	105	49	50	23	757
	14	Single Family Detached Residential	26	DU	5	18	18	10	286
	17	State Park (gross acres)	2,807	AC	589	2,526	814	870	53,754
TOTAL FOR TAZ 2					1,080	3,611	1,901	1,480	70,778
3	2B	Single Family Detached Residential	62	DU	12	43	43	25	682
	4A	Single Family Detached Residential	784	DU	157	549	549	314	8,624
TOTAL FOR TAZ 3					169	592	592	339	9,306
4	2C	Single Family Detached Residential	307	DU	61	215	215	123	3,377
	5	Single Family Detached Residential	300	DU	60	210	210	120	3,300
	6	Single Family Detached Residential	75	DU	15	53	53	30	825
	8	Condominium/Townhouse	289	DU	49	142	136	104	2,341
TOTAL FOR TAZ 4					185	620	614	377	9,843
TOTAL FOR ALL ZONES					1,966	5,633	3,900	2,725	103,015

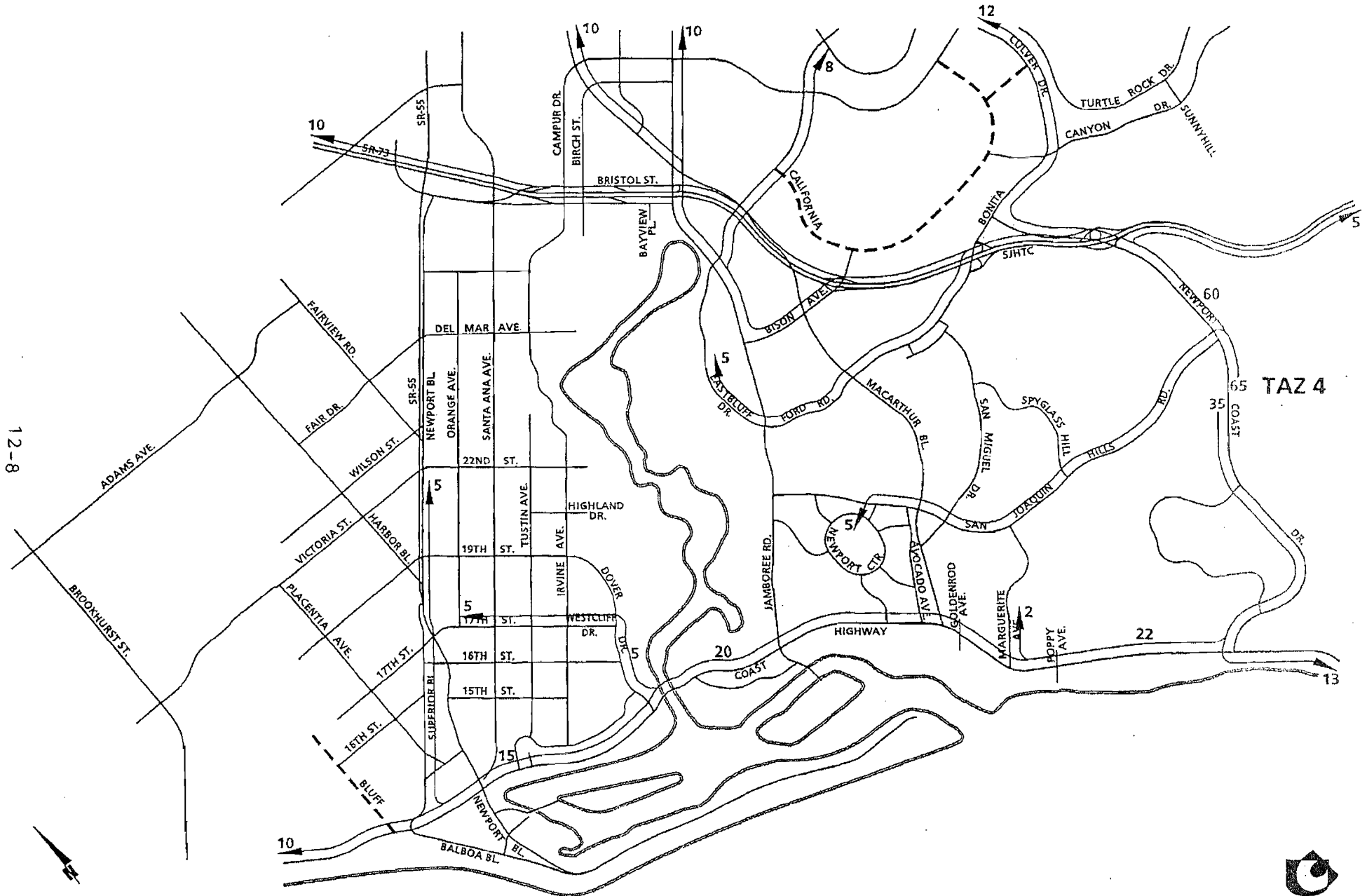
¹ DU = Dwelling Units
AC = Acres

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- 70% OF DU'S ARE BUILT. ONLY 30% IS CUMULATIVE PROJECT THE

- ASSUME STATE PARK IS EXISTING.

EXHIBIT 12-E
**NEWPORT COAST TRAFFIC ANALYSIS ZONE 4
 TRIP DISTRIBUTION PATTERNS**



12-8

TAZ 4



**TABLE 2
ONE NEWPORT HOTEL PROJECT
SUMMARY OF PROJECT TRIP GENERATION**

Land Use	ITE Code	Unit	Trip Generation Rates ¹						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Hotel	310	Room	8.170	0.313	0.217	0.530	0.306	0.294	0.600
Specialty Retail Center ²	826	KSF	44.320	0.595	0.365	0.960	1.192	1.518	2.710
High-Turnover (Sit-Down) Restaurant	932	KSF	127.150	5.946	4.865	10.810	5.910	3.940	9.850
Land Use	Quantity	Unit	Trip Generation Estimates						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Hotel	180	Room	1,471	56	39	95	55	53	108
Specialty Retail Center ²	15.000	KSF	665	9	5	14	18	23	41
Retail Adjustment Factor (10%) ³			-67	-1	-1	-2	-2	-2	-4
High-Turnover (Sit-Down) Restaurant	3.300	KSF	420	20	16	36	20	13	33
Total Project Trips			2,489	84	59	143	91	87	178

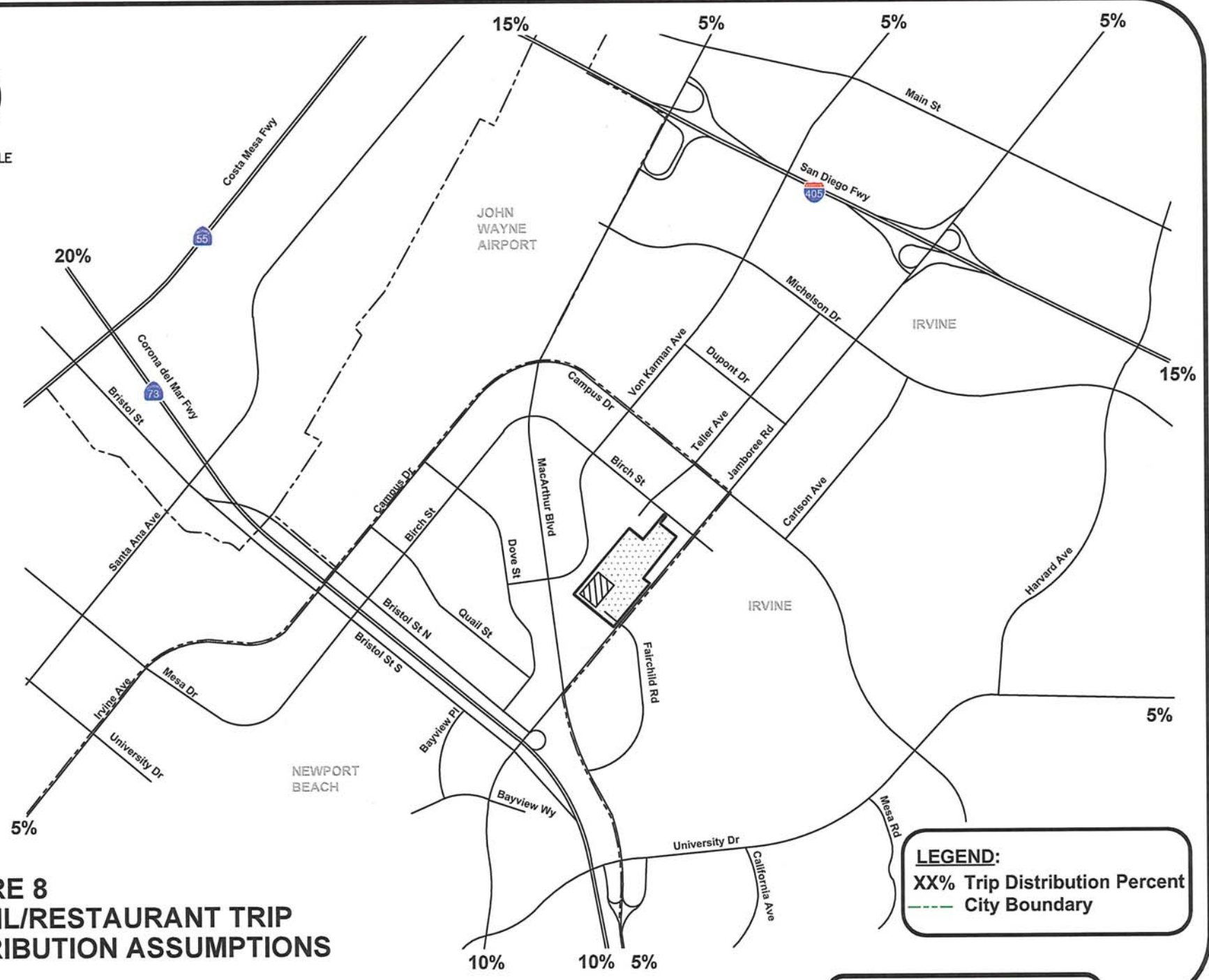
¹ Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition

