Technical Appendix K

Balboa Marina West Traffic Impact Analysis
Kunzman Associates, Inc.
April 17, 2014

KUNZMAN ASSOCIATES, INC.

BALBOA MARINA WEST

TRAFFIC IMPACT ANALYSIS

April 17, 2014

Traffic Engineering | Transportation Planning | Parking | Noise/Vibration | Expert Witness
Air Quality | Global Climate Change | Health Risk Assessment

KUNZMAN ASSOCIATES, INC.

BALBOA MARINA WEST

TRAFFIC IMPACT ANALYSIS

April 17, 2014

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Balboa Marina West

Traffic Impact Analysis

This report contains the traffic impact analysis for the Balboa Marina West project in the City of Newport Beach. The traffic report contains documentation of existing traffic conditions, traffic generated by the project, distribution of the project generated trips to the surrounding roadway network, and an analysis of future traffic conditions. Each of these topics are contained in separate sections of the report. The first section is "Findings", and subsequent sections expand upon the findings. In this way, information on any particular aspect of the study can be easily located by the reader.

The City of Newport Beach (City) and Irvine Company propose a joint project known as Balboa Marina West. The project will include the development of a new point of public access in Newport Harbor; a new public transient dock area, and an expansion to the existing private boat slips at the Balboa Marina. A land-side component with marine commercial development, including a restaurant is also proposed. The project site is located south of East Coast Highway, between the Coast Highway Bridge and Bayside Drive.

The conceptual plan illustrates the Public Transient Docks as Area A, the Private Dock Expansion shown as Area B, and the Landside Marina Development shown as Area C. Areas A and B, known as the “water-side development” will occupy approximately 0.87 acre of water surface owned principally by Irvine Company. The submerged lands at this location are designated State Tidelands administered and under the jurisdiction of the County of Orange.

Area A (Public Transient Dock Area) will provide 12 public boat slips, including the relocation of 4 existing public slips currently located in the private Balboa Marina. The public slips will be transient in nature, meaning that there will be no overnight tie ups allowed. There will be no boat launches from this site. It is anticipated that boaters will access the docks from the water-side and use the docks to tie up and access the existing land-side restaurants and commercial uses. There are no public docks in this area of the Harbor; relocating the 4 existing public boat slips and adding 8 new public boat slips will greatly enhance resident and visiting boater's ability to access the land from the water. In addition, there will be a dedicated pedestrian walkway through the parking lot to allow boaters to navigate from the public dock to the existing uses on the landside.

Area B (Private Dock Expansion Area) will add 24 private boat slips accessible from the existing Balboa Marina and a new private gangway. The marina expansion will include ten new slips for boats 20-feet in length and 14 new slips for boats 35-feet and longer.

In addition to the public and private dock components, Area C will include up to a maximum of 19,400 square feet of marine commercial development, including a restaurant. This development, referred to as the "land-side" development, includes approximately 3.5 acres of the existing parking lot on Irvine Company property immediately north of the existing Balboa Marina docks.

An existing 1,200 square foot structure located at 201 East Coast Highway will be demolished. The existing use, a yacht brokerage and marina restrooms, are anticipated to be accommodated within the new development.

Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to transportation engineering, a glossary of terms is provided in Appendix A.

1. Findings

This section summarizes the existing traffic conditions, project traffic impacts, and the proposed mitigation measures.

Existing Traffic Conditions

a. An existing 1,200 square-foot structure located at 201 East Coast Highway will be demolished. The existing use, a yacht brokerage and marina restrooms, are anticipated to be accommodated within the new development.

b. The project site currently has access to East Coast Highway and Bayside Drive.

c. Pursuant to discussions with the City of Newport Beach staff, the study area includes the following study area intersections:

Newport Boulevard SB Ramp (NS) at:
- West Coast Highway (EW)

Riverside Avenue (NS) at:
- West Coast Highway (EW)

Tustin Avenue (NS) at:
- West Coast Highway (EW)

Irvine Avenue (NS) at:
- 19th Street/Dover Drive (EW)
- 17th Street/Westcliff Drive (EW)

Dover Drive (NS) at:
- Westcliff Drive (EW)
- 16th Street (EW)
- West Coast Highway (EW)

Bayside Drive (NS) at:
- East Coast Highway (EW)

Jamboree Road (NS) at:
- San Joaquin Hills Road (EW)
- Santa Barbara Drive (EW)
- East Coast Highway (EW)

Santa Cruz Drive (NS) at:
- San Joaquin Hills Road (EW)

Santa Rosa Drive (NS) at:
San Joaquin Hills Road (EW)

Newport Center Drive (NS) at:
East Coast Highway (EW)

Avocado Avenue (NS) at:
East Coast Highway (EW)

MacArthur Boulevard (NS) at:
San Joaquin Hills Road (EW)
San Miguel Drive (EW)
East Coast Highway (EW)

d. For existing (Year 2014) traffic conditions, the study area intersections currently operate at Level of Service D or better during the morning/evening peak hours.

Traffic Summary

a. The City of Newport Beach (City) and Irvine Company propose a joint project known as Balboa Marina West. The project will include the development of a new point of public access in Newport Harbor; a new public transient dock area, and an expansion to the existing private boat slips at the Balboa Marina. A land-side component with marine commercial development, including a restaurant is also proposed.

b. The proposed development is projected to generate a total of approximately 1,506 daily vehicle trips, 14 of which occur in the morning peak hour and 74 of which occur during the evening peak hour.

c. For existing (Year 2014) + project traffic conditions, the study area intersections are projected to operate at Level of Service D or better during the morning/evening peak hours.

d. The City of Newport Beach staff provided the list of approved and cumulative projects within the study area. The approved projects consist of development that has been approved but are not fully completed. Cumulative projects are known, but not approved project developments that are reasonably expected to be completed or nearly completed at the same time as the proposed project.

e. The Traffic Phasing Ordinance (TPO) analysis resulted in the following study area intersections exceeding the one-percent threshold and requiring additional analysis:

Dover Drive (NS) at:
Westcliff Drive (EW) – Evening Peak Hour
16th Street (EW) – Evening Peak Hour
West Coast Highway (EW) – Evening Peak Hour

f. For existing + growth (Year 2017) + approved projects traffic conditions, the study area intersections are projected to operate at Level of Service D or better during the morning/evening peak hours, except for the following study area intersection that is projected to operate at Level of Service E during the morning peak hour:

Newport Boulevard SB Ramp (NS) at:
West Coast Highway (EW) (Morning Peak Hour, Level of Service E)

g. For existing + growth (Year 2017) + approved projects + project traffic conditions, the study area intersections are projected to operate at Level of Service D or better during the morning/evening peak hours, except for the following study area intersection that is projected to operate at Level of Service E during the morning peak hour:

Newport Boulevard SB Ramp (NS) at:
West Coast Highway (EW) (Morning Peak Hour, Level of Service E)

h. For existing + growth (Year 2017) + approved projects + cumulative projects traffic conditions, the study area intersections are projected to operate at Level of Service D or better during the morning/evening peak hours, except for the following study area intersection that is projected to operate at Level of Service E during the morning peak hour:

Newport Boulevard SB Ramp (NS) at:
West Coast Highway (EW) (Morning Peak Hour, Level of Service E)

i. For existing + growth (Year 2017) + approved projects + cumulative projects + project traffic conditions, the study area intersections are projected to operate at Level of Service D or better during the morning/evening peak hours, except for the following study area intersection that is projected to operate at Level of Service E during the morning peak hour:

Newport Boulevard SB Ramp (NS) at:
West Coast Highway (EW) (Morning Peak Hour, Level of Service E)

Recommended Improvements

a. Site-specific circulation and access recommendations are depicted on Figure 28.

b. On-site parking shall be provided to meet City of Newport Beach parking code requirements. Parking layout shall comply with City parking lot standards (see Appendix I).

c. All dead end drive aisles shall be accompanied by a dedicated turn around space.

d. Tandem parking spaces shall meet City of Newport Beach parking code requirements and include attendant/valet service. A valet operation plan shall be required with project approval.

e. Sight distance at the project accesses shall be reviewed with respect to City of Newport Beach standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.

f. On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project and as approved by the City of Newport Beach.

Conclusions

a. As shown in Table 3 for the existing (Year 2014) + project analysis, the project generated trips did not result in a significant impact at the study area intersections (increase of one-percent or more at a study area intersection operating at worse than Level of Service D during the morning/evening peak hours); therefore, no improvements are recommended at the study area intersections.

b. As shown in Table 6 for the TPO analysis, the project generated trips did not result in a significant impact at the study area intersections (increase of one-percent or more at a study area intersection operating at worse than Level of Service D during the morning/evening peak hours); therefore, no improvements are recommended at the study area intersections.

c. As shown in Table 8 for the CEQA analysis, the project generated trips did not result in a significant impact at the study area intersections (increase of one-percent or more at a study area intersection operating at worse than Level of Service D during the morning/evening peak hours); therefore, no improvements are recommended at the study area intersections.

d. Based upon the delay methodology required by the California Department of Transportation, the delay and Level of Service summary for the study area intersections are shown in Table 9. As previously noted, the project is projected to not have a significant impact at the study area intersections.

e. Based upon the CMP thresholds, the project generated trips did not result in a significant impact at the study area intersections; therefore, no improvements are recommended at the study area intersections.

2. Project Description

This section discusses the project's location, proposed development, and traffic characteristics of such a development. Figure 1 shows the project location map. Figure 2 illustrates the conceptual plan.

Location

The project site is located south of East Coast Highway, between the Coast Highway Bridge and Bayside Drive. The project site currently has access to East Coast Highway and Bayside Drive.

Proposed Development

The City of Newport Beach (City) and Irvine Company propose a joint project known as Balboa Marina West. The project will include the development of a new point of public access in Newport Harbor; a new public transient dock area, and an expansion to the existing private boat slips at the Balboa Marina. A land-side component with marine commercial development, including a restaurant is also proposed. The project site is located south of East Coast Highway, between the Coast Highway Bridge and Bayside Drive.

The conceptual plan (see Figure 2) illustrates the Public Transient Docks as Area A, the Private Dock Expansion shown as Area B, and the Landside Marina Development shown as Area C. Areas A and B, known as the "water-side development" will occupy approximately 0.87 acre of water surface owned principally by Irvine Company. The submerged lands at this location are designated State Tidelands administered and under the jurisdiction of the County of Orange.

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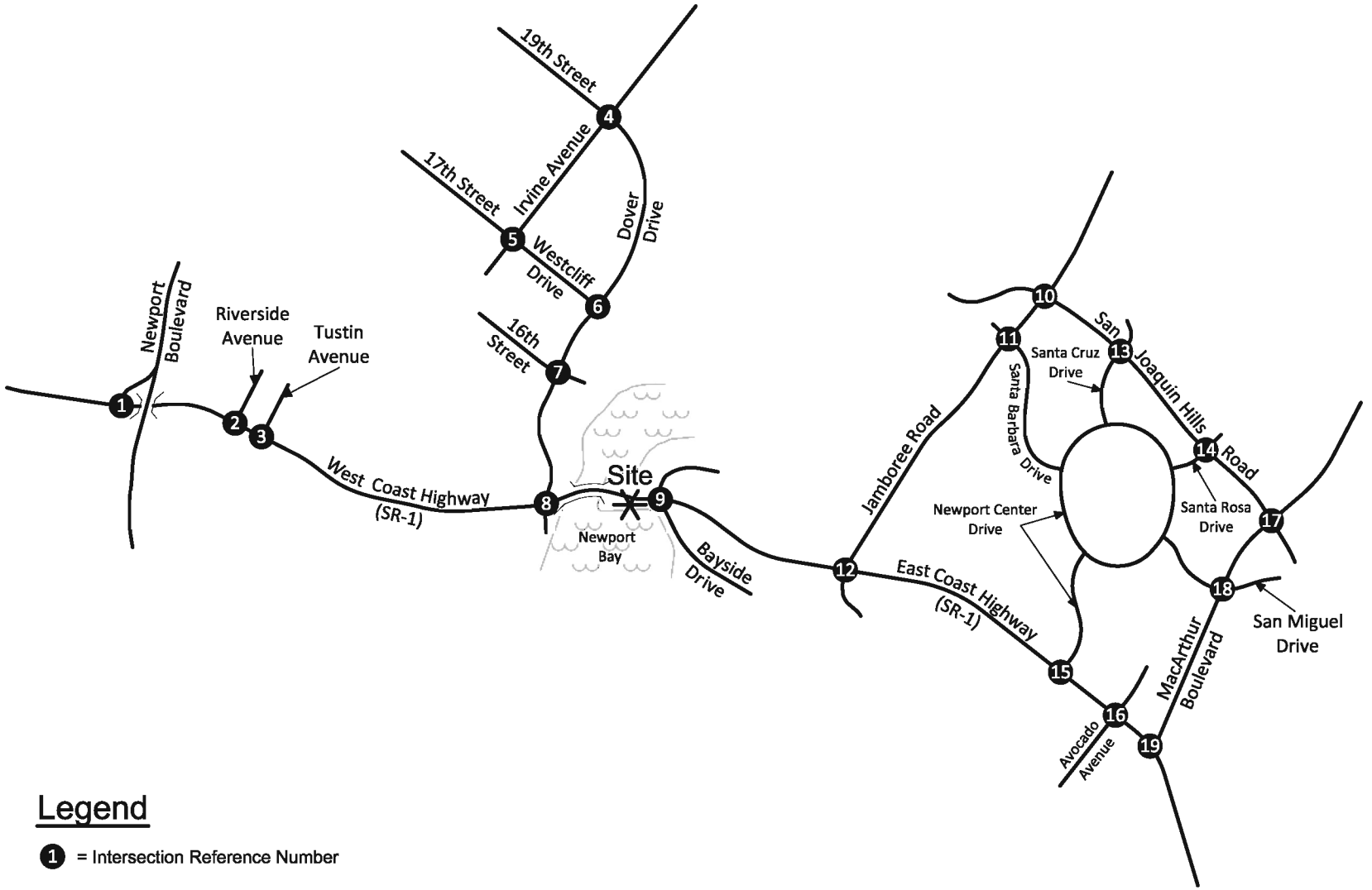
In addition to the public and private dock components, Area C will include up to a maximum of 19,400 square feet of marine commercial development, including a restaurant. This development, referred to as the "land-side" development, includes approximately 3.5 acres of the existing parking lot on Irvine Company property immediately north of the existing Balboa Marina docks.

An existing 1,200 square foot structure located at 201 East Coast Highway will be demolished. The existing use, a yacht brokerage and marina restrooms, are anticipated to be accommodated within the new development.