² ITE Trip Generation does not provide AM peak hour rates for a Specialty Retail Center. Therefore, the AM peak hour rates for Land Use Category 820 - Shopping Center were used to estimate AM peak hour trips.

³ A 10% adjustment factor to account for internal capture and pass-by for the retail use is assumed, as directed by City of Newport Beach staff.



NOT TO SCALE

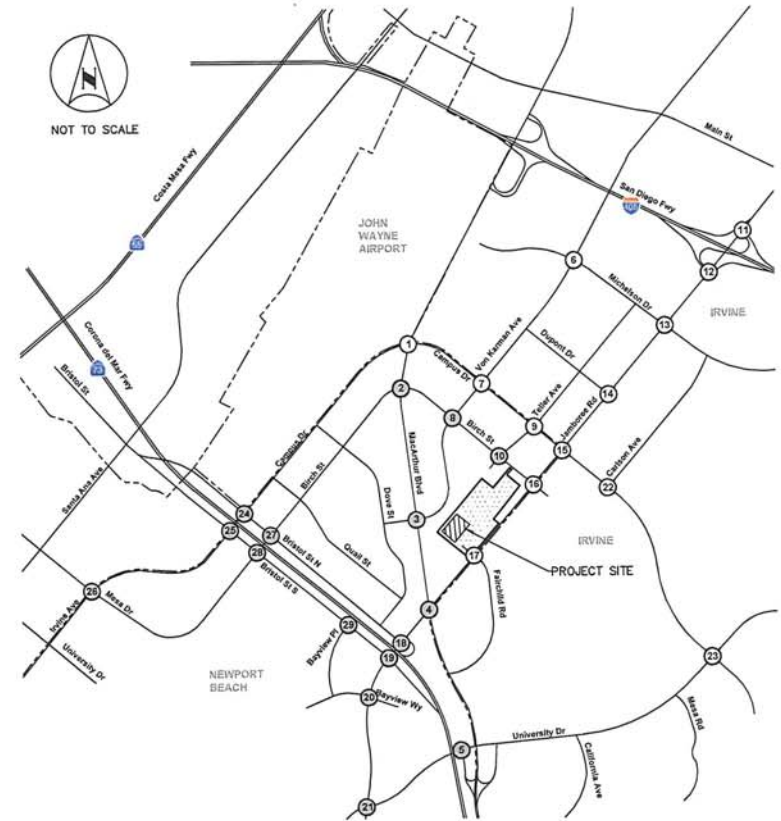


**FIGURE 8
RETAIL/RESTAURANT TRIP
DISTRIBUTION ASSUMPTIONS**

LEGEND:
 XX% Trip Distribution Percent
 - - - - City Boundary



1. MacArthur Blvd at Campus Dr	2. MacArthur Blvd at Birch St	3. MacArthur Blvd at Von Karman Ave	4. MacArthur Blvd at Jamboree Rd	5. MacArthur Blvd SB at University Dr	6. Von Karman Ave at Michelson Dr
7. Von Karman Ave at Campus Dr	8. Von Karman Ave at Birch St	9. Teller Ave at Campus Dr	10. Teller Ave at Birch St	11. Jamboree Rd at I-405 NB Ramp	12. Jamboree Rd at I-405 SB Ramp
13. Jamboree Rd at Michelson Dr	14. Jamboree Rd at Dupont Dr	15. Jamboree Rd at Campus Dr	16. Jamboree Rd at Birch St	17. Jamboree Rd at Fairchild Rd	18. Jamboree Rd at Bristol St N
19. Jamboree Rd at Bristol St S	20. Jamboree Rd at Bayview Wy	21. Jamboree Rd at University Dr	22. Carlson Ave at Campus Dr	23. University Dr at Campus Dr	24. Bristol St N at Campus Dr
25. Bristol St S at Campus Dr	26. Irvine Ave at Mesa Dr	27. Bristol St N at Birch St	28. Bristol St S at Birch St	29. Bristol St S at Bayview PI	

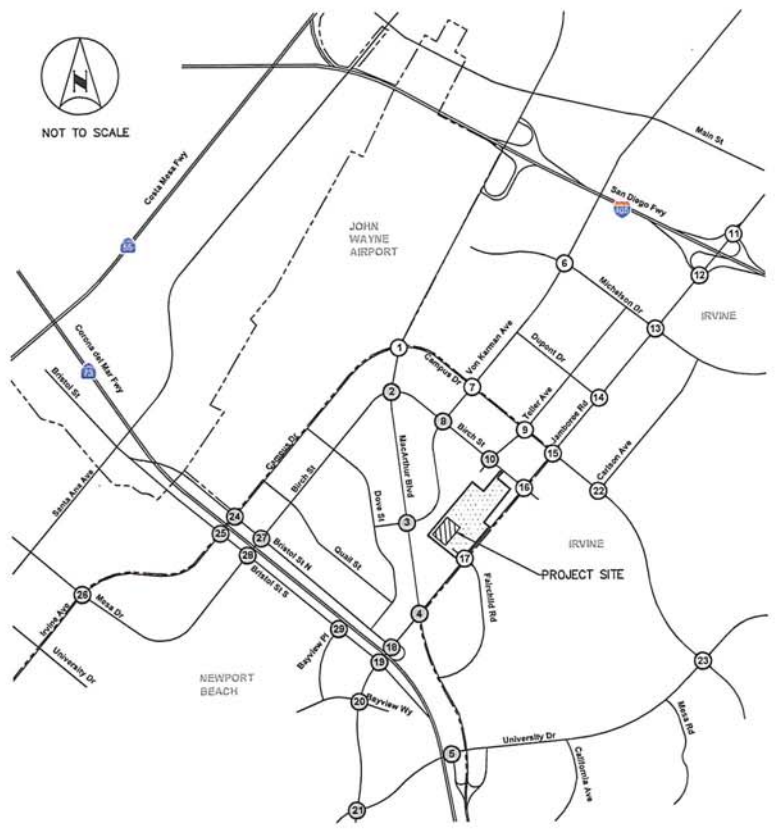


LEGEND:

- Newport Beach Intersection
- Irvine Intersection
- City Boundary
- XXXX AM/PM Peak Hour Turning Movement Volumes

FIGURE 9
PROJECT-RELATED PEAK HOUR TRAFFIC VOLUMES -
WITH UPTOWN NEWPORT PHASE 1 COMPLETION

1. MacArthur Blvd at Campus Dr 	2. MacArthur Blvd at Birch St 	3. MacArthur Blvd at Von Karman Ave 	4. MacArthur Blvd at Jamboree Rd 	5. MacArthur Blvd SB at University Dr 	6. Von Karman Ave at Michelson Dr
7. Von Karman Ave at Campus Dr 	8. Von Karman Ave at Birch St 	9. Teller Ave at Campus Dr 	10. Teller Ave at Birch St 	11. Jamboree Rd at I-405 NB Ramp 	12. Jamboree Rd at I-405 SB Ramp
13. Jamboree Rd at Michelson Dr 	14. Jamboree Rd at Dupont Dr 	15. Jamboree Rd at Campus Dr 	16. Jamboree Rd at Birch St 	17. Jamboree Rd at Fairchild Rd 	18. Jamboree Rd at Bristol St N
19. Jamboree Rd at Bristol St S 	20. Jamboree Rd at Bayview Wy 	21. Jamboree Rd at University Dr 	22. Carlson Ave at Campus Dr 	23. University Dr at Campus Dr 	24. Bristol St N at Campus Dr
25. Bristol St S at Campus Dr 	26. Irvine Ave at Mesa Dr 	27. Bristol St N at Birch St 	28. Bristol St S at Birch St 	29. Bristol St S at Bayview PI 	