Figure 1
Project Location Map



Legend

1 = Intersection Reference Number

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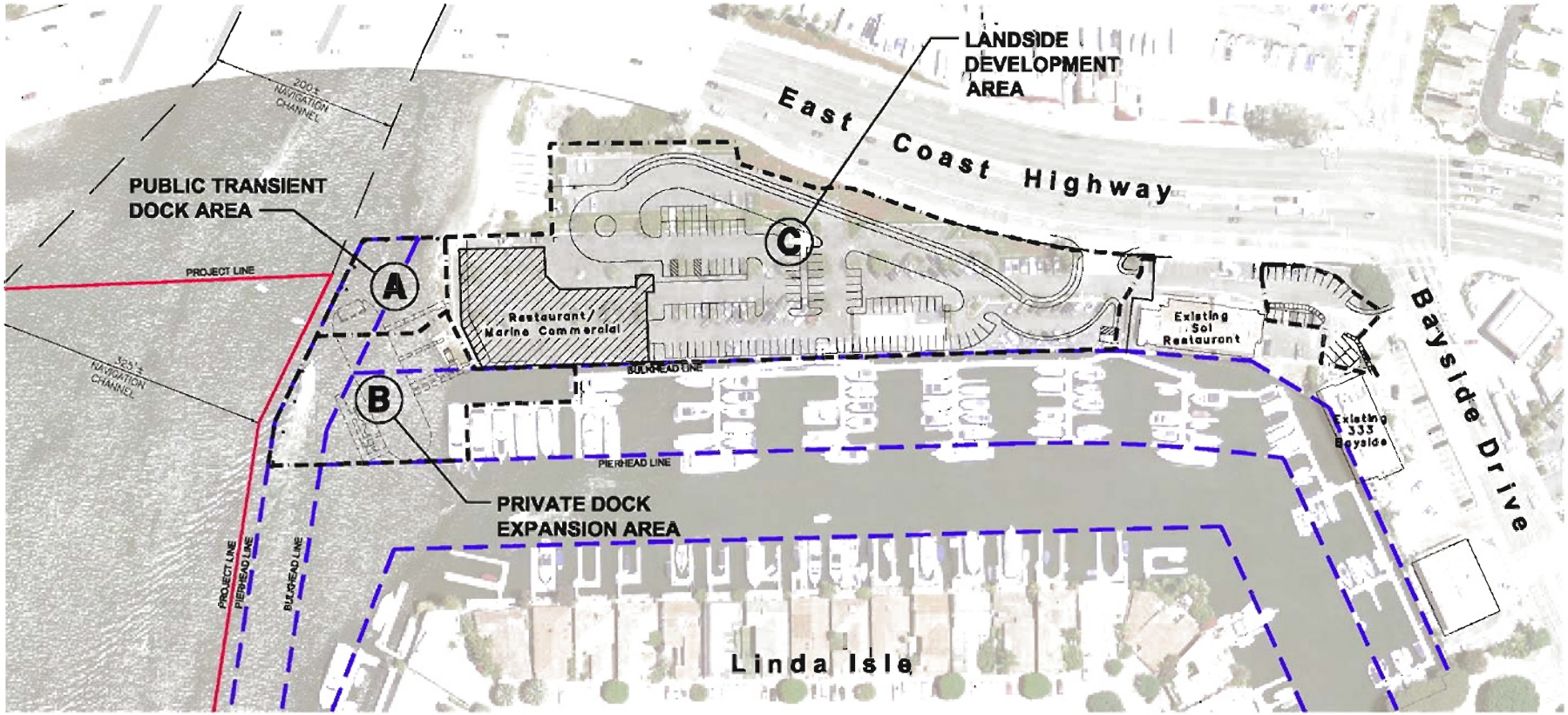
Figure 2
Conceptual Plan



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3. Existing Traffic Conditions

The traffic conditions as they exist today are discussed below and illustrated on Figures 3 to 8.

Study Area Intersections

Pursuant to discussions with the City of Newport Beach staff, the study area includes the following study area intersections:

Newport Boulevard (NS) at:
- West Coast Highway (EW)

Riverside Avenue (NS) at:
- West Coast Highway (EW)

Tustin Avenue (NS) at:
- West Coast Highway (EW)

Irvine Avenue (NS) at:
- 19th Street/Dover Drive (EW)
- 17th Street/Westcliff Drive (EW)

Dover Drive (NS) at:
- Westcliff Drive (EW)
- 16th Street (EW)
- West Coast Highway (EW)

Bayside Drive (NS) at:
- East Coast Highway (EW)

Jamboree Road (NS) at:
- San Joaquin Hills Road (EW)
- Santa Barbara Drive (EW)
- East Coast Highway (EW)

Santa Cruz Drive (NS) at:
- San Joaquin Hills Road (EW)

Santa Rosa Drive (NS) at:
- San Joaquin Hills Road (EW)

Newport Center Drive (NS) at:
- East Coast Highway (EW)

Avocado Avenue (NS) at:
- East Coast Highway (EW)

MacArthur Boulevard (NS) at:
San Joaquin Hills Road (EW)
San Miguel Drive (EW)
East Coast Highway (EW)

Existing Travel Lanes and Intersection Controls

Figure 3 identifies the existing intersection controls and Figure 4 illustrates the existing number of through lanes for the study area intersections.

Existing Master Plan of Arterial Highways

Figure 5 exhibits the current City of Newport Beach General Plan Circulation Element. Both existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 5. This figure shows the nature and extent of arterial highways that are needed to serve adequately the ultimate development depicted by the Land Use Element of the General Plan. Figure 6 shows the City of Newport Beach General Plan roadway cross-sections.

Existing Traffic Volumes

The City of Newport Beach staff provided Year 2012/2013 morning and evening peak hour approach volumes at each study area intersection (see Appendix B). The Year 2014 traffic volumes are the Year 2012/2013 traffic volumes adjusted based on a 1 percent annual growth rate. The regional growth rate has been obtained from the City of Newport Beach (see Appendix E). Existing (Year 2014) morning and evening peak hour intersection turning movement volumes are shown on Figures 7 and 8, respectively.

Existing Intersection Capacity Utilization

Consistent with the City of Newport Beach approved methodology, the technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. An Intersection Capacity Utilization value is usually expressed as a decimal. The decimal represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The Levels of Service for existing (Year 2014) traffic conditions have been calculated and are shown in Table 1. Existing (Year 2014) Intersection Capacity Utilization worksheets and the Level of Service description are provided in Appendix C. For existing (Year 2014) traffic conditions, the study area intersections currently operate at Level of Service D or better during the morning/evening peak hours.

Table 1

Existing (Year 2014) Intersection Capacity Utilization and Levels of Service

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour ICU-LOS[2]	
		Northbound			Southbound			Eastbound			Westbound				
		L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Newport Boulevard SB Ramp (NS) at:															
West Coast Highway (EW)	TS	0	0	0	2	0	1	0	2	1>>	0	3	1>>	0.87-D	0.66-B
Riverside Avenue (NS) at:															
West Coast Highway (EW)	TS	0	1	0	0.5	0.5	1>	1	1.5	0.5	1	3	1	0.77-C	0.79-C
Tustin Avenue (NS) at:															
West Coast Highway (EW)	TS	0	0	0	0	1	0	1	1.5	0.5	0	2.5	0.5	0.76-C	0.61-B
Irvine Avenue (NS) at:															
19th Street/Dover Drive (EW)	TS	1	2	d	1	2	d	1	0.5	0.5	1	1	1	0.52-A	0.62-B
17th Street/Westcliff Drive (EW)	TS	2	2	d	2	2	d	2	1.5	0.5	1	1.5	0.5	0.46-A	0.71-C
Dover Drive (NS) at:															
Westcliff Drive (EW)	TS	2	2	0	0	1	1	2	0	1>>	0	0	0	0.43-A	0.44-A
16th Street (EW)	TS	1	2	d	1	2	d	0.5	0.5	d	1	1	1	0.50-A	0.50-A
West Coast Highway (EW)	TS	1	1.5	0.5	3	1	1	2	2.5	0.5	1	3	1>>	0.62-B	0.68-B
Bayside Drive (NS) at:															
East Coast Highway (EW)	TS	2.3	0.3	0.3	1	0.5	0.5	1	3	1	1	3.5	0.5	0.65-B	0.62-B
Jamboree Road (NS) at:															
San Joaquin Hills Road (EW)	TS	1	3	1>>	2	3	1>>	1.5	1.5	1	1.5	1.5	1	0.61-B	0.52-A
Santa Barbara Drive (EW)	TS	1	3	1	2	3	1	1	1	1	1.5	0.5	1	0.49-A	0.61-B
East Coast Highway (EW)	TS	1	1.5	0.5	1	2	1>>	3	3.5	0.5	2	4	1	0.57-A	0.66-B
Santa Cruz Drive (NS) at:															
San Joaquin Hills Road (EW)	TS	2	0.5	0.5	1	1.5	0.5	1	2.5	0.5	1	2.5	0.5	0.31-A	0.34-A
Santa Rosa Drive (NS) at:															
San Joaquin Hills Road (EW)	TS	1	1	1>	1	1	1	1	2.5	0.5	2	2.5	0.5	0.33-A	0.47-A
Newport Center Drive (NS) at:															
East Coast Highway (EW)	TS	0	0	0	2	0	1>>	2	3	0	0	3	1>>	0.37-A	0.45-A
Avocado Avenue (NS) at:															
East Coast Highway (EW)	TS	1	1	1	1.5	0.5	1>>	1	3	d	1	3	1	0.45-A	0.50-A
MacArthur Boulevard (NS) at:															
San Joaquin Hills Road (EW)	TS	2	3	1	2	3	1>>	3	2.5	0.5	1	2	1>>	0.64-B	0.73-C
San Miguel Drive (EW)	TS	2	3	1	2	3	1>	3	1.5	0.5	2	1.5	0.5	0.53-A	0.48-A
East Coast Highway (EW)	TS	0	0	0	2	0	1>>	2	3	0	0	3	1>>	0.68-B	0.65-B

[1] L = Left; T = Through; R = Right; >> = Free Right Turn; > = Right Turn Overlap; d = De Facto Right Turn Lane

[2] ICU-LOS = Intersection Capacity Utilization - Level of Service (see Appendix C).

[3] TS = Traffic Signal

Figure 3
Existing Intersection Controls

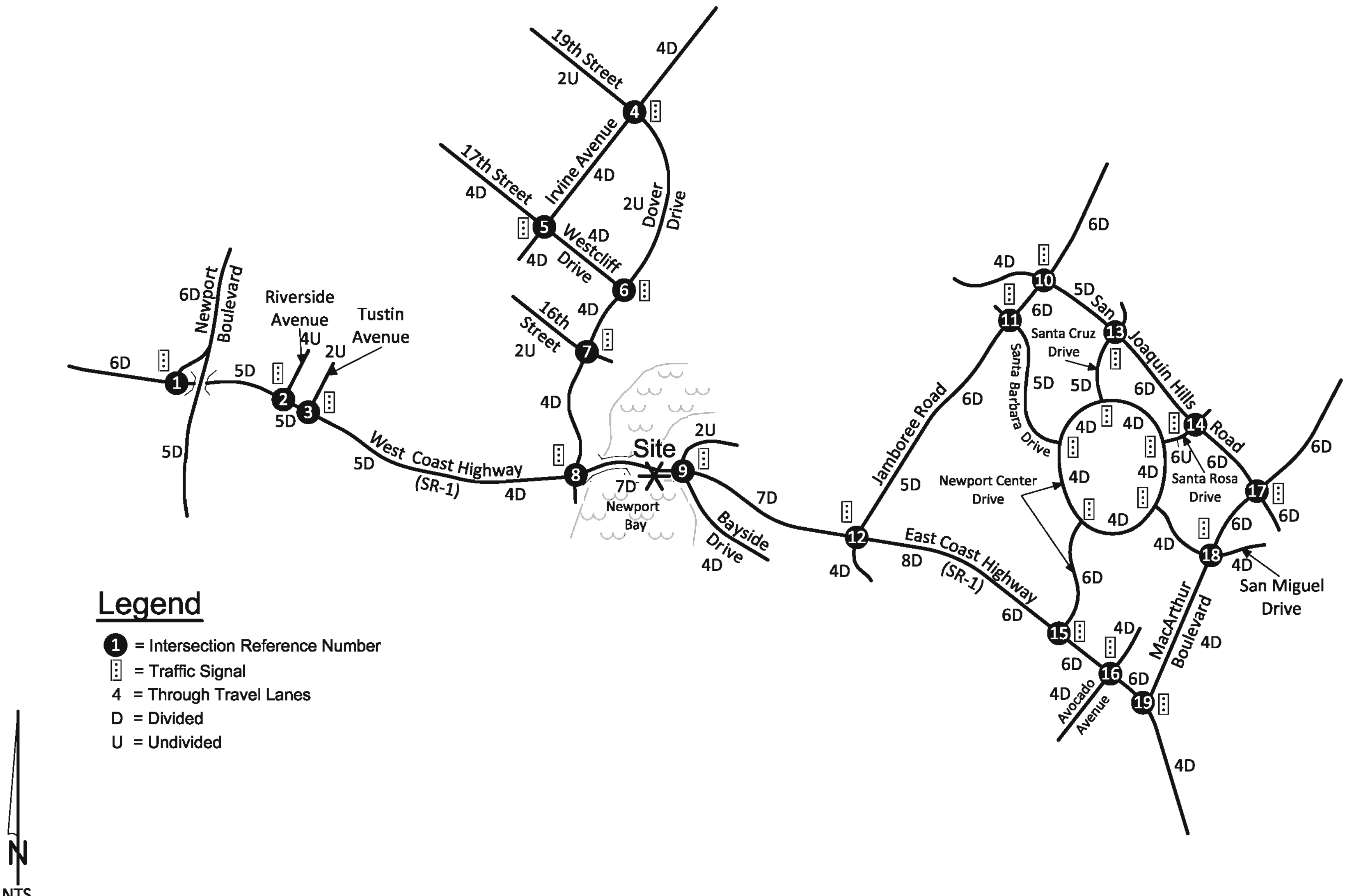

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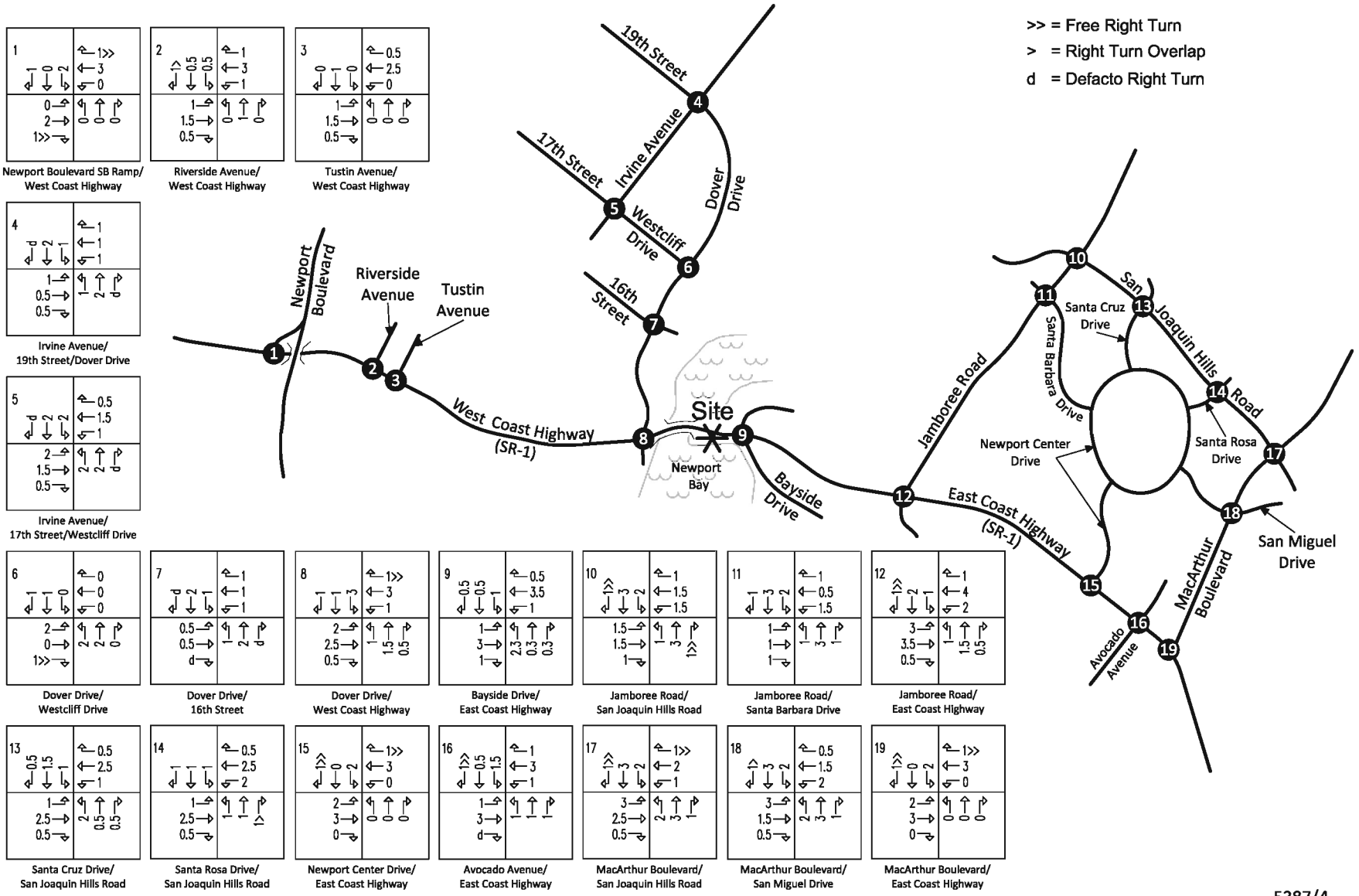
Figure 4
Existing Travel Lanes