LEGEND:

- Newport Beach Intersection
- Irvine Intersection
- City Boundary
- AM/PM Peak Hour Turning Movement Volumes

FIGURE 10
PROJECT-RELATED PEAK HOUR TRAFFIC VOLUMES -
WITH UPTOWN NEWPORT PHASE 2 COMPLETION



**Koll-Conexant
4311 Jamboree Road**

Trip Generation Rates

Land Use	Rate Type	Size	Unit	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	Total
Office	ITE-8th		TSF	1.36	0.19	1.55	0.25	1.24	1.49	11.01
General Light Industrial	ITE-8th		TSF	0.81	0.11	0.92	0.12	0.85	0.97	6.97
Apartments	ITE-8th		DU	0.1	0.41	0.51	0.4	0.22	0.62	6.65

Existing Use

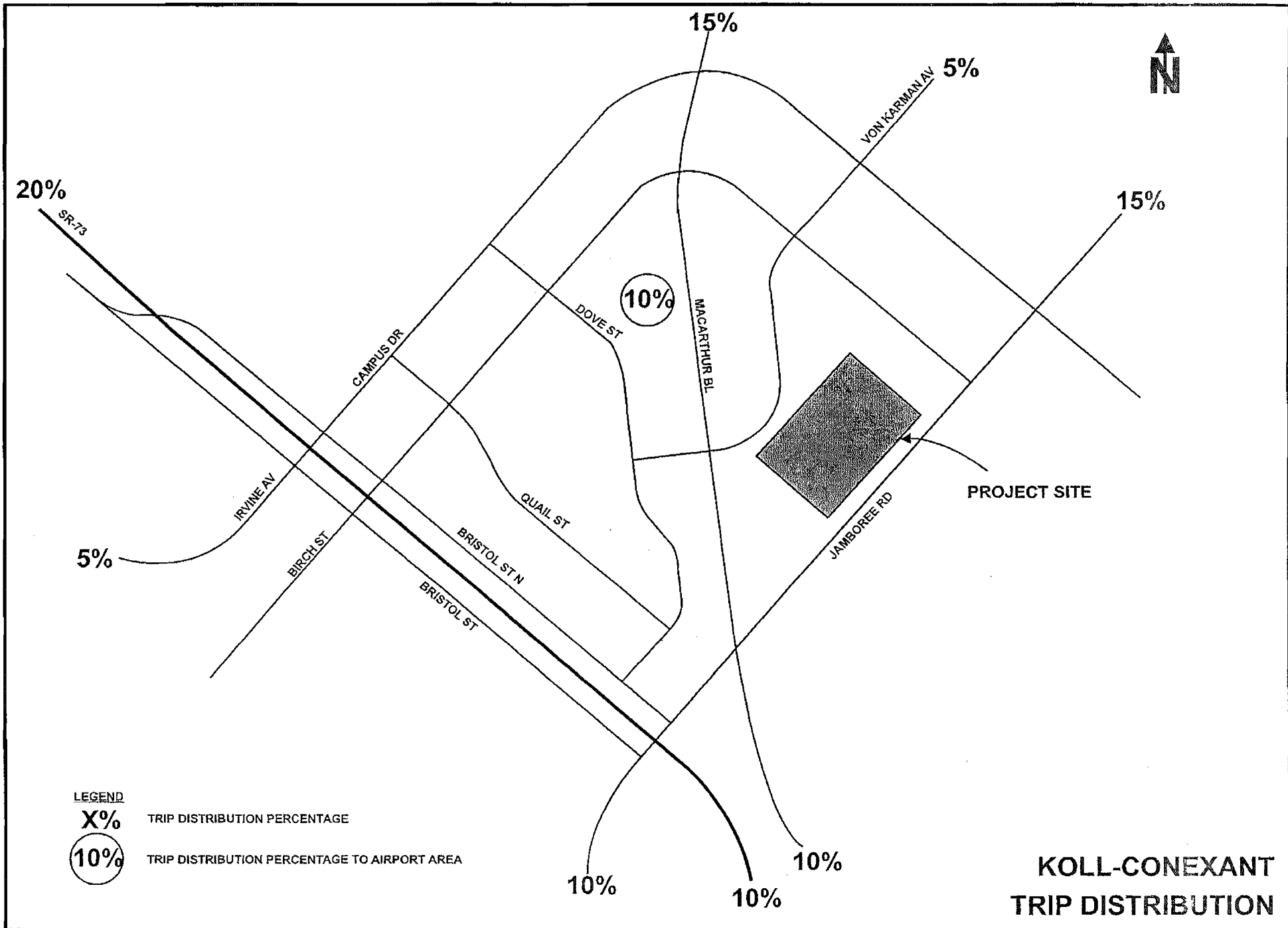
Land Use	Rate Type	Size	Unit	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	Total
Office	ITE-8th	167	TSF	227	32	259	42	207	249	1839
Industrial	ITE-8th	269	TSF	218	30	247	32	229	261	1875
	ITE-8th									
	ITE-8th									
Total				445	61	506	74	436	510	3714

Proposed Use

Land Use	Rate Type	Size	Unit	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	Total
Apartment	ITE-8th	974	DU	97	399	497	390	214	604	6477
	ITE-8th		TSF	0	0	0	0	0	0	0
	ITE-8th		TSF	0	0	0	0	0	0	0
	ITE-8th		TSF	0	0	0	0	0	0	0
Total				97	399	497	390	214	604	6477

Net Increase				-348	338	-10	316	-221	94	2764
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Note: Do not assign negative trips to the circulation system





APPENDIX K

Future (2021) Plus Approved Plus Cumulative Growth Intersection Level of Service Worksheets

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.705
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 77 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, Crit Moves, and other capacity-related metrics.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.798
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 113 Level of Service: C

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include North Bound, South Bound, East Bound, West Bound movements and their respective controls and rights.

Volume Module: Table with columns for various volume metrics (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume) across four bound directions.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. across four bound directions.

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves across four bound directions.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Jamboree (NS) at MacArthur (EW)

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			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	4	0	1	3	0	3	0	1	2	0

Volume Module:

Base Vol:	374	1079	228	303	692	174	64	351	170	194	1472	544
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	393	1133	239	318	727	183	67	369	179	204	1546	571
Added Vol:	19	146	0	18	107	0	0	17	6	0	58	11
PasserByVol:	74	274	37	7	61	0	0	10	9	11	19	10
Initial Fut:	486	1553	276	343	895	183	67	396	194	215	1623	592
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:	486	1553	276	343	895	183	67	396	0	215	1623	592
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	486	1553	276	343	895	183	67	396	0	215	1623	592
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:	486	1553	276	343	895	183	67	396	0	215	1623	592
OvlAdjVol:												478

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	6400	1600	4800	4800	1600	3200	4800	1600	3200	4800	1600

Capacity Analysis Module:

Vol/Sat:	0.15	0.24	0.17	0.07	0.19	0.11	0.02	0.08	0.00	0.07	0.34	0.37	
OvlAdjV/S:												0.30	
Crit Moves:	****						****	****					****

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Jamboree (NS) at University Dr (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow and adjustment factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns representing capacity analysis factors like Vol/Sat, Crit Moves, etc.

OCMA Residential Development Traffic Impact Study
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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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*****
Intersection #5 Jamboree (NS) at Bison (EW)
*****
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      Include
Min. Green:    0 0 0      0 0 0      0 0 0      0 0 0
Y+R:           4.0 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 1423 171 148 1432 36 72 0 87 193 0 112
Growth Adj:   1.05 1.05 1.05 1.05 1.05 1.05 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0 1494 180 155 1504 38 72 0 87 193 0 112
Added Vol:    0 109 0 16 50 0 0 0 0 0 0 0 52
PasserByVol:  0 77 5 2 139 0 0 0 0 1 0 1
Initial Fut:  0 1680 185 173 1693 38 72 0 87 194 0 165
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 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 185 173 1693 38 72 0 87 194 0 165
Reduct Vol:   0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol:  0 1680 185 173 1693 38 72 0 87 194 0 165
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 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 185 173 1693 38 72 0 87 194 0 165
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:     1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment:   1.00 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 4325 475 3200 4800 1600 1600 0 1600 3200 0 3200
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:      0.00 0.39 0.39 0.05 0.35 0.02 0.05 0.00 0.05 0.06 0.00 0.05
Crit Moves:   ****          ****          ****          ****
*****

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Jamboree (NS) at Eastbluf/Ford (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.712
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			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	1	0	3	1	1	1	1	1	1