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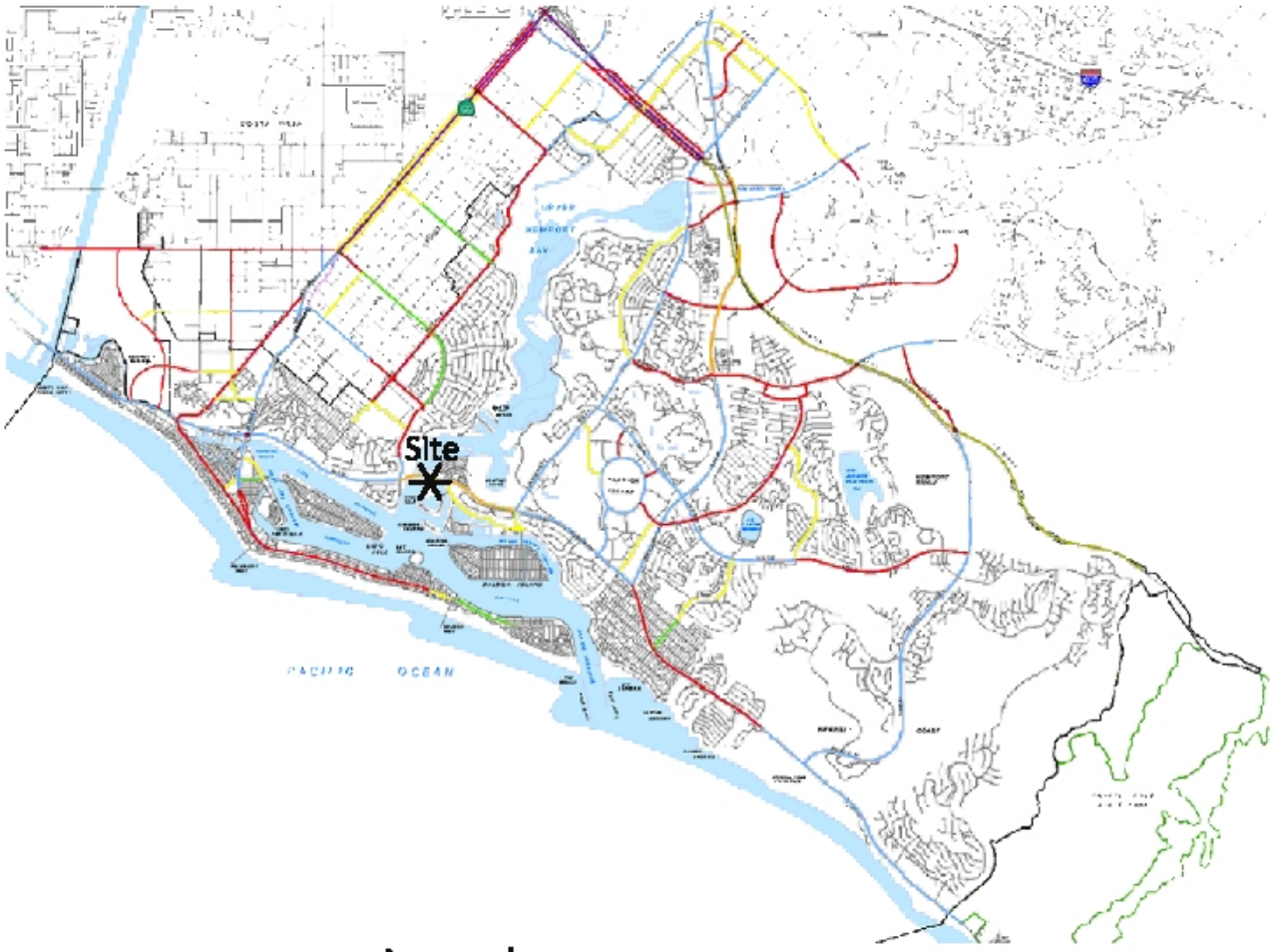
Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 5
City of Newport Beach General Plan Circulation Element



Legend

- ADOPTED INTERCHANGE
- PROPOSED INTERCHANGE
- ROUTES REQUIRING FURTHER COORDINATION **0.75 Miles**
- COMMUTER ROADWAY (TWO LANE UNDIVIDED) **3.24 Miles**
- SECONDARY ROAD (FOUR LANE UNDIVIDED) **16.88 Miles**
- SECONDARY (NOT BUILT) **0.28 Miles**
- PRIMARY ROAD (FOUR LANE DIVIDED) **29.62 Miles**
- PRIMARY ROAD (NOT BUILT) **3.05 Miles**
- MAJOR ROAD (SIX LANE DIVIDED) **30.64 Miles**
- EIGHT LANE ROAD (DIVIDED) **2.81 Miles**
- SAN JOAQUIN HILLS TRANSPORTATION CORRIDOR **5.32 Miles**
- ADOPTED FREEWAY ROUTES **4.48 Miles**
- FUTURE FREEWAY EXTENSION **0.75 Miles**

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Source: City of Newport Beach

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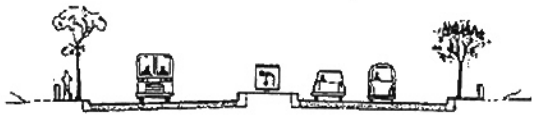
Figure 6
City of Newport Beach General Plan Roadway Cross-Sections

PRINCIPAL - 144'
(8 LANES DIVIDED)

MAJOR - 128'
(6 LANES DIVIDED)

PRIMARY - 104'
(4 LANES DIVIDED)



SECONDARY - 84'
(4 LANES UNDIVIDED)

COMMUTER - 56'
(2 LANES UNDIVIDED)

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Source: City of Newport Beach

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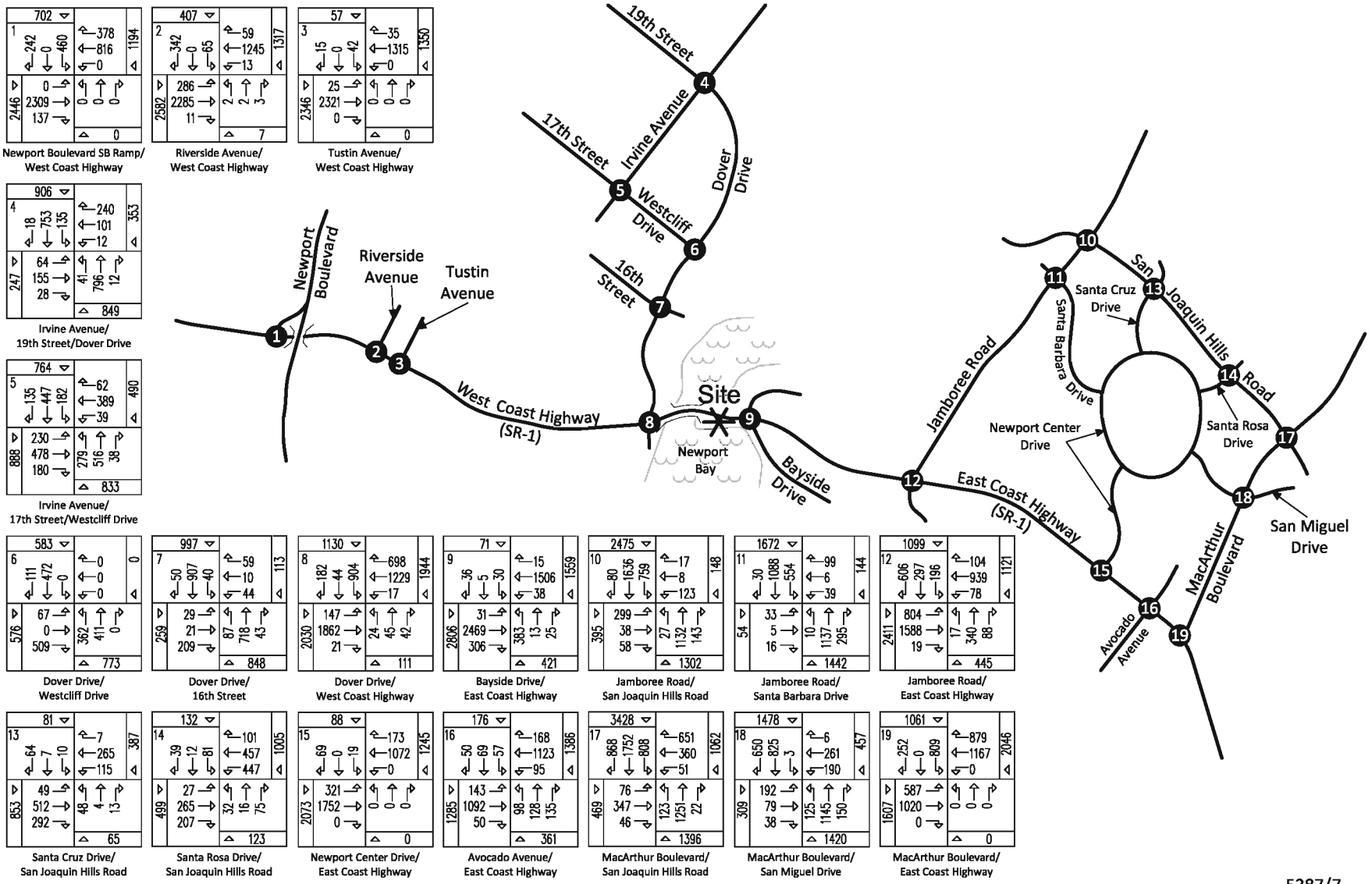
Figure 7
Existing (Year 2014)
Morning Peak Hour Intersection Turning Movement Volumes



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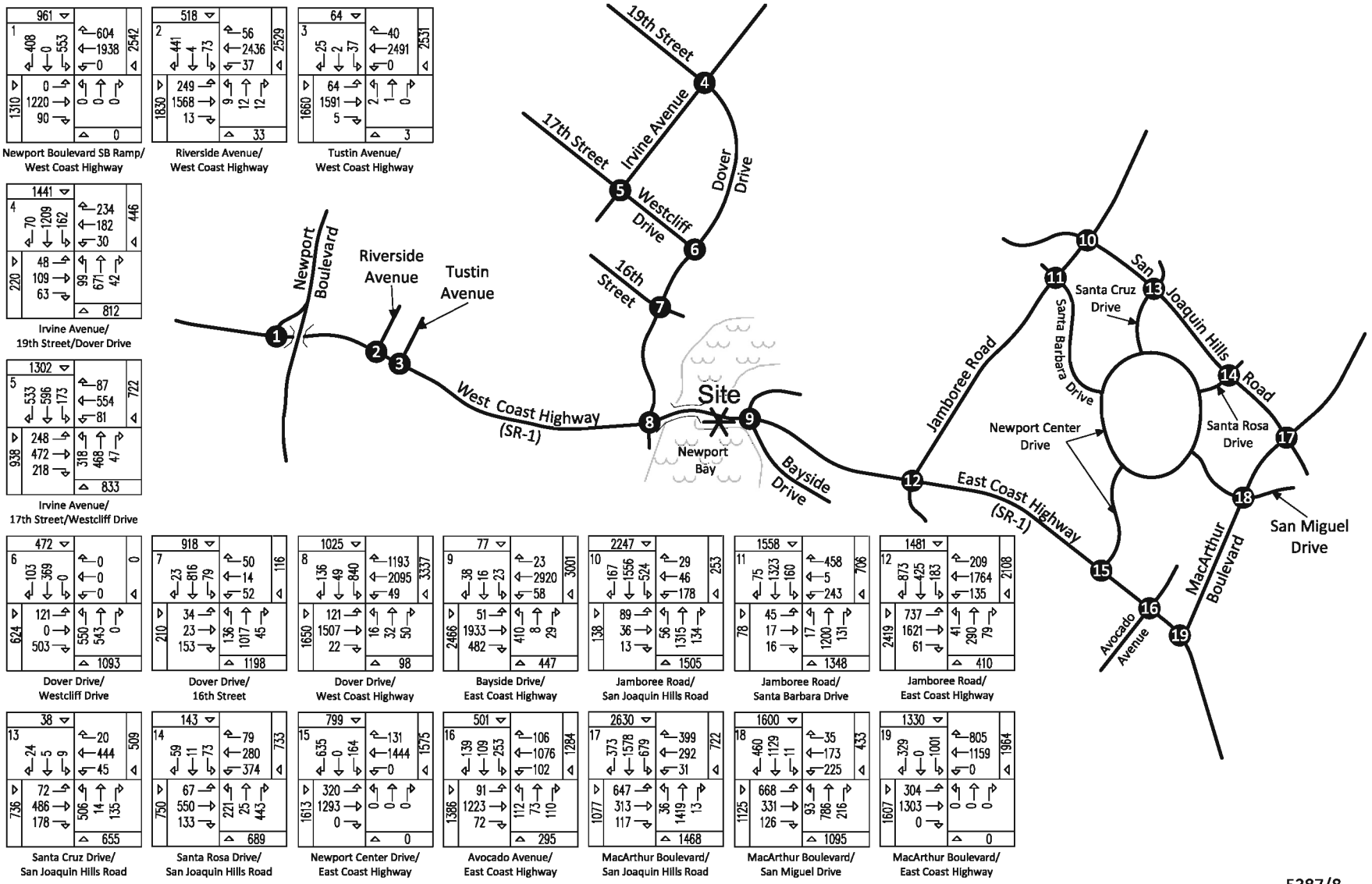
Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 8
Existing (Year 2014)
Evening Peak Hour Intersection Turning Movement Volumes



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Intersection reference numbers are in upper left corner of turning movement boxes.

4. Project Traffic

The City of Newport Beach (City) and Irvine Company propose a joint project known as Balboa Marina West. The project will include the development of a new point of public access in Newport Harbor; a new public transient dock area, and an expansion to the existing private boat slips at the Balboa Marina. A land-side component with marine commercial development, including a restaurant is also proposed.

Trip Generation

The trips generated by the project are determined by multiplying an appropriate trip generation rate by the quantity of land use.

Trip generation rates were determined for daily traffic, morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the proposed land uses. By multiplying the trip generation rates by the land use quantities, the project generated trips volumes are determined. Table 2 exhibits the trip generation rates. The trip generation rates are derived from the Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012. Table 3 shows the project peak hour volumes and project daily traffic volumes.

The proposed development is projected to generate a total of approximately 1,506 daily vehicle trips, 14 of which occur during the morning peak hour and 74 of which occur during the evening peak hour.

It should be noted that a 44% pass-by trip reduction was applied to the quality restaurant land use based upon the Institute of Transportation Engineers, Trip Generation Handbook, 2nd Edition, 2004.

Trip Distribution and Assignment

Trip distribution is the determination of the directional orientation of traffic. It is based on the geographical location of employment centers, commercial centers, recreational areas, or residential area concentrations. The TPO requires the trip distribution percentages to be in increments of 5%. Trip assignment is the determination of which specific route development traffic will use, once the generalized trip distribution is determined. The basic factors affecting route selection are minimum time path and minimum distance path.

Figures 9 and 10 contain the directional distributions and assignment of the project trips for the proposed land uses.

Project-Related Traffic

Based on the identified trip generation and distributions, project morning and evening peak hour intersection turning movement volumes are shown on Figures 11 and 12, respectively.

Table 2

Project Trip Generation[1]

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 Generated[4]									
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

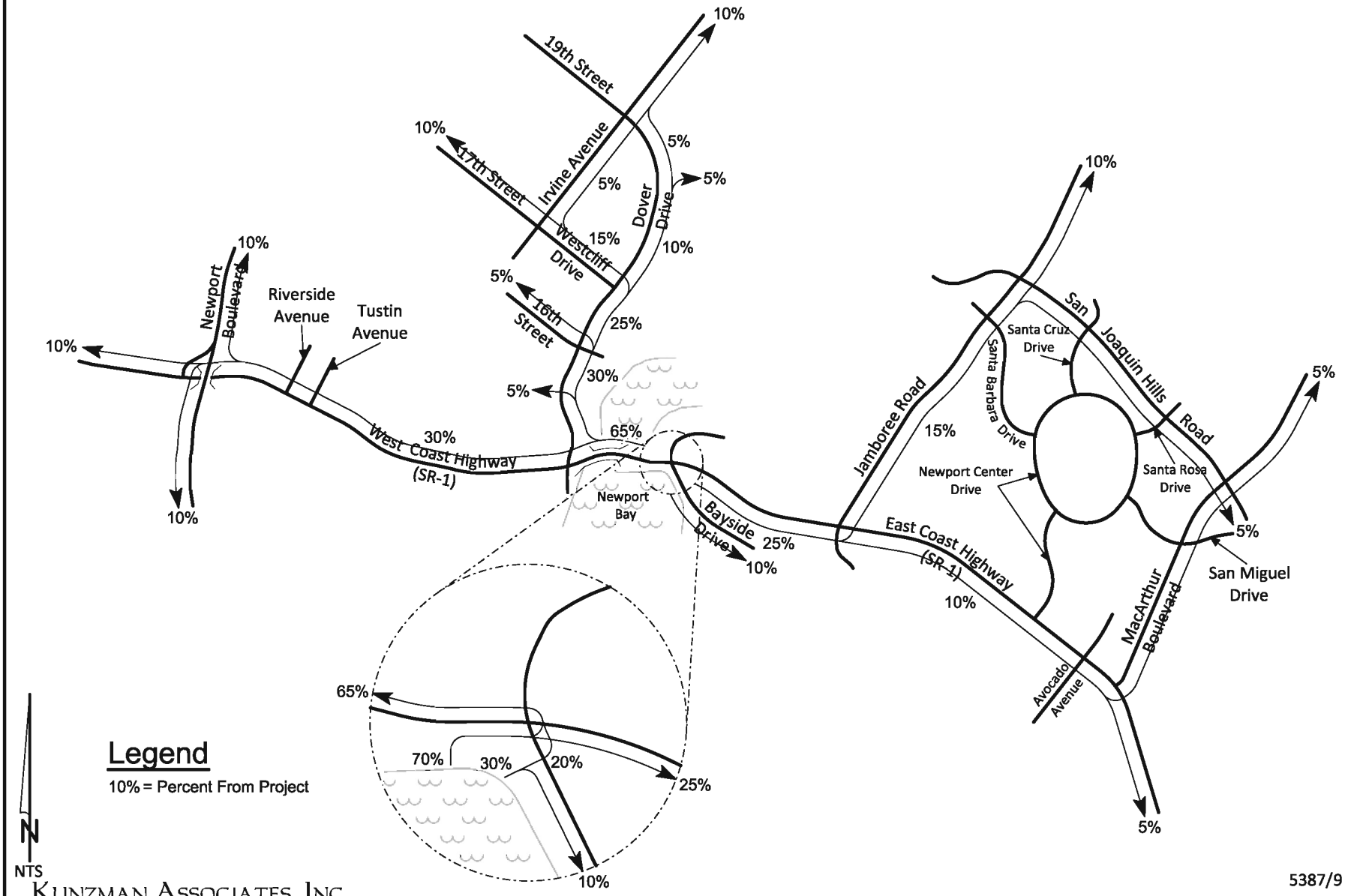
[3] Institute of Transportation Engineers, Trip Generation, does not provide inbound/outbound splits for the peak hour of adjacent street traffic (one hour between 7:00 AM - 9:00 AM) for the Quality Restaurant land use. Therefore, the inbound/outbound splits for the AM peak hour of generator were used.

[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 inlcude 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.

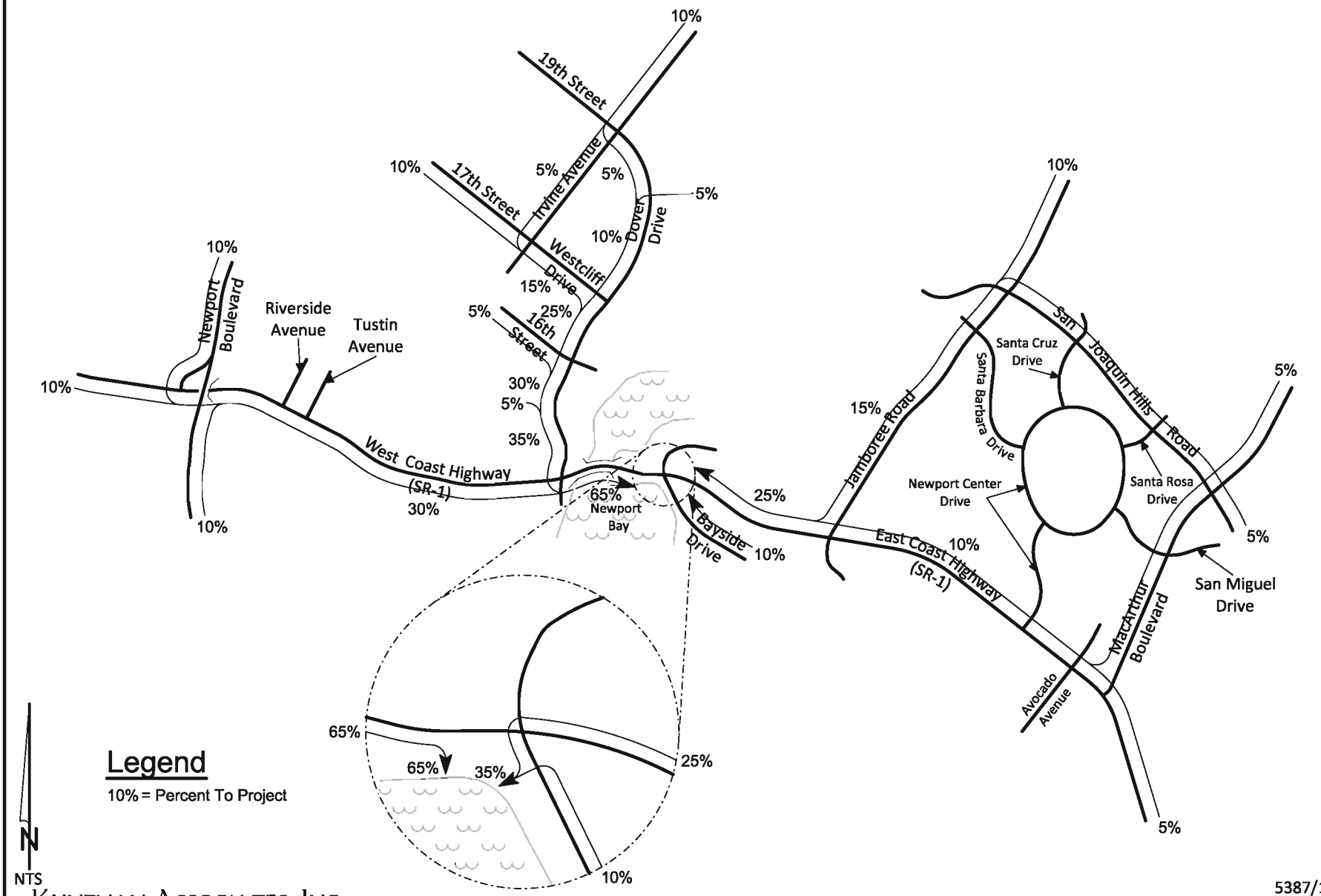
Figure 9
Project Outbound Trip Distribution



KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 10
Project Inbound Trip Distribution



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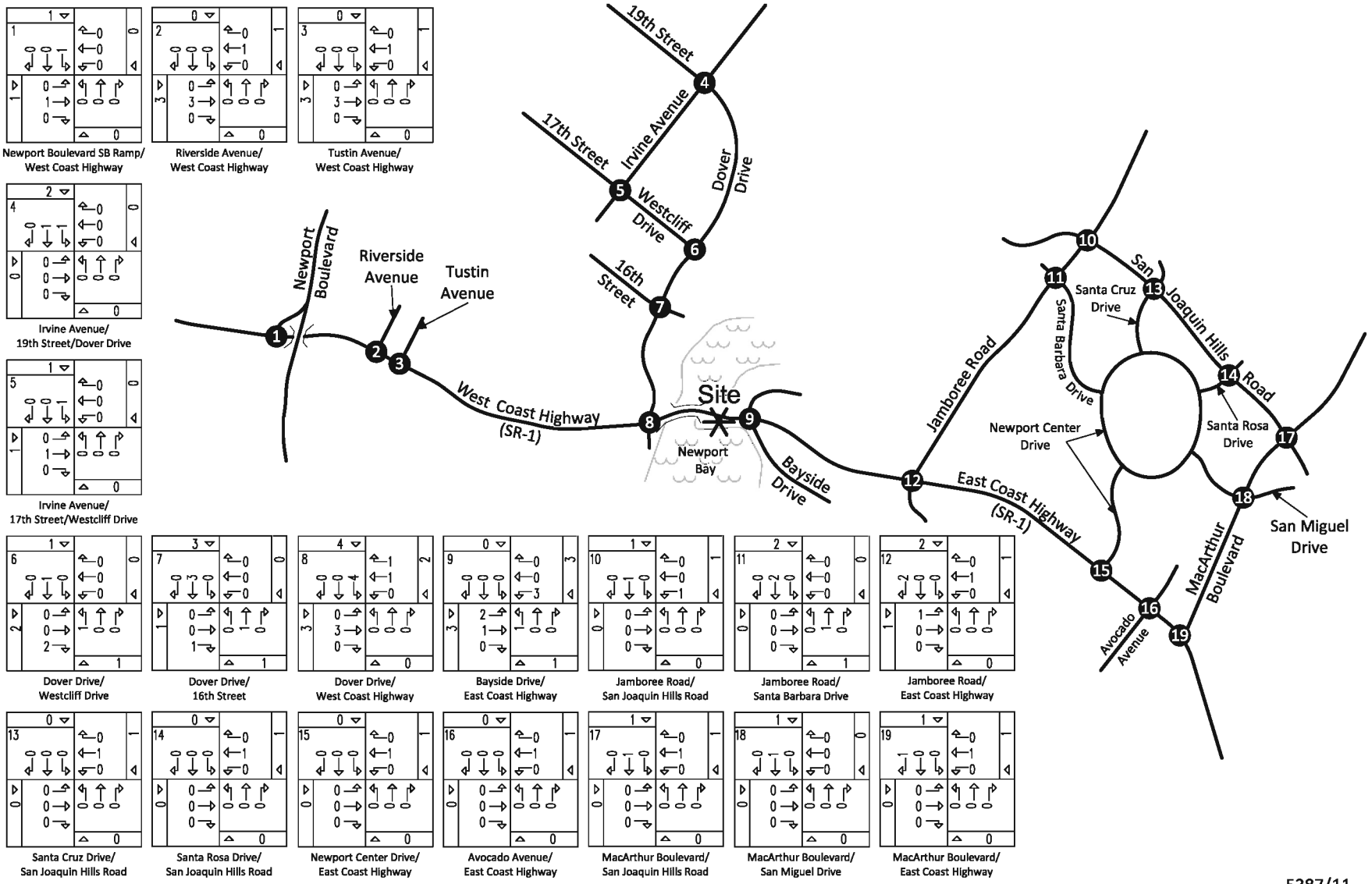
KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

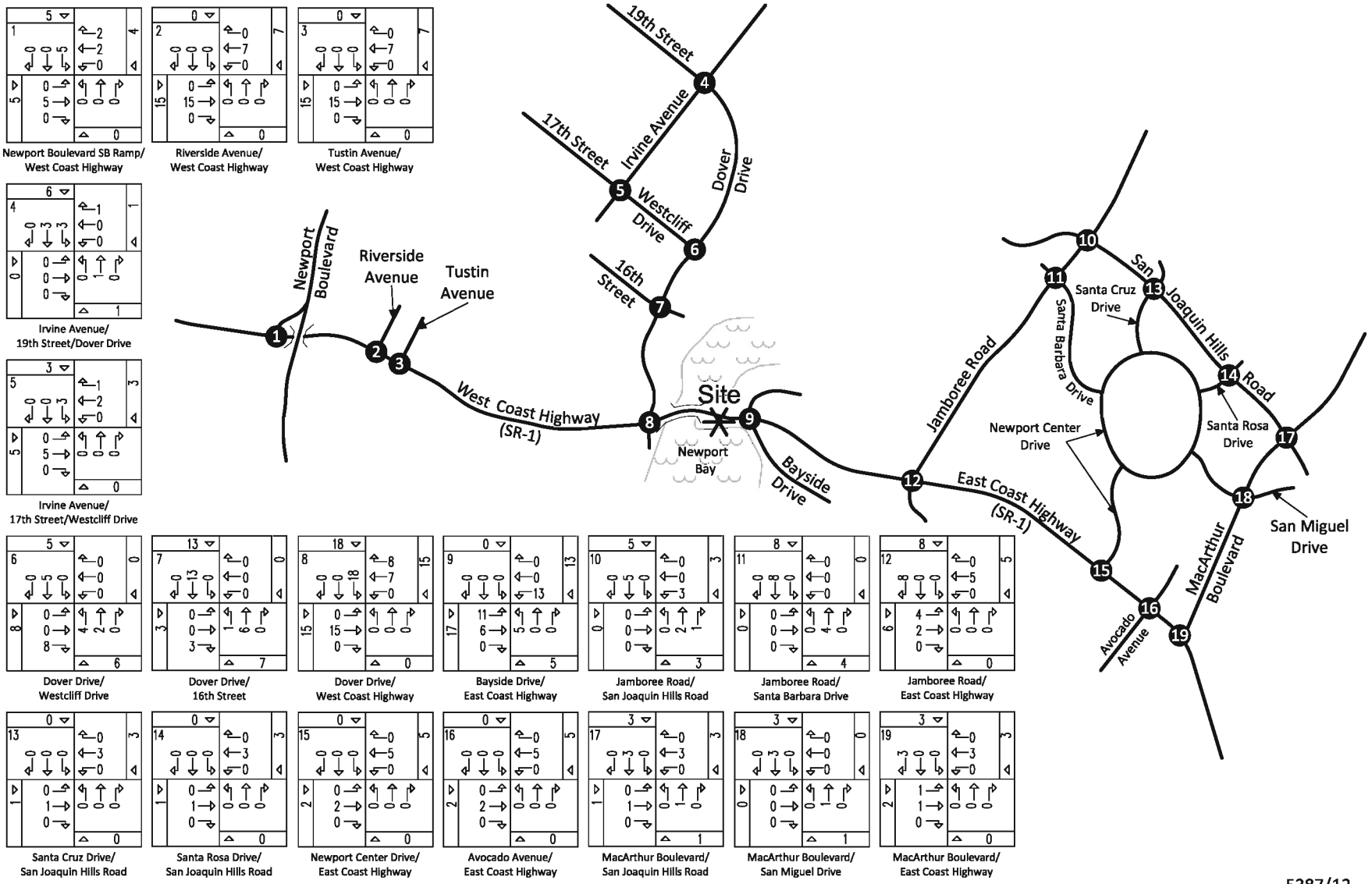
Figure 11
Project Morning Peak Hour Intersection Turning Movement Volumes



5387/11

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 12
Project Evening Peak Hour Intersection Turning Movement Volumes



5387/12

Intersection reference numbers are in upper left corner of turning movement boxes.