Volume Module:

Base Vol:	206	1505	126	164	1938	133	51	245	361	49	322	32
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	216	1580	132	172	2035	140	51	245	361	49	322	32
Added Vol:	9	109	0	0	50	0	0	0	3	0	0	0
PasserByVol:	0	95	4	0	144	0	0	0	0	1	0	0
Initial Fut:	225	1784	136	172	2229	140	51	245	364	50	322	32
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:	225	1784	136	172	2229	140	51	245	0	50	322	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	225	1784	136	172	2229	140	51	245	0	50	322	32
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:	225	1784	136	172	2229	140	51	245	0	50	322	32

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3200	4459	341	1600	4800	1600	1600	3200	1600	1600	3200	1600

Capacity Analysis Module:

Vol/Sat:	0.07	0.40	0.40	0.11	0.46	0.09	0.03	0.08	0.00	0.03	0.10	0.02
Crit Moves:	****			****			****			****		

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Jamboree (NS) at San Joaquin (EW)

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

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Volume Module:
Base Vol: 40 1246 172 888 1285 56 284 50 64 120 17 29
Growth Adj: 1.05 1.05 1.05 1.05 1.05 1.05 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 42 1308 181 932 1349 59 284 50 64 120 17 29
Added Vol: 0 118 0 0 53 0 0 0 0 1 0 0
PasserByVol: 0 69 7 46 106 0 0 4 0 13 0 38
Initial Fut: 42 1495 188 978 1508 59 284 54 64 134 17 67
User Adj: 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 42 1495 0 978 1508 0 284 54 64 134 17 67
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 42 1495 0 978 1508 0 284 54 64 134 17 67
PCE Adj: 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 42 1495 0 978 1508 0 284 54 64 134 17 67

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 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 2.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1600 4800 1600 3200 4800 1600 3200 1600 1600 3200 1600 1600

Capacity Analysis Module:
Vol/Sat: 0.03 0.31 0.00 0.31 0.31 0.00 0.09 0.03 0.04 0.04 0.01 0.04
Crit Moves: **** **** **** ****

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Jamboree (NS) at Santa Barbara (EW)

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			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	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	2	0	3	0	1	1

Volume Module:

Base Vol:	11	1214	235	514	1081	49	53	2	8	36	2	103
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	1275	247	540	1135	51	53	2	8	36	2	103
Added Vol:	0	119	0	0	53	0	0	0	0	0	0	0
PasserByVol:	0	63	3	3	114	0	0	0	0	23	0	13
Initial Fut:	12	1457	250	543	1302	51	53	2	8	59	2	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	1457	250	543	1302	51	53	2	8	59	2	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	1457	250	543	1302	51	53	2	8	59	2	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	1457	250	543	1302	51	53	2	8	59	2	116

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.00	1.00	1.00	1.93	0.07	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	1600	1600	1600	3095	105	1600

Capacity Analysis Module:

Vol/Sat:	0.01	0.30	0.16	0.17	0.27	0.03	0.03	0.00	0.01	0.02	0.02	0.07
Crit Moves:	****			****			****			****		

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Jamboree (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.458
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			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:	1	0	1	1	0	2	3	0	3	2	0	4

Volume Module:

Base Vol:	17	330	85	137	246	623	17	330	85	62	924	123
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	18	347	89	144	258	654	18	347	89	65	970	129
Added Vol:	0	15	0	30	21	3	1	83	0	0	186	103
PasserByVol:	0	0	0	6	0	122	61	44	0	0	47	1
Initial Fut:	18	362	89	180	279	779	80	474	89	65	1203	233
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:	18	362	89	180	279	0	80	474	89	65	1203	233
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	362	89	180	279	0	80	474	89	65	1203	233
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:	18	362	89	180	279	0	80	474	89	65	1203	233

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.60	0.40	1.00	2.00	1.00	3.00	3.37	0.63	2.00	4.00	1.00
Final Sat.:	1600	2566	634	1600	3200	1600	4800	5385	1015	3200	6400	1600

Capacity Analysis Module:

Vol/Sat:	0.01	0.14	0.14	0.11	0.09	0.00	0.02	0.09	0.09	0.02	0.19	0.15
Crit Moves:	****			****			****			****		

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 MacArthur (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.706
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:	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	1	2	0	4	0	1	1

Volume Module:

Base Vol:	258	2394	160	82	2307	247	216	198	209	501	306	107	
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	271	2514	168	86	2422	259	216	198	209	501	306	107	
Added Vol:	0	99	0	0	29	0	0	16	0	0	52	0	
PasserByVol:	1	20	6	0	49	2	2	5	1	16	1	0	
Initial Fut:	272	2633	174	86	2500	261	218	219	210	517	359	107	
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:	272	2633	0	86	2500	261	218	219	0	517	359	107	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	272	2633	0	86	2500	261	218	219	0	517	359	107	
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:	272	2633	0	86	2500	261	218	219	0	517	359	107	
OvlAdjVol:							152				64		

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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:	0.08	0.41	0.00	0.03	0.39	0.16	0.07	0.07	0.00	0.16	0.11	0.07	
OvlAdjV/S:							0.10				0.04		
Crit Moves:	****				****				****				

OCMA Residential Development Traffic Impact Study
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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 MacArthur (NS) at Ford/Bonita Canyon (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.669
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 69 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns representing saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns representing capacity analysis factors like Vol/Sat, Crit Moves, etc.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 MacArthur (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.679
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			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	3	0	1	0	3	0	2	1	0	2

Volume Module:

Base Vol:	75	1188	5	598	1450	896	132	227	58	23	516	562
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	1247	5	628	1523	941	132	227	58	23	516	562
Added Vol:	0	99	0	0	29	0	0	3	0	0	10	0
PasserByVol:	2	4	0	1	4	67	38	5	0	0	5	0
Initial Fut:	81	1350	5	629	1556	1008	170	235	58	23	531	562
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:	81	1350	5	629	1556	0	170	235	58	23	531	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	1350	5	629	1556	0	170	235	58	23	531	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:	81	1350	5	629	1556	0	170	235	58	23	531	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	1.00	2.00	3.00	1.00	3.00	2.41	0.59	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	3850	950	1600	3200	1600

Capacity Analysis Module:

Vol/Sat:	0.03	0.28	0.00	0.20	0.32	0.00	0.04	0.06	0.06	0.01	0.17	0.00
Crit Moves:	****			****			****			****		

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 MacArthur (NS) at San Miguel (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.661
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			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	3	0	1	1	2	0	3	0	1	1

Volume Module:

Base Vol:	118	1114	205	6	873	777	198	101	39	204	310	7
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	1170	215	6	917	816	198	101	39	204	310	7
Added Vol:	37	99	0	0	29	0	0	0	11	0	0	0
PasserByVol:	1	5	0	1	4	0	1	1	10	0	6	0
Initial Fut:	162	1274	215	7	950	816	199	102	60	204	316	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	1274	215	7	950	816	199	102	60	204	316	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	1274	215	7	950	816	199	102	60	204	316	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	1274	215	7	950	816	199	102	60	204	316	7
OvlAdjVol:	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:	2.00	3.00	1.00	2.00	3.00	1.00	3.00	1.26	0.74	2.00	1.96	0.04
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2015	1185	3200	3131	69

Capacity Analysis Module:

Vol/Sat:	0.05	0.27	0.13	0.00	0.20	0.51	0.04	0.05	0.05	0.06	0.10	0.10
OvlAdjV/S:	0.47											
Crit Moves:	****			****			****			****		

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 MacArthur (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.652
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			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	0	2	0	0	2	0	3	0	0	3

Volume Module:

Base Vol:	0	0	0	622	0	314	442	983	0	0	1005	910
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	0	0	0	653	0	330	464	1032	0	0	1055	956
Added Vol:	0	0	0	39	0	1	0	112	0	0	289	136
PasserByVol:	0	0	0	10	0	3	4	17	0	0	29	2
Initial Fut:	0	0	0	702	0	334	468	1161	0	0	1373	1094
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	0	0	702	0	0	468	1161	0	0	1373	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	702	0	0	468	1161	0	0	1373	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	0	0	702	0	0	468	1161	0	0	1373	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	2.00	0.00	1.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	3200	4800	0	0	4800	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.22	0.00	0.00	0.15	0.24	0.00	0.00	0.29	0.00
Crit Moves:				***			***			***		

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Marguerite (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.879
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:	Prot+Permit			Prot+Permit			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	0	1	0	0	1	0	2	1	0	1

Volume Module:

Base Vol:	124	88	63	66	74	82	51	1136	97	41	1556	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	124	88	63	66	74	82	54	1193	102	43	1634	49
Added Vol:	0	0	0	4	0	0	0	151	0	0	425	12
PasserByVol:	0	0	0	0	0	0	0	16	0	0	24	0
Initial Fut:	124	88	63	70	74	82	54	1360	102	43	2083	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:	124	88	63	70	74	82	54	1360	102	43	2083	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	88	63	70	74	82	54	1360	102	43	2083	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:	124	88	63	70	74	82	54	1360	102	43	2083	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:	1.00	0.58	0.42	1.00	0.47	0.53	1.00	2.00	1.00	1.00	1.94	0.06
Final Sat.:	1600	932	668	1600	759	841	1600	3200	1600	1600	3108	92

Capacity Analysis Module:

Vol/Sat:	0.08	0.09	0.09	0.04	0.10	0.10	0.03	0.42	0.06	0.03	0.67	0.67
Crit Moves:	****			****			****			****		

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.815
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 123 Level of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and 12 rows of adjustment factors.