5. Existing (Year 2014) + Project Analysis

The existing (Year 2014) + project analysis has been completed for the study area intersections based upon California Environmental Quality Act (CEQA) requirements (this part of the analysis is consistent with CEQA).

Intersection Capacity Utilization

The City of Newport Beach methodology used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value the volume of traffic using the intersection is compared with the capacity of the intersection. An Intersection Capacity Utilization value is usually expressed as a decimal. The decimal represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The Levels of Service for existing (Year 2014) + project traffic conditions have been calculated and are shown in Table 3. Existing (Year 2014) + project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 13 and 14, respectively. Existing (Year 2014) + project Intersection Capacity Utilization worksheets and the Level of Service description are provided in Appendix C. For existing (Year 2014) + project traffic conditions, the study area intersections are projected to operate at Level of Service D or better during the morning/evening peak hours.

Significance Criteria

The intersection significance criteria for the City of Newport Beach requires an increase of one-percent or more at a study area intersection operating at worse than Level of Service D during the morning/evening peak hours.

As shown in Table 3 for the existing (Year 2014) + project analysis, the project generated trips did not result in a significant impact at the study area intersections; therefore, no improvements are recommended at the study area intersections.

Table 3

Existing (Year 2014) + Project Intersection Capacity Utilization and Levels of Service

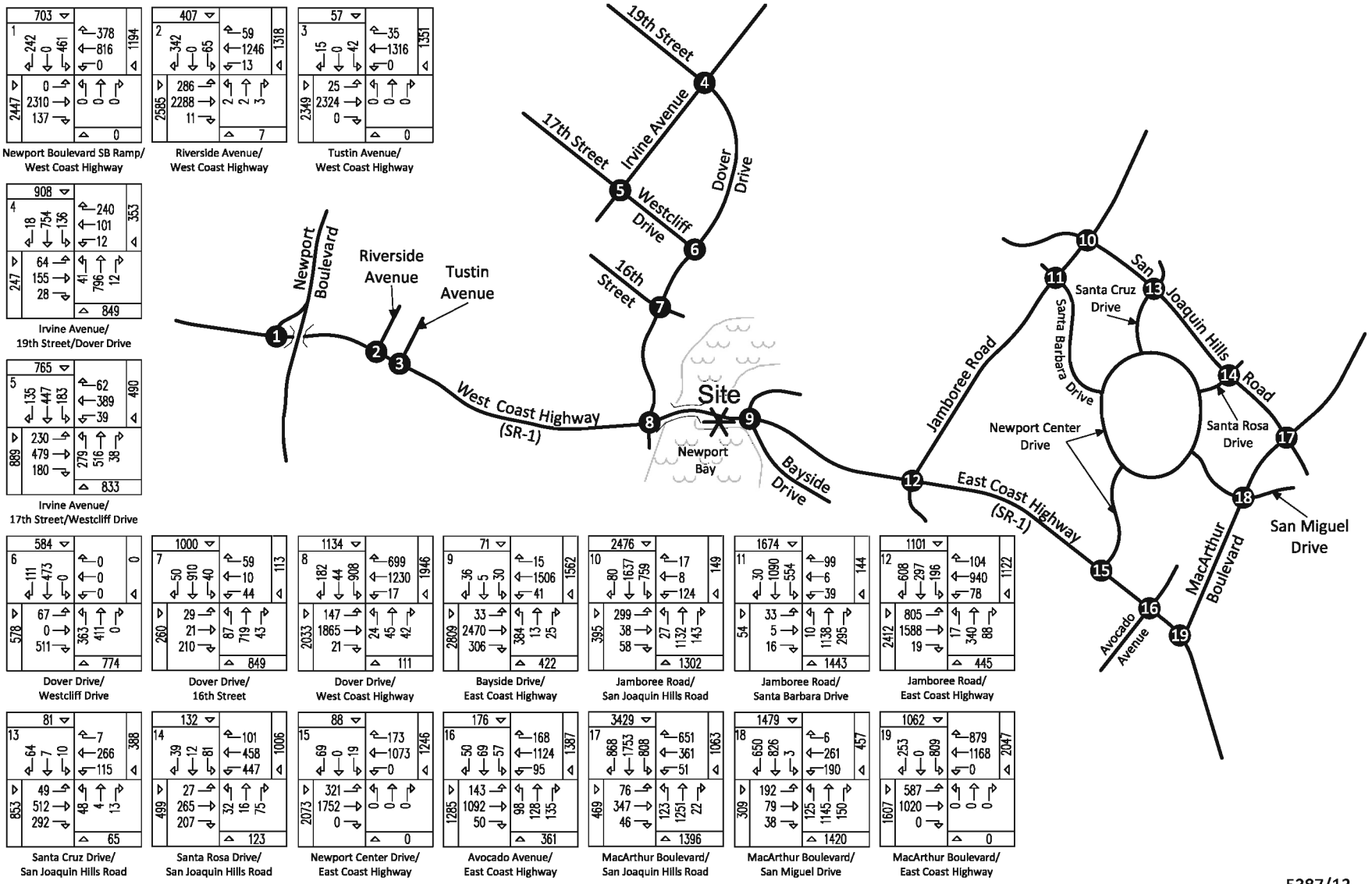
Intersection	Traffic Control[3]	Intersection Approach Lanes[2]												Peak Hour ICU-LOS[1]					
		Northbound			Southbound			Eastbound			Westbound			Existing (Year 2012)		Existing (Year 2012) + Project		ICU Increase	
		L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening	Morning	Evening	Morning	Evening
Newport Boulevard SB Ramp (NS) at:																			
West Coast Highway (EW)	TS	0	0	0	2	0	1	0	2	1>>	0	3	1>>	0.873-D	0.659-B	0.873-D	0.659-B	0.000	0.000
Riverside Avenue (NS) at:																			
West Coast Highway (EW)	TS	0	1	0	0.5	0.5	1>	1	1.5	0.5	1	3	1	0.771-C	0.789-C	0.772-C	0.790-C	+0.001	+0.001
Tustin Avenue (NS) at:																			
West Coast Highway (EW)	TS	0	0	0	0	1	0	1	1.5	0.5	0	2.5	0.5	0.761-C	0.608-B	0.762-C	0.610-B	+0.001	+0.002
Irvine Avenue (NS) at:																			
19th Street/Dover Drive (EW)	TS	1	2	d	1	2	d	1	0.5	0.5	1	1	1	0.523-A	0.616-B	0.523-A	0.617-B	0.000	+0.001
17th Street/Westcliff Drive (EW)	TS	2	2	d	2	2	d	2	1.5	0.5	1	1.5	0.5	0.457-A	0.711-C	0.457-A	0.712-C	0.000	+0.001
Dover Drive (NS) at:																			
Westcliff Drive (EW)	TS	2	2	0	0	1	1	2	0	1>>	0	0	0	0.429-A	0.440-A	0.430-A	0.445-A	+0.001	+0.005
16th Street (EW)	TS	1	2	d	1	2	d	0.5	0.5	d	1	1	1	0.496-A	0.495-A	0.498-A	0.499-A	+0.002	+0.004
West Coast Highway (EW)	TS	1	1.5	0.5	3	1	1	2	2.5	0.5	1	3	1>>	0.619-B	0.681-B	0.620-B	0.686-B	+0.001	+0.005
Bayside Drive (NS) at:																			
East Coast Highway (EW)	TS	2.3	0.3	0.3	1	0.5	0.5	1	3	1	1	3.5	0.5	0.651-B	0.619-B	0.654-B	0.627-B	+0.003	+0.008
Jamboree Road (NS) at:																			
San Joaquin Hills Road (EW)	TS	1	3	1>>	2	3	1>>	1.5	1.5	1	1.5	1.5	1	0.605-B	0.521-A	0.605-B	0.523-A	0.000	+0.002
Santa Barbara Drive (EW)	TS	1	3	1	2	3	1	1	1	1	1.5	0.5	1	0.493-A	0.614-B	0.493-A	0.615-B	0.000	+0.001
East Coast Highway (EW)	TS	1	1.5	0.5	1	2	1>>	3	3.5	0.5	2	4	1	0.570-A	0.659-B	0.571-A	0.660-B	+0.001	+0.001
Santa Cruz Drive (NS) at:																			
San Joaquin Hills Road (EW)	TS	2	0.5	0.5	1	1.5	0.5	1	2.5	0.5	1	2.5	0.5	0.309-A	0.340-A	0.309-A	0.340-A	0.000	0.000
Santa Rosa Drive (NS) at:																			
San Joaquin Hills Road (EW)	TS	1	1	1>	1	1	1	1	2.5	0.5	2	2.5	0.5	0.330-A	0.465-A	0.330-A	0.465-A	0.000	0.000
Newport Center Drive (NS) at:																			
East Coast Highway (EW)	TS	0	0	0	2	0	1>>	2	3	0	0	3	1>>	0.371-A	0.452-A	0.371-A	0.453-A	0.000	+0.001
Avocado Avenue (NS) at:																			
East Coast Highway (EW)	TS	1	1	1	1.5	0.5	1>>	1	3	d	1	3	1	0.451-A	0.502-A	0.451-A	0.502-A	0.000	0.000
MacArthur Boulevard (NS) at:																			
San Joaquin Hills Road (EW)	TS	2	3	1	2	3	1>>	3	2.5	0.5	1	2	1>>	0.641-B	0.734-C	0.642-B	0.735-C	+0.001	+0.001
San Miguel Drive (EW)	TS	2	3	1	2	3	1>	3	1.5	0.5	2	1.5	0.5	0.529-A	0.477-A	0.529-A	0.478-A	0.000	+0.001
East Coast Highway (EW)	TS	0	0	0	2	0	1>>	2	3	0	0	3	1>>	0.679-B	0.649-B	0.679-B	0.650-B	0.000	+0.001

[1] ICU-LOS = Intersection Capacity Utilization - Level of Service (see Appendix C).

[2] L = Left; T = Through; R = Right; >> = Free Right Turn; > = Right Turn Overlap; d = De Facto Right Turn Lane

[3] TS = Traffic Signal

Figure 13
Existing (Year 2014) + Project
Morning Peak Hour Intersection Turning Movement Volumes



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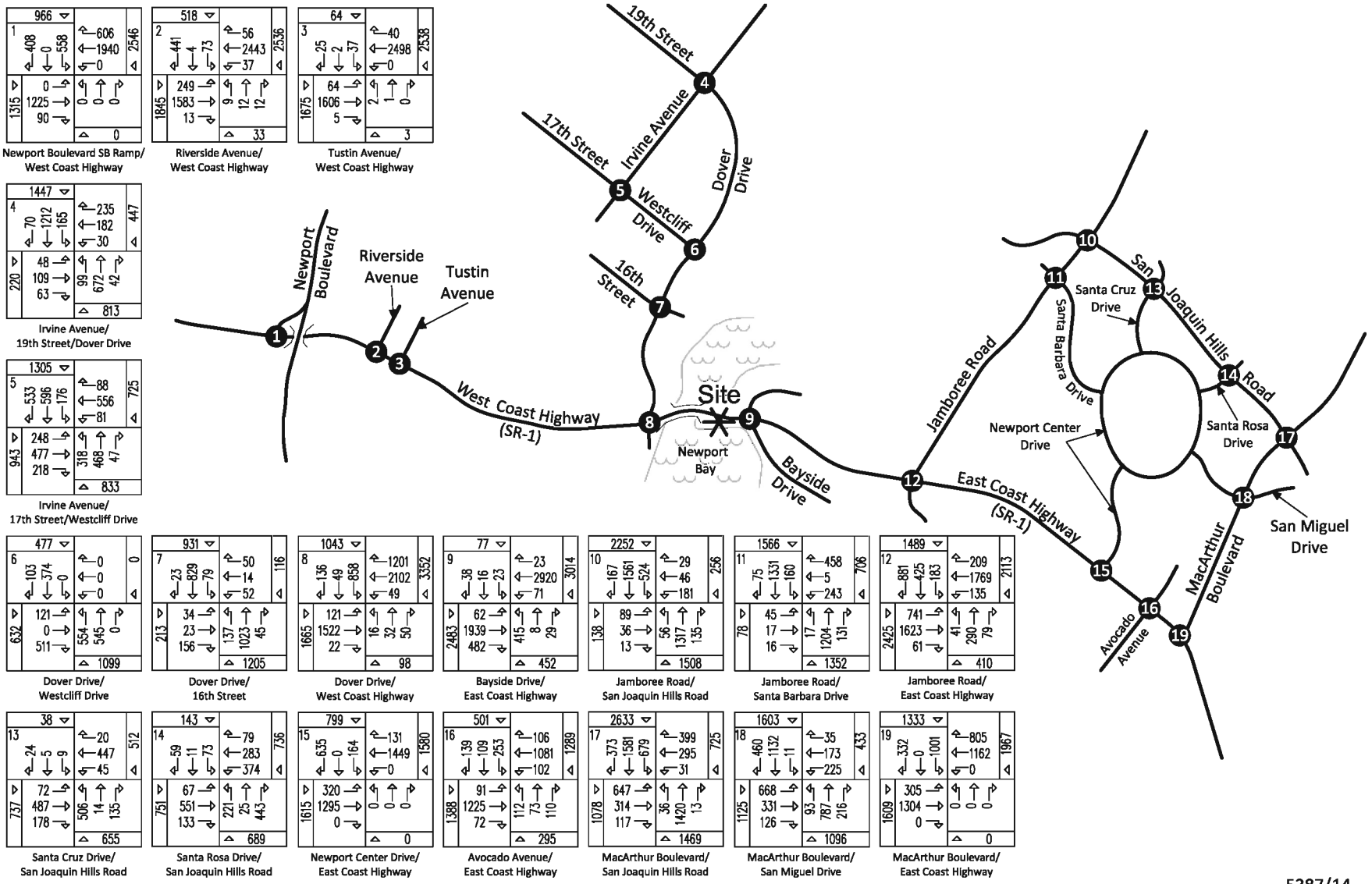
Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 14
Existing (Year 2014) + Project
Evening Peak Hour Intersection Turning Movement Volumes



5387/14

Intersection reference numbers are in upper left corner of turning movement boxes.

6. TPO Analysis

The Traffic Phasing Ordinance (TPO) analysis has been performed for the study area intersections.

Approved Projects

The City of Newport Beach staff provided the list of approved projects within the study area for the TPO analysis. The approved projects consist of development that has been approved but are not fully completed (see Table 4 and Appendix D). The approved project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 15 and 16, respectively.

An approved project is one that has been approved pursuant to the TPO, requires no further discretionary approval by the City of Newport Beach, and has received, or is entitled to receive, a building or grading permit for construction of the project or one or more phases of the project. Trips generated by approved projects shall be included subject to the following:

- All trips generated by each approved project or that portion or phase of the approved project for which no certificate of occupancy has been issued shall be included in any traffic study conducted prior to the expiration date of that approved project.

- In the event a final certificate of occupancy has been issued for one or more phases of a approved project, all trips shall be included in subsequent traffic studies until completion of the first field counts required by Subsection 3(d)(i) subsequent to the date on which the final certificate of occupancy was issued. Subsequent to completion of the field counts, those trips generated by phases of the approved project that have received a final certificate of occupancy shall no longer be included in subsequent traffic studies.

- The City Traffic Engineer and Community Development Director shall maintain a list of approved projects and, at least annually, update the list to reflect new approvals pursuant to the TPO as well as completion of all or a portion of each approved project. An approved project shall not be removed from the approved project list until a final certificate of occupancy has been issued for all phases and the field counts required by Subsection 3(d)(i) have been taken subsequent to issuance of the certificate of occupancy.