Saturation Flow Module: Table with 12 columns and 4 rows showing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns and 3 rows showing capacity analysis metrics.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.851
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 153 Level of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Jamboree (NS) at MacArthur (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.846
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 148 Level of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and their values.

Saturation Flow Module: Table with 12 columns representing saturation flow values.

Capacity Analysis Module: Table with 12 columns representing capacity analysis values.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Jamboree (NS) at University Dr (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and 12 rows of adjustment factors.

Saturation Flow Module: Table with 12 columns and 5 rows of saturation flow data.

Capacity Analysis Module: Table with 12 columns and 3 rows of capacity analysis data.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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*****
Intersection #5 Jamboree (NS) at Bison (EW)
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.583
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          Include
Min. Green:    0 0 0          0 0 0          0 0 0          0 0 0
Y+R:          4.0 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 1614 165 128 1731 67 40 0 19 180 0 130
Growth Adj:   1.05 1.05 1.05 1.05 1.05 1.05 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  0 1695 173 134 1818 70 40 0 19 180 0 130
Added Vol:    0 86 0 52 116 0 0 0 0 0 0 0 32
PasserByVol:  0 145 4 12 104 0 0 0 0 5 0 0 1
Initial Fut:  0 1926 177 198 2038 70 40 0 19 185 0 163
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 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 177 198 2038 70 40 0 19 185 0 163
Reduct Vol:   0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol:  0 1926 177 198 2038 70 40 0 19 185 0 163
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:      1.00 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 177 198 2038 70 40 0 19 185 0 163
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:     1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment:   1.00 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 2.75 0.25 2.00 3.00 1.00 1.00 0.00 1.00 2.00 0.00 2.00
Final Sat.:   0 4395 405 3200 4800 1600 1600 0 1600 3200 0 3200
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:      0.00 0.44 0.44 0.06 0.42 0.04 0.03 0.00 0.01 0.06 0.00 0.05
Crit Moves:   ****          ****          ****          ****
*****
    