- The total trips generated by approved projects shall be reduced by twenty (20%) to account for the interaction of approved project trips.

Regional Growth

To account for regional growth on roadways, Year 2017 traffic volumes have been calculated based on a 1 percent annual growth rate over a three-year period. The regional growth rate has been obtained from the City of Newport Beach (see Appendix E). The project is expected to open in Year 2016; therefore the traffic analysis is one year after opening year.

One-Percent Methodology

One-percent of the projected peak hour volumes of each approach of each study area intersection were compared with the peak hour distributed volumes from the proposed project. The TPO one-percent analysis calculation worksheets are shown within Appendix F.

If one-percent of the existing + growth (Year 2017) + approved projects traffic peak hour volumes of each approach is greater than the peak hour project generated approach volumes, no further analysis is required. If project generated peak hour approach volumes are higher than one-percent of the projected peak hour volumes on any approach of an intersection, the intersection would require analysis utilizing the Intersection Capacity Utilization methodology.

Existing + growth (Year 2017) + approved projects morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 17 and 18, respectively. Existing + growth (Year 2017) + approved projects + project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 19 and 20, respectively.

Comparison of the one-percent of the existing + growth (Year 2017) + approved projects traffic peak hour approach volumes with the project generated peak hour approach volumes resulted in the following study area intersections exceeding the one-percent threshold and requiring additional analysis (see Table 5 and Appendix F):

Dover Drive (NS) at:
- Westcliff Drive (EW) – Evening Peak Hour
- 16th Street (EW) – Evening Peak Hour
- West Coast Highway (EW) – Evening Peak Hour

Intersection Capacity Utilization

The City of Newport Beach methodology used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. The Intersection Capacity Utilization methodology (see Appendix C) is not the only method to analyze a signalized intersection, but the preferred method per the City of Newport Beach TPO. To calculate an Intersection Capacity Utilization value the volume of traffic using the intersection is compared with the capacity of the intersection. An Intersection Capacity Utilization value is usually expressed as a decimal. The decimal represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The Levels of Service for existing + growth (Year 2017) + approved projects traffic conditions have been calculated and are shown in Table 6. Existing + growth (Year 2017) + approved projects Intersection Capacity Utilization worksheets and the Level of Service description are provided in Appendix C. For existing + growth (Year 2017) + approved projects traffic conditions, the study area intersections are projected to operate at Level of Service D or better during the morning/evening peak hours, except for the following study area intersection that is projected to operate at Level of Service E during the morning peak hour:

Newport Boulevard SB Ramp (NS) at:
West Coast Highway (EW) (Morning Peak Hour, Level of Service E)

The Levels of Service for existing + growth (Year 2017) + approved projects + project traffic conditions have been calculated and are shown in Table 6. Existing + growth (Year 2017) + approved projects + project Intersection Capacity Utilization worksheets and the Level of Service description are provided in Appendix C. For existing + growth (Year 2017) + approved projects + project traffic conditions, the study area intersections are projected to operate at Level of Service D or better during the morning/evening peak hours, except for the following study area intersection that is projected to operate at Level of Service E during the morning peak hour:

Newport Boulevard SB Ramp (NS) at:
West Coast Highway (EW) (Morning Peak Hour, Level of Service E)

Significance Criteria

The intersection significance criteria for the City of Newport Beach requires an increase of one-percent or more at a study area intersection operating at worse than Level of Service D during the morning/evening peak hours.

As shown in Table 6 for the TPO analysis, the project generated trips did not result in a significant impact at the study area intersections; therefore, no improvements are recommended at the study area intersections.

Table 4

Approved Project List

Project Name
Fashion Island Expansion
Temple Bat Yahm Expansion
Ciosa - Irvine Project
Newport Dunes
Hoag Hospital Phase III
St. Mark Presbyterian Church
2300 Newport Boulevard
Newport Executive Court
Hoag Health Center
North Newport Center
Santa Barbara Condo (Marriott)
Newport Beach City Hall
328 Old Newport Medical Office
Coastline Community College
Bayview Medical Office
Mariner's Point
4221 Dolphin Striker
San Joaquin Hills Plaza
Uptown Newport (Phase 2)
Uptown Newport (Phase 1)
Marina Park

Table 5

TPO Analysis One-Percent Threshold

Intersection	Peak Hour	Approach Direction[1]			
		Northbound	Southbound	Eastbound	Westbound
Newport Boulevard SB Ramp (NS) at:					
West Coast Highway (EW)	AM	No	No	No	No
	PM	No	No	No	No
Riverside Avenue (NS) at:					
West Coast Highway (EW)	AM	No	No	No	No
	PM	No	No	No	No
Tustin Avenue (NS) at:					
West Coast Highway (EW)	AM	No	No	No	No
	PM	No	No	No	No
Irvine Avenue (NS) at:					
19th Street/Dover Drive (EW)	AM	No	No	No	No
	PM	No	No	No	No
17th Street/Westcliff Drive (EW)	AM	No	No	No	No
	PM	No	No	No	No
Dover Drive (NS) at:					
Westcliff Drive (EW)	AM	No	No	No	-
	PM	No	**YES**	**YES**	-
16th Street (EW)	AM	No	No	No	No
	PM	No	**YES**	**YES**	No
West Coast Highway (EW)	AM	No	No	No	No
	PM	No	**YES**	No	No
Bayside Drive (NS) at:					
East Coast Highway (EW)	AM	No	No	No	No
	PM	No	No	No	No
Jamboree Road (NS) at:					
San Joaquin Hills Road (EW)	AM	No	No	No	No
	PM	No	No	No	No
Santa Barbara Drive (EW)	AM	No	No	No	No
	PM	No	No	No	No
East Coast Highway (EW)	AM	No	No	No	No
	PM	No	No	No	No
Santa Cruz Drive (NS) at:					
San Joaquin Hills Road (EW)	AM	No	No	No	No
	PM	No	No	No	No
Santa Rosa Drive (NS) at:					
San Joaquin Hills Road (EW)	AM	No	No	No	No
	PM	No	No	No	No
Newport Center Drive (NS) at:					
East Coast Highway (EW)	AM	No	No	No	No
	PM	No	No	No	No
Avocado Avenue (NS) at:					
East Coast Highway (EW)	AM	No	No	No	No
	PM	No	No	No	No
MacArthur Boulevard (NS) at:					
San Joaquin Hills Road (EW)	AM	No	No	No	No
	PM	No	No	No	No
San Miguel Drive (EW)	AM	No	No	No	No
	PM	No	No	No	No
East Coast Highway (EW)	AM	No	No	No	No
	PM	No	No	No	No

[1] Project traffic is estimated to be equal to or greater than 1% of projected peak hour traffic.

Intersection Capacity Utilization analysis is required.

Table 6

TPO Analysis Intersection Capacity Utilization and Levels of Service

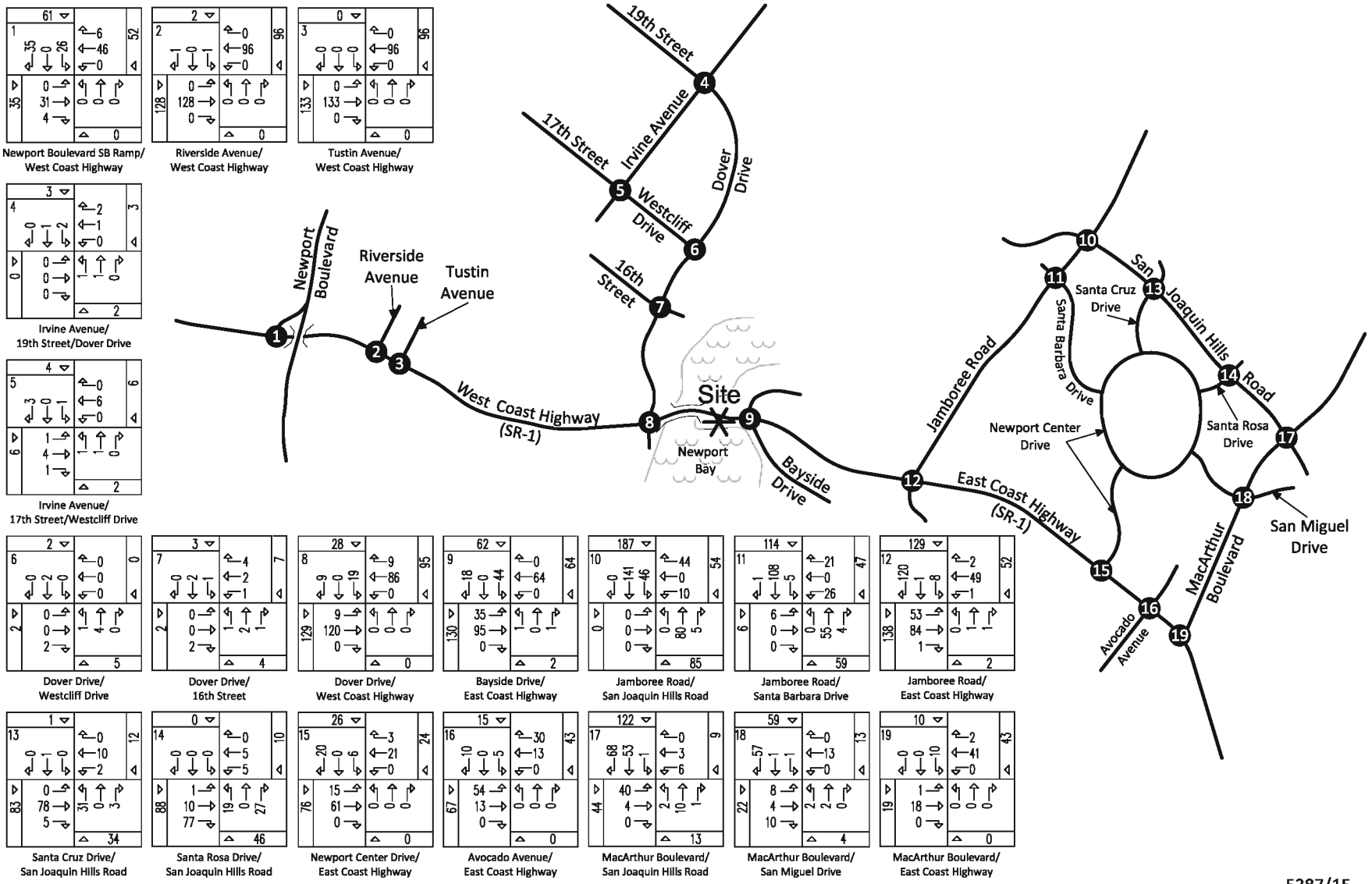
Intersection	Traffic Control[3]	Intersection Approach Lanes[2]												Peak Hour ICU-LOS[1]					
		Northbound			Southbound			Eastbound			Westbound			Existing + Growth (Year 2017) + Approved Projects		Existing + Growth (Year 2017) + Approved Projects + Project		ICU Increase	
		L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening	Morning	Evening	Morning	Evening
Newport Boulevard SB Ramp (NS) at:																			
West Coast Highway (EW)	TS	0	0	0	2	0	1	0	2	1>>	0	3	1>>	0.93-E	0.70-B	0.93-E	0.70-B	0.00	0.00
Riverside Avenue (NS) at:																			
West Coast Highway (EW)	TS	0	1	0	0.5	0.5	1>	1	1.5	0.5	1	3	1	0.83-D	0.84-D	0.83-D	0.84-D	0.00	0.00
Tustin Avenue (NS) at:																			
West Coast Highway (EW)	TS	0	0	0	0	1	0	1	1.5	0.5	0	2.5	0.5	0.82-D	0.66-B	0.83-D	0.66-B	+0.01	0.00
Irvine Avenue (NS) at:																			
19th Street/Dover Drive (EW)	TS	1	2	d	1	2	d	1	0.5	0.5	1	1	1	0.54-A	0.63-B	0.54-A	0.63-B	0.00	0.00
17th Street/Westcliff Drive (EW)	TS	2	2	d	2	2	d	2	1.5	0.5	1	1.5	0.5	0.47-A	0.73-C	0.47-A	0.73-C	0.00	0.00
Dover Drive (NS) at:																			
Westcliff Drive (EW)	TS	2	2	0	0	1	1	2	0	1>>	0	0	0	0.43-A	0.44-A	0.43-A	0.45-A	0.00	+0.01
16th Street (EW)	TS	1	2	d	1	2	d	0.5	0.5	d	1	1	1	0.50-A	0.50-A	0.50-A	0.51-A	0.00	+0.01
West Coast Highway (EW)	TS	1	1.5	0.5	3	1	1	2	2.5	0.5	1	3	1>>	0.66-B	0.74-C	0.66-B	0.74-C	0.00	0.00
Bayside Drive (NS) at:																			
East Coast Highway (EW)	TS	2.3	0.3	0.3	1	0.5	0.5	1	3	1	1	3.5	0.5	0.71-C	0.70-B	0.71-C	0.70-B	0.00	0.00
Jamboree Road (NS) at:																			
San Joaquin Hills Road (EW)	TS	1	3	1>>	2	3	1>>	1.5	1.5	1	1.5	1.5	1	0.65-B	0.60-A	0.65-B	0.60-A	0.00	0.00
Santa Barbara Drive (EW)	TS	1	3	1	2	3	1	1	1	1	1.5	0.5	1	0.53-A	0.66-B	0.53-A	0.66-B	0.00	0.00
East Coast Highway (EW)	TS	1	1.5	0.5	1	2	1>>	3	3.5	0.5	2	4	1	0.61-B	0.72-C	0.61-B	0.72-C	0.00	0.00
Santa Cruz Drive (NS) at:																			
San Joaquin Hills Road (EW)	TS	2	0.5	0.5	1	1.5	0.5	1	2.5	0.5	1	2.5	0.5	0.32-A	0.36-A	0.32-A	0.36-A	0.00	0.00
Santa Rosa Drive (NS) at:																			
San Joaquin Hills Road (EW)	TS	1	1	1>	1	1	1	1	2.5	0.5	2	2.5	0.5	0.38-A	0.50-A	0.38-A	0.50-A	0.00	0.00
Newport Center Drive (NS) at:																			
East Coast Highway (EW)	TS	0	0	0	2	0	1>>	2	3	0	0	3	1>>	0.40-A	0.49-A	0.40-A	0.49-A	0.00	0.00
Avocado Avenue (NS) at:																			
East Coast Highway (EW)	TS	1	1	1	1.5	0.5	1>>	1	3	d	1	3	1	0.50-A	0.52-A	0.50-A	0.52-A	0.00	0.00
MacArthur Boulevard (NS) at:																			
San Joaquin Hills Road (EW)	TS	2	3	1	2	3	1>>	3	2.5	0.5	1	2	1>>	0.67-B	0.78-C	0.67-B	0.78-C	0.00	0.00
San Miguel Drive (EW)	TS	2	3	1	2	3	1>	3	1.5	0.5	2	1.5	0.5	0.58-A	0.50-A	0.58-A	0.50-A	0.00	0.00
East Coast Highway (EW)	TS	0	0	0	2	0	1>>	2	3	0	0	3	1>>	0.71-C	0.67-B	0.71-C	0.68-B	0.00	+0.01

[1] ICU-LOS = Intersection Capacity Utilization - Level of Service (see Appendix C).

[2] L = Left; T = Through; R = Right; >> = Free Right Turn; > = Right Turn Overlap; d = De Facto Right Turn Lane

[3] TS = Traffic Signal

Figure 15
Approved Projects
Morning Peak Hour Intersection Turning Movement Volumes



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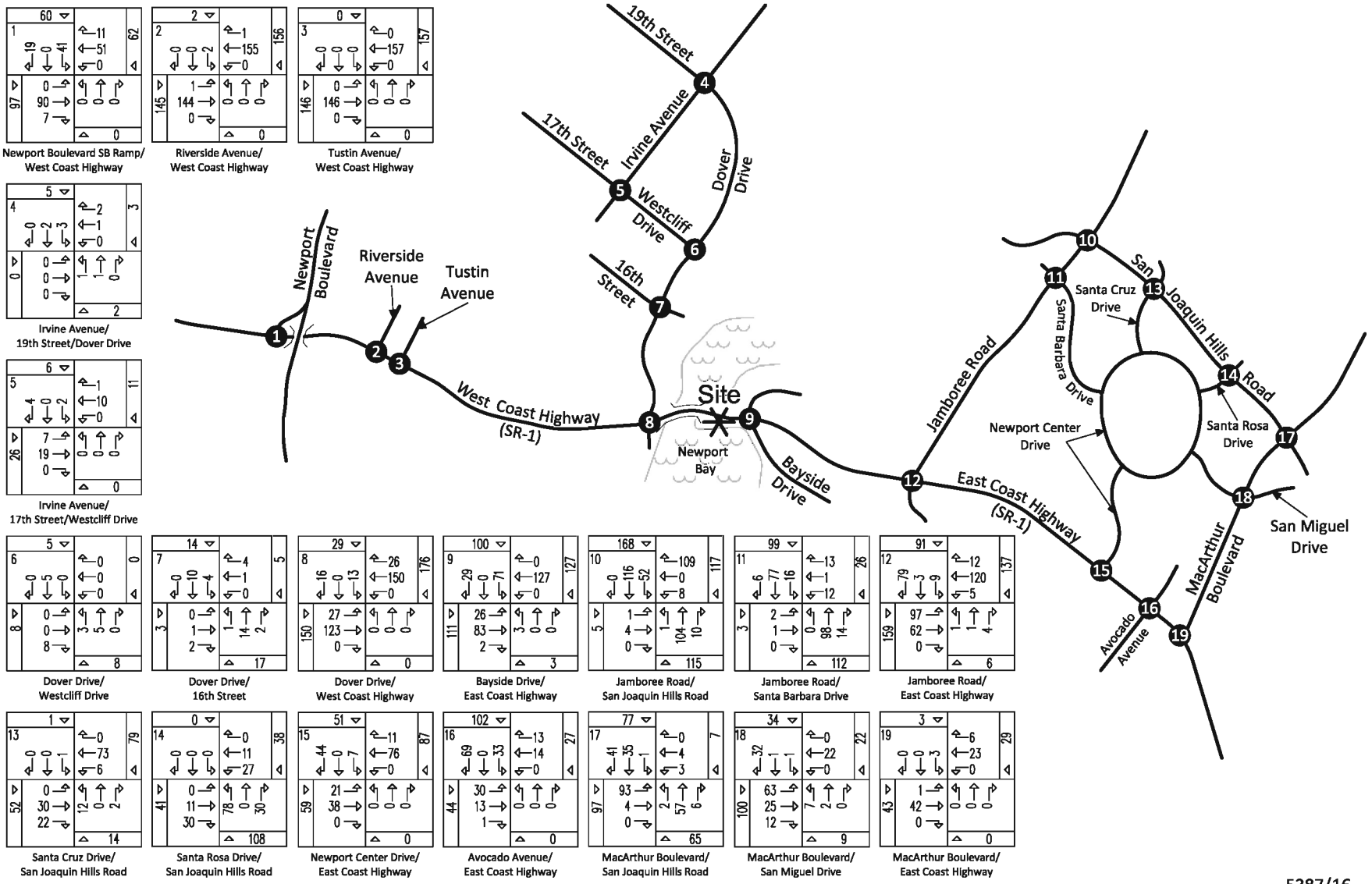
Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 16
Approved Projects
Evening Peak Hour Intersection Turning Movement Volumes



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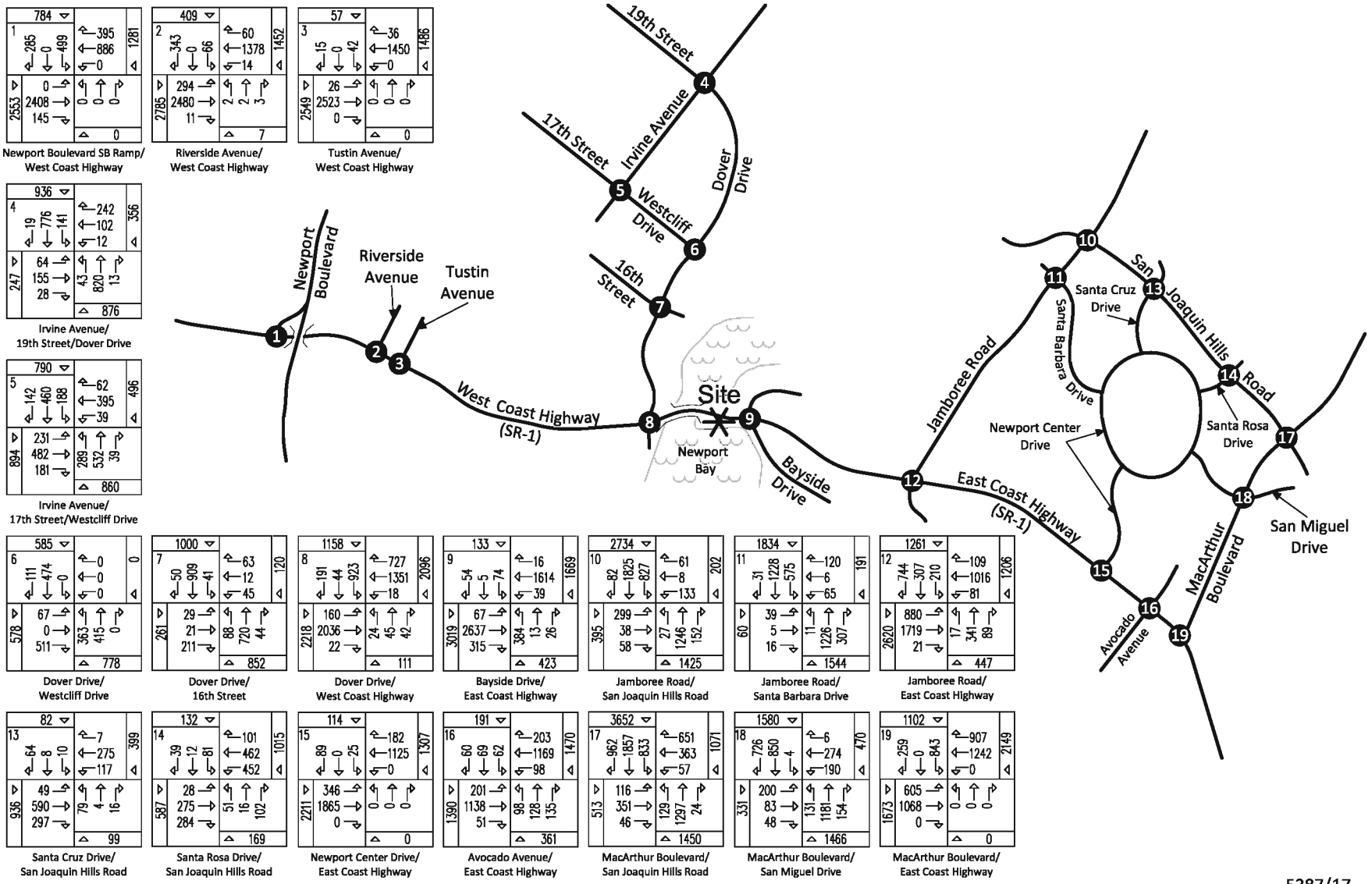
Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 17
Existing + Growth (Year 2017) + Approved Projects
Morning Peak Hour Intersection Turning Movement Volumes



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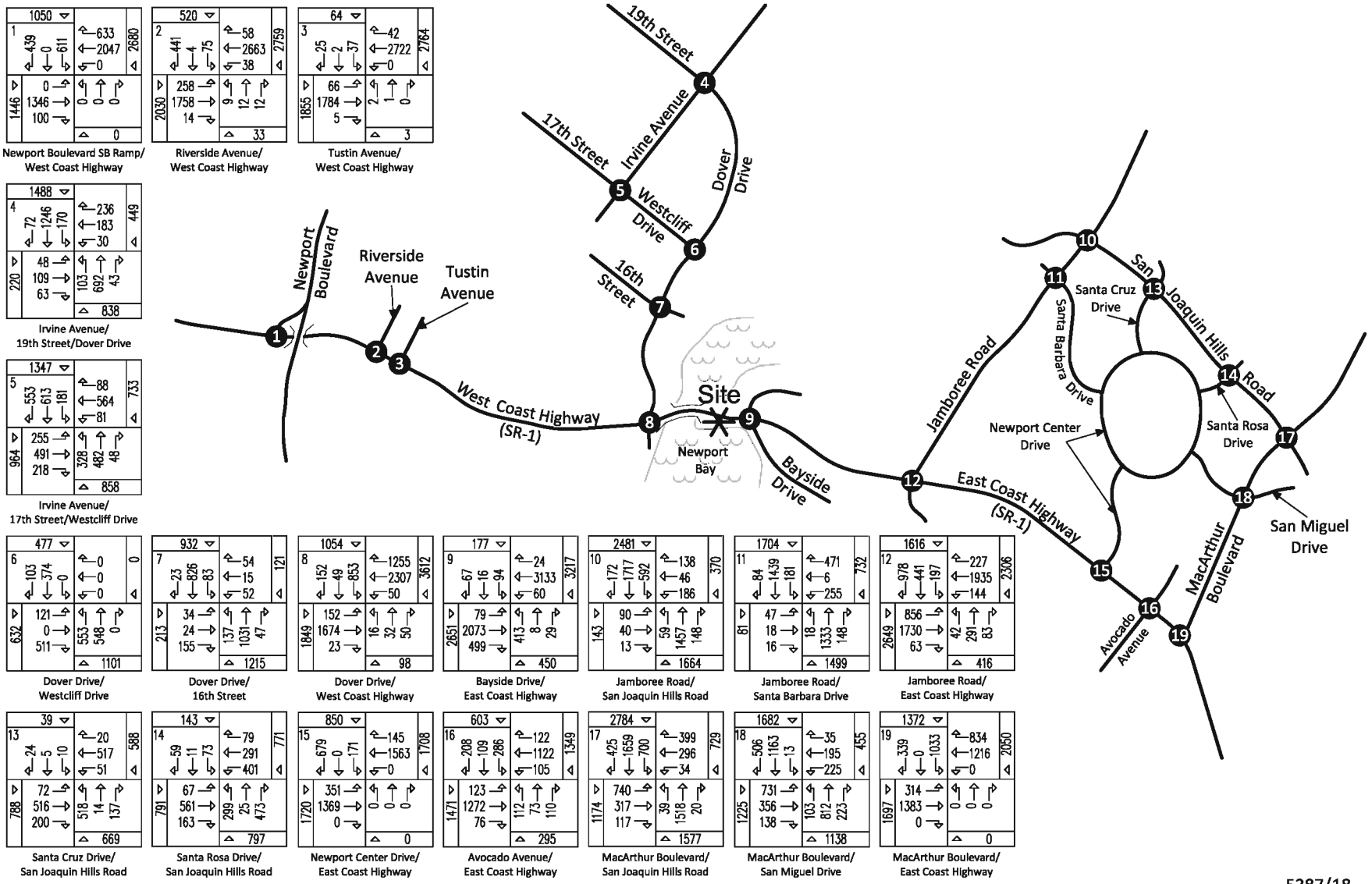
Intersection reference numbers are in upper left corner of turning movement boxes.

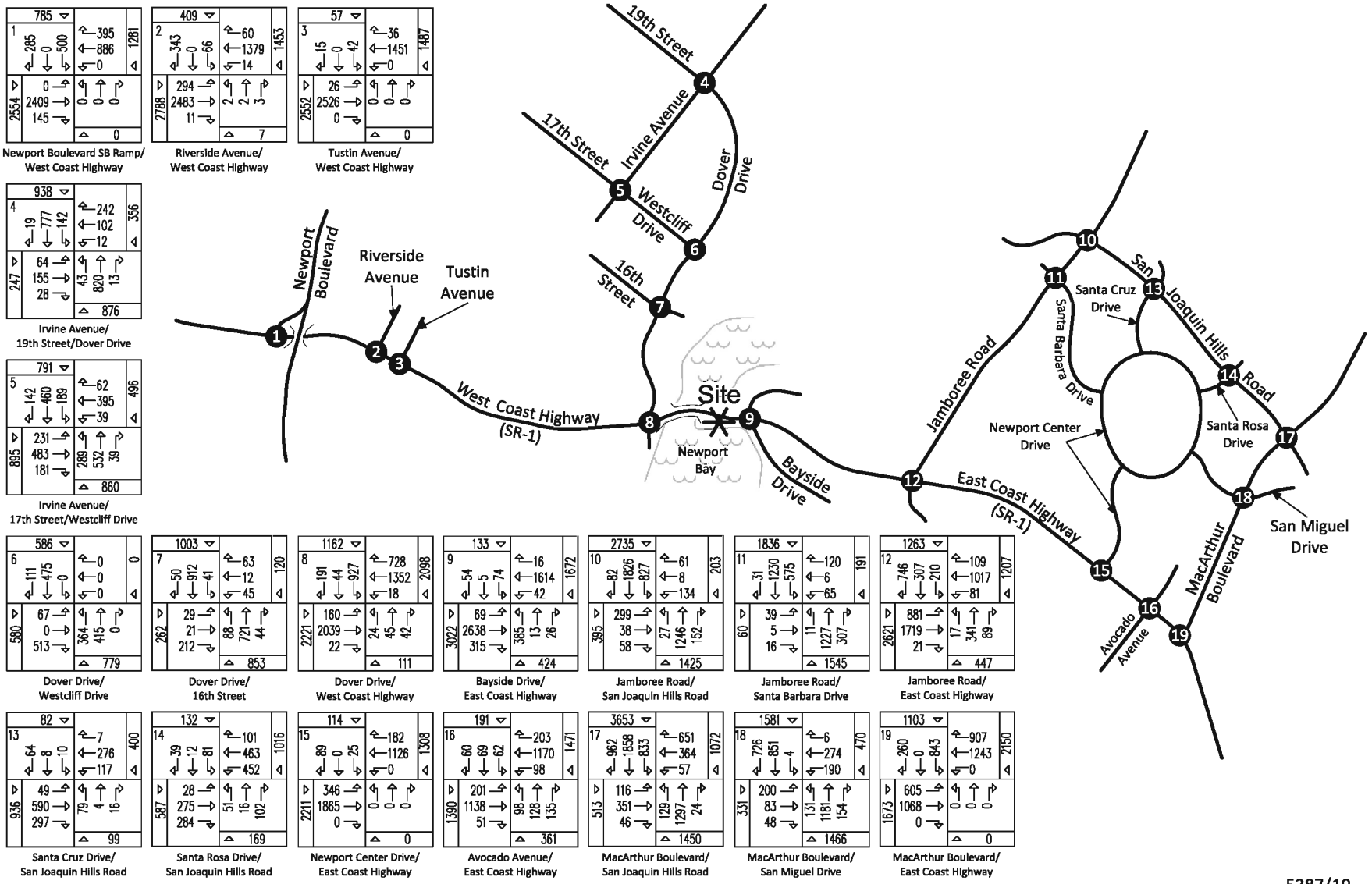
Figure 18
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour Intersection Turning Movement Volumes



5387/18

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 19
Existing + Growth (Year 2017) + Approved Projects + Project
Morning Peak Hour Intersection Turning Movement Volumes