```


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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Jamboree (NS) at Eastbluf/Ford (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.768
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 98 Level Of Service: C

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Volume Module:
Base Vol: 56 1955 153 176 2068 246 59 209 357 59 239 32
Growth Adj: 1.05 1.05 1.05 1.05 1.05 1.05 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 59 2053 161 185 2171 258 59 209 357 59 239 32
Added Vol: 5 86 0 0 116 0 0 0 9 0 0 0
PasserByVol: 2 156 4 0 119 0 0 0 2 6 0 0
Initial Fut: 66 2295 165 185 2406 258 59 209 368 65 239 32
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: 66 2295 165 185 2406 258 59 209 0 65 239 32
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 66 2295 165 185 2406 258 59 209 0 65 239 32
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: 66 2295 165 185 2406 258 59 209 0 65 239 32

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 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 2.80 0.20 1.00 3.00 1.00 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 3200 4479 321 1600 4800 1600 1600 3200 1600 1600 3200 1600

Capacity Analysis Module:
Vol/Sat: 0.02 0.51 0.51 0.12 0.50 0.16 0.04 0.07 0.00 0.04 0.07 0.02
Crit Moves: **** **** **** ****

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Jamboree (NS) at San Joaquin (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns representing saturation flow and adjustment factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns representing capacity analysis factors like Vol/Sat, Crit Moves, etc.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Jamboree (NS) at Santa Barbara (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.750
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 91 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, Crit Moves, and other capacity metrics.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Jamboree (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.849
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 151 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			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	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	3	0	3	2	0	4

Volume Module:

Base Vol:	28	272	85	176	481	1348	684	1317	19	105	2020	203
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	29	286	89	185	505	1415	718	1383	20	110	2121	213
Added Vol:	0	23	0	102	18	8	7	206	0	0	151	62
PasserByVol:	0	0	2	8	2	89	104	40	0	2	77	2
Initial Fut:	29	309	91	295	525	1512	829	1629	20	112	2349	277
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:	29	309	91	295	525	0	829	1629	20	112	2349	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	309	91	295	525	0	829	1629	20	112	2349	277
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:	29	309	91	295	525	0	829	1629	20	112	2349	277

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.00	2.00	1.00	3.00	3.95	0.05	2.00	4.00	1.00
Final Sat.:	1600	2470	730	1600	3200	1600	4800	6323	77	3200	6400	1600

Capacity Analysis Module:

Vol/Sat:	0.02	0.12	0.12	0.18	0.16	0.00	0.17	0.26	0.26	0.04	0.37	0.17
Crit Moves:	****			****			****			****		

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 MacArthur (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.712
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 79 Level of Service: C

Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table showing various volume adjustments like Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume, and OvlAdjVol.

Saturation Flow Module: Table showing Sat/Lane, Adjustment, Lanes, and Final Sat values.

Capacity Analysis Module: Table showing Vol/Sat, OvlAdjV/S, and Crit Moves.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 MacArthur (NS) at Ford/Bonita Canyon (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.771
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and their values.

Saturation Flow Module: Table with 12 columns representing saturation flow values and adjustments.

Capacity Analysis Module: Table with 12 columns representing capacity analysis values.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 MacArthur (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.838
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 141 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:	2	0	3	0	1		3	0	2	1	0	2

Volume Module:

Base Vol:	57	1727	21	628	1682	408	643	426	74	34	264	463
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1813	22	659	1766	428	643	426	74	34	264	463
Added Vol:	0	59	0	0	101	0	0	10	0	0	8	0
PasserByVol:	2	8	0	1	8	40	92	6	0	0	6	0
Initial Fut:	62	1880	22	660	1875	468	735	442	74	34	278	463
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:	62	1880	22	660	1875	0	735	442	74	34	278	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	1880	22	660	1875	0	735	442	74	34	278	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:	62	1880	22	660	1875	0	735	442	74	34	278	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	1.00	2.00	3.00	1.00	3.00	2.57	0.43	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	4112	688	1600	3200	1600

Capacity Analysis Module:

Vol/Sat:	0.02	0.39	0.01	0.21	0.39	0.00	0.15	0.11	0.11	0.02	0.09	0.00
Crit Moves:	****			****			****			****		

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 MacArthur (NS) at San Miguel (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.596
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			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	3	0	1	1	3	0	1	1	0	0

Volume Module:

Base Vol:	73	971	261	10	1241	475	885	448	144	208	232	24
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	77	1020	274	11	1303	499	885	448	144	208	232	24
Added Vol:	22	59	0	0	101	0	0	0	37	0	0	0
PasserByVol:	6	6	0	1	5	2	3	15	12	0	12	0
Initial Fut:	105	1085	274	12	1409	501	888	463	193	208	244	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	105	1085	274	12	1409	501	888	463	193	208	244	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	105	1085	274	12	1409	501	888	463	193	208	244	24
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	105	1085	274	12	1409	501	888	463	193	208	244	24
OvlAdjVol:	205											

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	2.00	3.00	1.00	3.00	1.41	0.59	2.00	1.82	0.18
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2259	941	3200	2913	287

Capacity Analysis Module:

Vol/Sat:	0.03	0.23	0.17	0.00	0.29	0.31	0.19	0.20	0.21	0.07	0.08	0.08	
OvlAdjV/S:	0.13												
Crit Moves:	****	****					****	****	****				

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 MacArthur (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.746
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			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	0	2	0	0	2	0	3	0	0	3

Volume Module:

Base Vol:	0	0	0	845	0	339	409	1321	0	0	1105	680
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	0	0	0	887	0	356	429	1387	0	0	1160	714
Added Vol:	0	0	0	135	0	3	1	307	0	0	211	80
PasserByVol:	0	0	0	3	0	4	5	28	0	0	17	5
Initial Fut:	0	0	0	1025	0	363	435	1722	0	0	1388	799
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	0	0	1025	0	0	435	1722	0	0	1388	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	1025	0	0	435	1722	0	0	1388	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	0	0	1025	0	0	435	1722	0	0	1388	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	2.00	0.00	1.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	3200	4800	0	0	4800	1600

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.32	0.00	0.00	0.14	0.36	0.00	0.00	0.29	0.00
Crit Moves:				***			***			***		

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Marguerite (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.918
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:	Prot+Permit			Prot+Permit			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	0	1	0	0	1	0	2	1	0	1

Volume Module:

Base Vol:	165	95	82	92	106	77	57	1544	102	75	1246	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	165	95	82	92	106	77	60	1621	107	79	1308	29
Added Vol:	0	0	0	12	0	0	0	442	0	0	291	7
PasserByVol:	0	0	0	0	0	0	0	22	0	0	8	0
Initial Fut:	165	95	82	104	106	77	60	2085	107	79	1607	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	165	95	82	104	106	77	60	2085	107	79	1607	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	165	95	82	104	106	77	60	2085	107	79	1607	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	165	95	82	104	106	77	60	2085	107	79	1607	36

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	0.54	0.46	1.00	0.58	0.42	1.00	2.00	1.00	1.00	1.96	0.04
Final Sat.:	1600	859	741	1600	927	673	1600	3200	1600	1600	3129	71

Capacity Analysis Module:

Vol/Sat:	0.10	0.11	0.11	0.07	0.11	0.11	0.04	0.65	0.07	0.05	0.51	0.51
Crit Moves:	****			****			****			****		



APPENDIX L

Future (2021) Plus Approved Plus Cumulative Plus Growth Plus Project Intersection Level of Service Worksheets

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.706
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 77 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, Crit Moves, etc.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.799
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 113 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			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	0	0	1	0	3	0	1	0	3

Volume Module:

Base Vol:	369	16	46	27	8	38	34	2548	383	93	1416	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	369	16	46	27	8	38	36	2675	402	98	1487	34
Added Vol:	1	0	1	0	0	0	2	83	0	3	192	0
PasserByVol:	1	6	0	62	3	41	72	63	0	0	80	15
Initial Fut:	371	22	47	89	11	79	110	2821	402	101	1759	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	371	22	47	89	11	79	110	2821	402	101	1759	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	371	22	47	89	11	79	110	2821	402	101	1759	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	371	22	47	89	11	79	110	2821	402	101	1759	49

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.53	0.15	0.32	1.00	0.12	0.88	1.00	3.00	1.00	1.00	3.89	0.11
Final Sat.:	4047	240	513	1600	196	1404	1600	4800	1600	1600	6228	172

Capacity Analysis Module:

Vol/Sat:	0.09	0.09	0.09	0.06	0.06	0.06	0.07	0.59	0.25	0.06	0.28	0.28
Crit Moves:	****			****			****			****		

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Jamboree (NS) at MacArthur (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.699
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 76 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume metrics and 12 rows of data.

Saturation Flow Module: Table with 12 columns representing saturation flow metrics and 4 rows of data.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics and 4 rows of data.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Jamboree (NS) at University Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.685
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 72 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow and adjustment factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns representing capacity analysis factors like Vol/Sat, Crit Moves, etc.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Jamboree (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.560
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume components and their values.

Saturation Flow Module: Table with 12 columns representing saturation flow values and adjustments.

Capacity Analysis Module: Table with 12 columns representing capacity analysis values.

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City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Jamboree (NS) at Eastbluf/Ford (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.712
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 79 Level of Service: C

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Volume Module:
Base Vol: 206 1505 126 164 1938 133 51 245 361 49 322 32
Growth Adj: 1.05 1.05 1.05 1.05 1.05 1.05 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 216 1580 132 172 2035 140 51 245 361 49 322 32
Added Vol: 10 119 0 0 51 0 0 0 3 0 0 0
PasserByVol: 0 95 4 0 144 0 0 0 0 1 0 0
Initial Fut: 226 1794 136 172 2230 140 51 245 364 50 322 32
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: 226 1794 136 172 2230 140 51 245 0 50 322 32
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 226 1794 136 172 2230 140 51 245 0 50 322 32
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: 226 1794 136 172 2230 140 51 245 0 50 322 32

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 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 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 3200 4461 339 1600 4800 1600 1600 3200 1600 1600 3200 1600

Capacity Analysis Module:
Vol/Sat: 0.07 0.40 0.40 0.11 0.46 0.09 0.03 0.08 0.00 0.03 0.10 0.02
Crit Moves: **** **** **** ****

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Jamboree (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.751
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 91 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and their values.

Saturation Flow Module: Table with 12 columns representing saturation flow values.

Capacity Analysis Module: Table with 12 columns representing capacity analysis values.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Jamboree (NS) at Santa Barbara (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.585
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, Crit Moves, and other capacity metrics.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Jamboree (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.458
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic flow metrics and 12 rows of data including Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow metrics and 4 rows of data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics and 2 rows of data including Vol/Sat and Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 MacArthur (NS) at Bison (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.706
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:	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	1	2	0	2	0	1	1

Volume Module:

Base Vol:	258	2394	160	82	2307	247	216	198	209	501	306	107	
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	271	2514	168	86	2422	259	216	198	209	501	306	107	
Added Vol:	0	100	1	0	29	0	0	16	0	0	52	0	
PasserByVol:	1	20	6	0	49	2	2	5	1	16	1	0	
Initial Fut:	272	2634	175	86	2500	261	218	219	210	517	359	107	
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:	272	2634	0	86	2500	261	218	219	0	517	359	107	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	272	2634	0	86	2500	261	218	219	0	517	359	107	
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:	272	2634	0	86	2500	261	218	219	0	517	359	107	
OvlAdjVol:							152				64		

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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:	0.08	0.41	0.00	0.03	0.39	0.16	0.07	0.07	0.00	0.16	0.11	0.07	
OvlAdjV/S:							0.10				0.04		
Crit Moves:	****						****	****			****		

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 MacArthur (NS) at Ford/Bonita Canyon (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.669
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:	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	1	2	0	4	0	1	1

Volume Module:

Base Vol:	122	1585	125	546	2537	48	59	341	101	287	544	959
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	1664	131	573	2664	50	59	341	101	287	544	959
Added Vol:	0	102	1	0	29	0	0	0	0	0	0	0
PasserByVol:	0	32	6	0	67	0	1	3	0	2	1	0
Initial Fut:	128	1798	138	573	2760	50	60	344	101	289	545	959
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:	128	1798	0	573	2760	0	60	344	101	289	545	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	1798	0	573	2760	0	60	344	101	289	545	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:	128	1798	0	573	2760	0	60	344	101	289	545	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	0.28	0.00	0.18	0.43	0.00	0.02	0.11	0.06	0.09	0.17	0.00
Crit Moves:	****			****			****			****		

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 MacArthur (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.680
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level of Service: B

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Volume Module:
Base Vol: 75 1188 5 598 1450 896 132 227 58 23 516 562
Growth Adj: 1.05 1.05 1.05 1.05 1.05 1.05 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 79 1247 5 628 1523 941 132 227 58 23 516 562
Added Vol: 0 99 0 0 29 1 4 4 1 0 10 0
PasserByVol: 2 4 0 1 4 67 38 5 0 0 5 0
Initial Fut: 81 1350 5 629 1556 1009 174 236 59 23 531 562
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: 81 1350 5 629 1556 0 174 236 59 23 531 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 81 1350 5 629 1556 0 174 236 59 23 531 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: 81 1350 5 629 1556 0 174 236 59 23 531 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 1.00 2.00 3.00 1.00 3.00 2.40 0.60 1.00 2.00 1.00
Final Sat.: 3200 4800 1600 3200 4800 1600 4800 3840 960 1600 3200 1600

Capacity Analysis Module:
Vol/Sat: 0.03 0.28 0.00 0.20 0.32 0.00 0.04 0.06 0.06 0.01 0.17 0.00
Crit Moves: **** **** **** ****

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 MacArthur (NS) at San Miguel (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.661
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 67 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, OvlAdjV/S, and Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 MacArthur (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.653
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 66 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and 12 rows of adjustment factors.

Saturation Flow Module: Table with 12 columns and 4 rows showing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns and 3 rows showing capacity analysis metrics.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Marguerite (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.879
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic flow metrics and 12 rows of data including Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns representing saturation flow metrics and 4 rows of data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics and 2 rows of data including Vol/Sat and Crit Moves.

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Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.816
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 124 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:	Split Phase			Split Phase			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	1	1	0	1	2	0	2	1	0	3

Volume Module:

Base Vol:	17	33	52	874	51	141	124	1536	23	50	2136	1217
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	17	33	52	874	51	141	130	1613	24	53	2243	1278
Added Vol:	0	0	0	65	0	0	0	179	0	0	129	37
PasserByVol:	0	0	0	54	0	39	42	119	0	0	137	54
Initial Fut:	17	33	52	993	51	180	172	1911	24	53	2509	1369
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:	17	33	52	993	51	180	172	1911	24	53	2509	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	33	52	993	51	180	172	1911	24	53	2509	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:	17	33	52	993	51	180	172	1911	24	53	2509	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	1.00	1.00	3.00	1.00	1.00	2.00	2.96	0.04	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	4800	1600	1600	3200	4740	60	1600	4800	1600

Capacity Analysis Module:

Vol/Sat:	0.01	0.02	0.03	0.21	0.03	0.11	0.05	0.40	0.40	0.03	0.52	0.00
Crit Moves:			****	****			****			****		

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.852
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 154 Level Of Service: D

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include North Bound, South Bound, East Bound, West Bound movements and their respective parameters.

Volume Module: Table showing traffic volume calculations including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each approach.

Capacity Analysis Module: Table showing Vol/Sat and Crit Moves for each approach.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Jamboree (NS) at MacArthur (EW)

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:	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	4	0	1	3	0	3	0	1	2	0

Volume Module:

Base Vol:	254	964	97	627	1086	203	153	1353	466	285	612	397
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	267	1012	102	658	1140	213	161	1421	489	299	643	417
Added Vol:	13	149	0	13	167	0	0	58	22	0	35	19
PasserByVol:	33	139	23	8	285	0	0	19	78	41	8	8
Initial Fut:	313	1300	125	679	1592	213	161	1498	589	340	686	444
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:	313	1300	125	679	1592	213	161	1498	0	340	686	444
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	313	1300	125	679	1592	213	161	1498	0	340	686	444
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:	313	1300	125	679	1592	213	161	1498	0	340	686	444
OvlAdjVol:												217

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	3.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	6400	1600	4800	4800	1600	3200	4800	1600	3200	4800	1600

Capacity Analysis Module:

Vol/Sat:	0.10	0.20	0.08	0.14	0.33	0.13	0.05	0.31	0.00	0.11	0.14	0.28
OvlAdjV/S:												0.14
Crit Moves:	****						****				****	

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Jamboree (NS) at University Dr (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for volume and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume.

Saturation Flow Module: Table with 12 columns for saturation flow and adjustment factors. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis. Rows include Vol/Sat and Crit Moves.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Jamboree (NS) at Bison (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and 12 rows of adjustment factors.

Saturation Flow Module: Table with 12 columns and 4 rows showing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns and 3 rows showing capacity analysis metrics.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Jamboree (NS) at Eastbluf/Ford (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.769
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 98 Level of Service: C

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include North Bound, South Bound, East Bound, West Bound movements and their respective parameters.

Volume Module: Table showing traffic volume adjustments including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each approach.

Capacity Analysis Module: Table showing Vol/Sat and Crit Moves for each approach.

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ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Jamboree (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.621
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 60 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns representing different volume and adjustment factors.

Saturation Flow Module: Table with 13 columns representing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 13 columns representing capacity analysis metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Jamboree (NS) at Santa Barbara (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.752
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 92 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat, Crit Moves, and other capacity-related metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Jamboree (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.850
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 152 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			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	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	3	0	3	2	0	4

Volume Module:

Base Vol:	28	272	85	176	481	1348	684	1317	19	105	2020	203
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	29	286	89	185	505	1415	718	1383	20	110	2121	213
Added Vol:	0	23	0	102	18	11	12	206	0	0	151	62
PasserByVol:	0	0	2	8	2	89	104	40	0	2	77	2
Initial Fut:	29	309	91	295	525	1515	834	1629	20	112	2349	277
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:	29	309	91	295	525	0	834	1629	20	112	2349	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	309	91	295	525	0	834	1629	20	112	2349	277
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:	29	309	91	295	525	0	834	1629	20	112	2349	277

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.00	2.00	1.00	3.00	3.95	0.05	2.00	4.00	1.00
Final Sat.:	1600	2470	730	1600	3200	1600	4800	6323	77	3200	6400	1600

Capacity Analysis Module:

Vol/Sat:	0.02	0.12	0.12	0.18	0.16	0.00	0.17	0.26	0.26	0.04	0.37	0.17
Crit Moves:	****			****			****			****		

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 MacArthur (NS) at Bison (EW)

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

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows: North Bound, South Bound, East Bound, West Bound.

Volume Module:
Base Vol: 169 2483 140 104 2767 264 218 171 215 350 283 116
Growth Adj: 1.05 1.05 1.05 1.05 1.05 1.05 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 177 2607 147 109 2905 277 218 171 215 350 283 116
Added Vol: 0 60 1 0 102 0 0 52 0 1 32 0
PasserByVol: 4 63 17 0 28 10 4 2 1 5 4 0
Initial Fut: 181 2730 165 109 3035 287 222 225 216 356 319 116
User Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 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: 181 2730 0 109 3035 287 222 225 0 356 319 116
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 181 2730 0 109 3035 287 222 225 0 356 319 116
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: 181 2730 0 109 3035 287 222 225 0 356 319 116
OvlAdjVol: 176 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 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: 0.06 0.43 0.00 0.03 0.47 0.18 0.07 0.07 0.00 0.11 0.10 0.07
OvlAdjV/S: 0.11 0.04
Crit Moves: ****

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 MacArthur (NS) at Ford/Bonita Canyon (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.771
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic components and their values.

Saturation Flow Module: Table with 12 columns representing saturation flow values and adjustments.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 MacArthur (NS) at San Joaquin (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.839
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 141 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:	2	0	3	0	1	1	3	0	2	1	0	2

Volume Module:

Base Vol:	57	1727	21	628	1682	408	643	426	74	34	264	463
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	1813	22	659	1766	428	643	426	74	34	264	463
Added Vol:	1	59	0	0	101	4	2	11	1	0	9	0
PasserByVol:	2	8	0	1	8	40	92	6	0	0	6	0
Initial Fut:	63	1880	22	660	1875	472	737	443	75	34	279	463
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:	63	1880	22	660	1875	0	737	443	75	34	279	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	1880	22	660	1875	0	737	443	75	34	279	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:	63	1880	22	660	1875	0	737	443	75	34	279	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	1.00	2.00	3.00	1.00	3.00	2.57	0.43	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	4105	695	1600	3200	1600

Capacity Analysis Module:

Vol/Sat:	0.02	0.39	0.01	0.21	0.39	0.00	0.15	0.11	0.11	0.02	0.09	0.00
Crit Moves:	****			****			****			****		

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 MacArthur (NS) at San Miguel (EW)

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

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and 12 rows of adjustment factors.

Saturation Flow Module: Table with 12 columns and 4 rows showing saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns and 4 rows showing capacity analysis metrics.

Crit Moves: ****

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 MacArthur (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.746
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 90 Level of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and 12 rows for various adjustment factors like Base Vol, Growth Adj, etc.

Saturation Flow Module: Table with 12 columns for saturation flow and 4 rows for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis and 3 rows for Vol/Sat, Crit Moves, and a summary row.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Marguerite (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.919
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level of Service: E

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include North Bound, South Bound, East Bound, West Bound movements and their respective parameters.

Volume Module: Table showing traffic volume adjustments including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each approach.

Capacity Analysis Module: Table showing Vol/Sat and Crit Moves for each approach.



APPENDIX M

Existing (2016) No Project and Plus Project Intersection Level of Service Worksheets (HCM Methodology)

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.587
Loss Time (sec): 0 Average Delay (sec/veh): 18.7
Optimal Cycle: 55 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic scenarios and 12 rows of adjustment factors like Base Vol, Growth Adj, etc.

Saturation Flow Module: Table with 12 columns and 5 rows showing saturation flow rates and adjustment factors.

Capacity Analysis Module: Table with 12 columns and 10 rows showing capacity analysis metrics like Vol/Sat, Crit Moves, Green/Cycle, etc.

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.676
Loss Time (sec): 0 Average Delay (sec/veh): 11.4
Optimal Cycle: 70 Level of Service: B

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include North Bound, South Bound, East Bound, West Bound movements and their respective parameters.

Volume Module: Table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume for each movement.

Saturation Flow Module: Table showing Sat/Lane, Adjustment, Lanes, Final Sat. for each movement.

Capacity Analysis Module: Table showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ for each movement.

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.645
Loss Time (sec): 0 Average Delay (sec/veh): 17.8
Optimal Cycle: 64 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, Final Sat., etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis factors like Vol/Sat, Crit Moves, Green/Cycle, etc.

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.648
Loss Time (sec): 0 Average Delay (sec/veh): 13.0
Optimal Cycle: 65 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves, Green/Cycle, etc.

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.587
Loss Time (sec): 0 Average Delay (sec/veh): 18.7
Optimal Cycle: 55 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic volumes and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow rates and adjustment factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics like Vol/Sat, Crit Moves, Green/Cycle, etc.

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.676
Loss Time (sec): 0 Average Delay (sec/veh): 11.3
Optimal Cycle: 70 Level of Service: B

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include North Bound, South Bound, East Bound, West Bound movements and their respective parameters.

Volume Module: Table showing traffic volume adjustments including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module: Table showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ values.

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.646
Loss Time (sec): 0 Average Delay (sec/veh): 17.8
Optimal Cycle: 64 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic volumes and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow rates and adjustment factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics like Vol/Sat, Crit Moves, Green/Cycle, etc.

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.648
Loss Time (sec): 0 Average Delay (sec/veh): 13.0
Optimal Cycle: 65 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves, Green/Cycle, etc.

Note: Queue reported is the number of cars per lane.



APPENDIX N

Future (2021) Plus Approved Plus Cumulative Plus Growth No Project and Plus Project Intersection Level of Service Worksheets (HCM Methodology)

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.652
Loss Time (sec): 0 Average Delay (sec/veh): 19.0
Optimal Cycle: 65 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for traffic volume metrics across four directions.

Saturation Flow Module: Table with 12 columns for saturation flow and adjustment factors.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics like Vol/Sat, Crit Moves, and Delay/Veh.

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.764
Loss Time (sec): 0 Average Delay (sec/veh): 15.1
Optimal Cycle: 96 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			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	0	0	1	0	3	0	1	0	3

Volume Module:

Base Vol:	369	16	46	27	8	38	34	2548	383	93	1416	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	369	16	46	27	8	38	36	2675	402	98	1487	34
Added Vol:	1	0	1	0	0	0	2	82	0	3	186	0
PasserByVol:	1	6	0	62	3	41	72	63	0	0	80	15
Initial Fut:	371	22	47	89	11	79	110	2820	402	101	1753	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	371	22	47	89	11	79	110	2820	402	101	1753	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	371	22	47	89	11	79	110	2820	402	101	1753	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	371	22	47	89	11	79	110	2820	402	101	1753	49

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.94	0.94	0.95	0.87	0.87	0.95	0.91	0.85	0.95	0.91	0.91
Lanes:	2.65	0.11	0.24	1.00	0.12	0.88	1.00	3.00	1.00	1.00	3.89	0.11
Final Sat.:	4612	201	429	1805	202	1448	1805	5187	1615	1805	6702	186

Capacity Analysis Module:

Vol/Sat:	0.08	0.11	0.11	0.05	0.05	0.05	0.06	0.54	0.25	0.06	0.26	0.26
Crit Moves:	****			****			****			****		
Green/Cycle:	0.14	0.14	0.14	0.07	0.07	0.07	0.15	0.71	0.71	0.07	0.64	0.64
Volume/Cap:	0.56	0.76	0.76	0.69	0.76	0.76	0.41	0.76	0.35	0.76	0.41	0.41
Delay/Veh:	40.8	47.2	47.2	60.1	70.7	70.7	39.7	10.1	5.7	68.3	9.0	9.0
User DelAdj:	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:	40.8	47.2	47.2	60.1	70.7	70.7	39.7	10.1	5.7	68.3	9.0	9.0
LOS by Move:	D	D	D	E	E	E	D	B	A	E	A	A
HCM2kAvgQ:	5	8	8	4	4	4	3	21	5	3	7	7

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.753
Loss Time (sec): 0 Average Delay (sec/veh): 19.3
Optimal Cycle: 92 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			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	1	1	0	1	2	0	2	1	0	3

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	17	33	52	874	51	141	124	1536	23	50	2136	1217
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	17	33	52	874	51	141	130	1613	24	53	2243	1278
Added Vol:	0	0	0	64	0	0	0	175	0	0	126	37
PasserByVol:	0	0	0	54	0	39	42	119	0	0	137	54
Initial Fut:	17	33	52	992	51	180	172	1907	24	53	2506	1369
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:	17	33	52	992	51	180	172	1907	24	53	2506	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	33	52	992	51	180	172	1907	24	53	2506	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:	17	33	52	992	51	180	172	1907	24	53	2506	0

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.86	0.86	0.92	1.00	0.85	0.92	0.91	0.91	0.95	0.91	1.00
Lanes:	1.00	1.00	1.00	3.00	1.00	1.00	2.00	2.96	0.04	1.00	3.00	1.00
Final Sat.:	1805	1639	1639	5253	1900	1615	3502	5112	65	1805	5187	1900

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.01	0.02	0.03	0.19	0.03	0.11	0.05	0.37	0.37	0.03	0.48	0.00
Crit Moves:			****	****			****			****		
Green/Cycle:	0.04	0.04	0.04	0.25	0.25	0.25	0.07	0.66	0.66	0.05	0.64	0.00
Volume/Cap:	0.22	0.48	0.75	0.75	0.11	0.44	0.75	0.57	0.57	0.57	0.75	0.00
Delay/Veh:	47.8	48.8	71.8	37.1	28.9	32.4	59.1	9.7	9.7	54.5	13.4	0.0
User DelAdj:	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:	47.8	48.8	71.8	37.1	28.9	32.4	59.1	9.7	9.7	54.5	13.4	0.0
LOS by Move:	D	D	E	D	C	C	E	A	A	D	B	A
HCM2kAvgQ:	1	2	3	11	1	5	4	12	12	3	21	0

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.818
Loss Time (sec): 0 Average Delay (sec/veh): 19.2
Optimal Cycle: 125 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for saturation flow factors like Sat/Lane, Adjustment, Lanes, etc.

Capacity Analysis Module: Table with 13 columns for capacity analysis factors like Vol/Sat, Crit Moves, Green/Cycle, etc.

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.652
Loss Time (sec): 0 Average Delay (sec/veh): 19.0
Optimal Cycle: 65 Level of Service: B

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include North Bound, South Bound, East Bound, West Bound movements and their respective parameters.

Volume Module: Table with columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. values.

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.764
Loss Time (sec): 0 Average Delay (sec/veh): 15.1
Optimal Cycle: 97 Level of Service: B

Table with columns: Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include North Bound, South Bound, East Bound, West Bound movements and their respective parameters.

Volume Module: Table with columns for various volume metrics (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume) across four bound directions.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat. across four bound directions.

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ across four bound directions.

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Dover (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.754
Loss Time (sec): 0 Average Delay (sec/veh): 19.3
Optimal Cycle: 93 Level of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic metrics and 12 rows of data including Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns and 5 rows of data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns and 10 rows of data including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, etc.

Note: Queue reported is the number of cars per lane.

OCMA Residential Development Traffic Impact Study
City of Newport Beach

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Bayside (NS) at Pacific Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.818
Loss Time (sec): 0 Average Delay (sec/veh): 19.2
Optimal Cycle: 125 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			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	0	0	1	0	3	0	1	0	3

Volume Module:

Base Vol:	469	26	42	34	23	55	46	1974	490	69	3063	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	469	26	42	34	23	55	48	2073	515	72	3216	38
Added Vol:	5	0	6	0	0	0	11	211	0	13	150	0
PasserByVol:	3	6	0	98	7	80	71	83	2	0	92	30
Initial Fut:	477	32	48	132	30	135	130	2367	517	85	3458	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	477	32	48	132	30	135	130	2367	517	85	3458	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	477	32	48	132	30	135	130	2367	517	85	3458	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	477	32	48	132	30	135	130	2367	517	85	3458	68

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.95	0.88	0.88	0.95	0.91	0.85	0.95	0.91	0.91
Lanes:	2.67	0.13	0.20	1.00	0.18	0.82	1.00	3.00	1.00	1.00	3.92	0.08
Final Sat.:	4661	236	354	1805	303	1363	1805	5187	1615	1805	6763	133

Capacity Analysis Module:

Vol/Sat:	0.10	0.14	0.14	0.07	0.10	0.10	0.07	0.46	0.32	0.05	0.51	0.51
Crit Moves:	****			****			****			****		
Green/Cycle:	0.17	0.17	0.17	0.12	0.12	0.12	0.09	0.65	0.65	0.07	0.62	0.62
Volume/Cap:	0.62	0.82	0.82	0.60	0.82	0.82	0.82	0.71	0.49	0.71	0.82	0.82
Delay/Veh:	40.1	48.0	48.0	46.4	65.2	65.2	71.9	12.2	9.6	63.0	15.7	15.7
User DelAdj:	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:	40.1	48.0	48.0	46.4	65.2	65.2	71.9	12.2	9.6	63.0	15.7	15.7
LOS by Move:	D	D	D	D	E	E	E	B	A	E	B	B
HCM2kAvgQ:	6	10	10	5	7	7	6	18	8	3	22	22

Note: Queue reported is the number of cars per lane.