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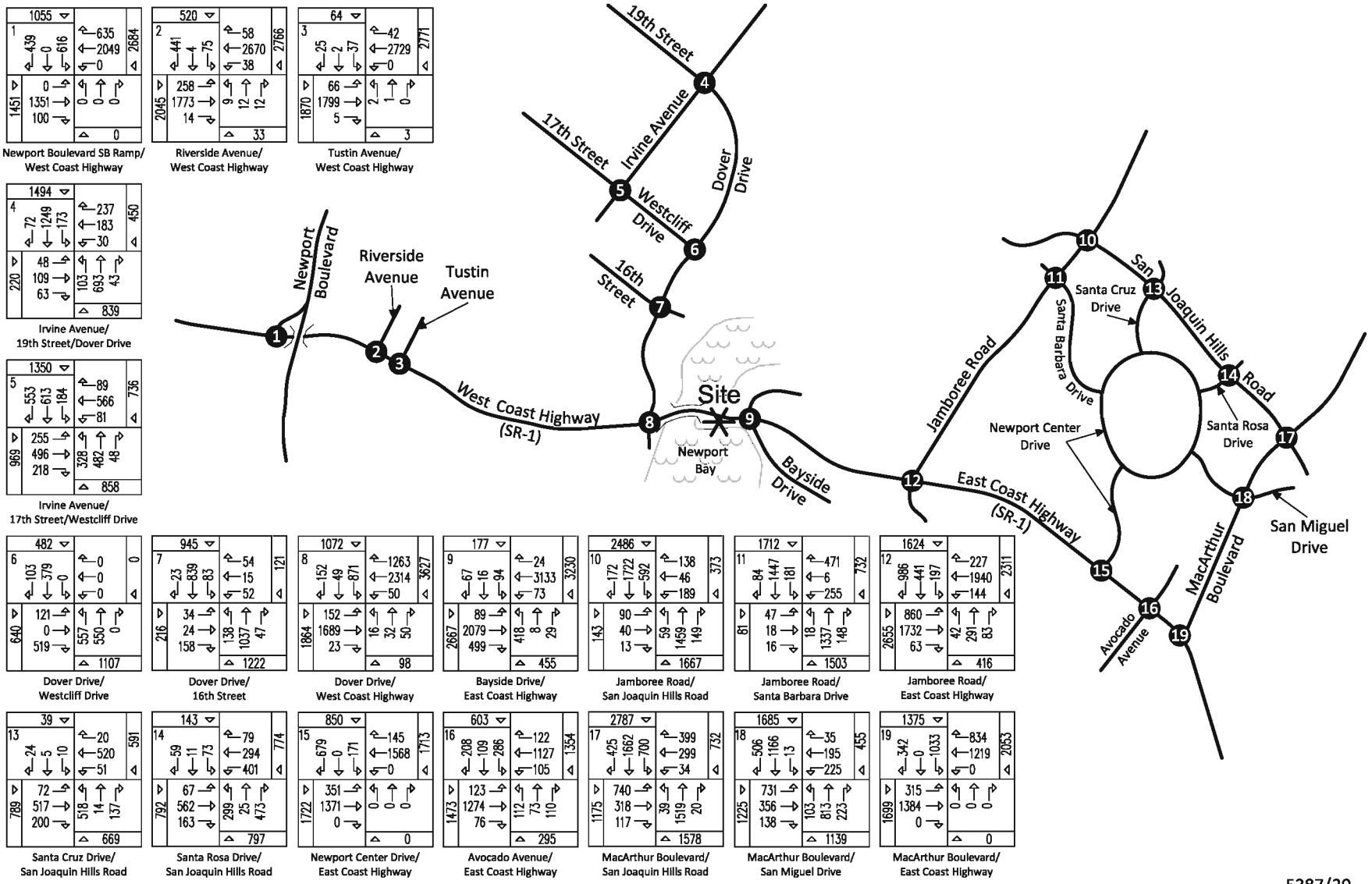
5387/19

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 20
Existing + Growth (Year 2017) + Approved Projects + Project
Evening Peak Hour Intersection Turning Movement Volumes



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5387/20

Intersection reference numbers are in upper left corner of turning movement boxes.

7. CEQA Analysis

The California Environmental Quality Act (CEQA) analysis (this part of the analysis is consistent with CEQA) included analysis of the study area intersections.

Cumulative Projects

The City of Newport Beach staff provided the list of cumulative projects within the study area for the CEQA analysis. Typically, the cumulative projects are known, but not approved project developments that are reasonably expected to be completed or nearly completed at the same time as the proposed project. The cumulative projects utilized were ones that added trips to the study area intersections. The cumulative project list is shown in Table 7 and the cumulative project trip generation is included in Appendix G. Appendix G contains the directional distributions of the cumulative project trips. The cumulative project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 21 and 22, respectively.

The CEQA traffic volumes were obtained by adding the cumulative projects traffic volumes to the TPO traffic volumes.

Intersection Capacity Utilization

Consistent with the City of Newport Beach approved methodology, the technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value the volume of traffic using the intersection is compared with the capacity of the intersection. An Intersection Capacity Utilization value is usually expressed as a decimal. The decimal represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The Levels of Service for existing + growth (Year 2017) + approved projects + cumulative projects traffic conditions have been calculated and are shown in Table 8. Existing + growth (Year 2017) + approved projects + cumulative projects morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 23 and 24, respectively. Existing + growth (Year 2017) + approved projects + cumulative projects Intersection Capacity Utilization worksheets and the Level of Service description are provided in Appendix C.

For existing + growth (Year 2017) + approved projects + cumulative projects traffic conditions, the study area intersections are projected to operate at Level of Service D or better during the morning/evening peak hours, except for the following study area intersection that is projected to operate at Level of Service E during the morning peak hour:

Newport Boulevard SB Ramp (NS) at:
West Coast Highway (EW) (Morning Peak Hour, Level of Service E)

The Levels of Service for existing + growth (Year 2017) + approved projects + cumulative projects + project traffic conditions have been calculated and are shown in Table 8. Existing + growth (Year 2017) + approved projects + cumulative projects + project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 25 and 26, respectively. Existing + growth (Year 2017) + approved projects + cumulative projects + project Intersection Capacity Utilization worksheets and the Level of Service description are provided in Appendix C.

For existing + growth (Year 2017) + approved projects + cumulative projects + project traffic conditions, the study area intersections are projected to operate at Level of Service D or better during the morning/evening peak hours, except for the following study area intersection that is projected to operate at Level of Service E during the morning peak hour:

Newport Boulevard SB Ramp (NS) at:
West Coast Highway (EW) (Morning Peak Hour, Level of Service E)

Significance Criteria

The intersection significance criteria for the City of Newport Beach requires an increase of one-percent or more at a study area intersection operating at worse than Level of Service D during the morning/evening peak hours.

As shown in Table 8 for the CEQA analysis, the project generated trips did not result in a significant impact at the study area intersections; therefore, no improvements are recommended at the study area intersections.

Table 7

Cumulative Project List

Project Name
Koll-Conexant
Back Bay Landing
Banning Ranch
Old City Hall Complex Redevelopment/Lido House Hotel
Newport Coast - TAZ 1
Newport Coast - TAZ 2
Newport Coast - TAZ 3
Newport Coast - TAZ 4

Table 8

CEQA Analysis Intersection Capacity Utilization and Levels of Service

Intersection	Traffic Control[3]	Intersection Approach Lanes[2]												Peak Hour ICU-LOS[1]				ICU Increase	
		Northbound			Southbound			Eastbound			Westbound			Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects		Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects + Project			
		L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening	Morning	Evening	Morning	Evening
Newport Boulevard SB Ramp (NS) at:																			
West Coast Highway (EW)	TS	0	0	0	2	0	1	0	2	1>>	0	3	1>>	0.962-E	0.744-C	0.962-E	0.746-C	0.000	+0.002
Riverside Avenue (NS) at:																			
West Coast Highway (EW)	TS	0	1	0	0.5	0.5	1>	1	1.5	0.5	1	3	1	0.862-D	0.895-D	0.863-D	0.897-D	+0.001	+0.002
Tustin Avenue (NS) at:																			
West Coast Highway (EW)	TS	0	0	0	0	1	0	1	1.5	0.5	0	2.5	0.5	0.853-D	0.690-B	0.854-D	0.691-B	+0.001	+0.001
Irvine Avenue (NS) at:																			
19th Street/Dover Drive (EW)	TS	1	2	d	1	2	d	1	0.5	0.5	1	1	1	0.539-A	0.635-B	0.540-A	0.637-B	+0.001	+0.002
17th Street/Westcliff Drive (EW)	TS	2	2	d	2	2	d	2	1.5	0.5	1	1.5	0.5	0.492-A	0.772-C	0.493-A	0.773-C	+0.001	+0.001
Dover Drive (NS) at:																			
Westcliff Drive (EW)	TS	2	2	0	0	1	1	2	0	1>>	0	0	0	0.452-A	0.462-A	0.453-A	0.466-A	+0.001	+0.004
16th Street (EW)	TS	1	2	d	1	2	d	0.5	0.5	d	1	1	1	0.512-A	0.521-A	0.513-A	0.525-A	+0.001	+0.004
West Coast Highway (EW)	TS	1	1.5	0.5	3	1	1	2	2.5	0.5	1	3	1>>	0.687-B	0.784-C	0.688-B	0.789-C	+0.001	+0.005
Bayside Drive (NS) at:																			
East Coast Highway (EW)	TS	2.3	0.3	0.3	1	0.5	0.5	1	3	1	1	3.5	0.5	0.743-C	0.782-C	0.745-C	0.790-C	+0.002	+0.008
Jamboree Road (NS) at:																			
San Joaquin Hills Road (EW)	TS	1	3	1>>	2	3	1>>	1.5	1.5	1	1.5	1.5	1	0.684-B	0.625-B	0.684-B	0.625-B	0.000	0.000
Santa Barbara Drive (EW)	TS	1	3	1	2	3	1	1	1	1	1.5	0.5	1	0.564-A	0.681-B	0.564-A	0.682-B	0.000	+0.001
East Coast Highway (EW)	TS	1	1.5	0.5	1	2	1>>	3	3.5	0.5	2	4	1	0.667-B	0.836-D	0.668-B	0.838-D	+0.001	+0.002
Santa Cruz Drive (NS) at:																			
San Joaquin Hills Road (EW)	TS	2	0.5	0.5	1	1.5	0.5	1	2.5	0.5	1	2.5	0.5	0.323-A	0.359-A	0.323-A	0.359-A	0.000	0.000
Santa Rosa Drive (NS) at:																			
San Joaquin Hills Road (EW)	TS	1	1	1>	1	1	1	1	2.5	0.5	2	2.5	0.5	0.382-A	0.503-A	0.382-A	0.503-A	0.000	0.000
Newport Center Drive (NS) at:																			
East Coast Highway (EW)	TS	0	0	0	2	0	1>>	2	3	0	0	3	1>>	0.422-A	0.540-A	0.422-A	0.541-A	0.000	+0.001
Avocado Avenue (NS) at:																			
East Coast Highway (EW)	TS	1	1	1	1.5	0.5	1>>	1	3	d	1	3	1	0.568-A	0.599-A	0.568-A	0.599-A	0.000	0.000
MacArthur Boulevard (NS) at:																			
San Joaquin Hills Road (EW)	TS	2	3	1	2	3	1>>	3	2.5	0.5	1	2	1>>	0.691-B	0.800-D	0.691-B	0.801-D	0.000	+0.001
San Miguel Drive (EW)	TS	2	3	1	2	3	1>	3	1.5	0.5	2	1.5	0.5	0.594-A	0.538-A	0.594-A	0.539-A	0.000	+0.001
East Coast Highway (EW)	TS	0	0	0	2	0	1>>	2	3	0	0	3	1>>	0.799-C	0.764-C	0.799-C	0.765-C	0.000	+0.001

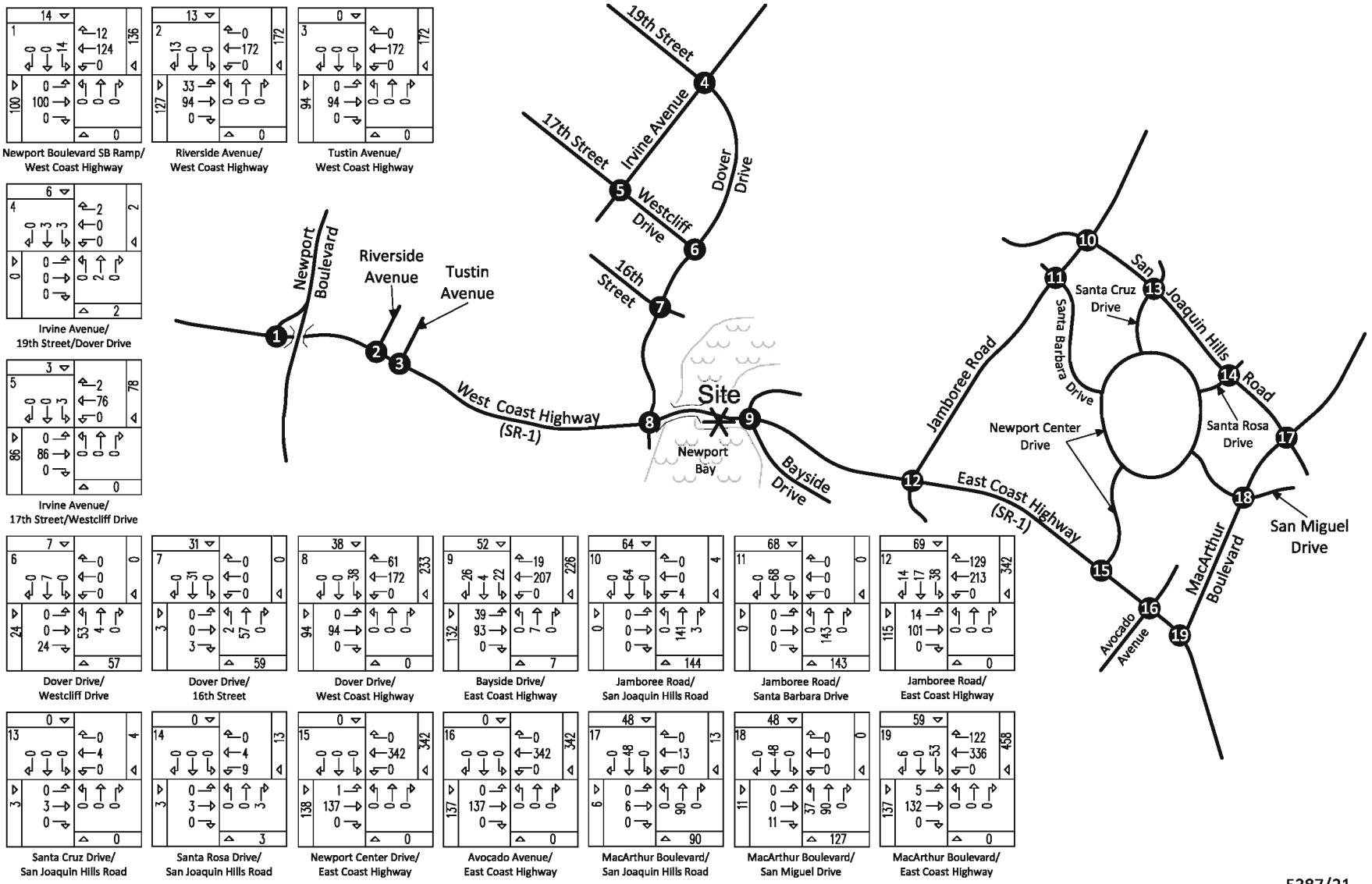
[1] ICU-LOS = Intersection Capacity Utilization - Level of Service (see Appendix D).

[2] L = Left; T = Through; R = Right; >> = Free Right Turn; > = Right Turn Overlap; d = De Facto Right Turn Lane

[3] TS = Traffic Signal

[4] Intersection is located on the City boundary line of Costa Mesa and Newport Beach.

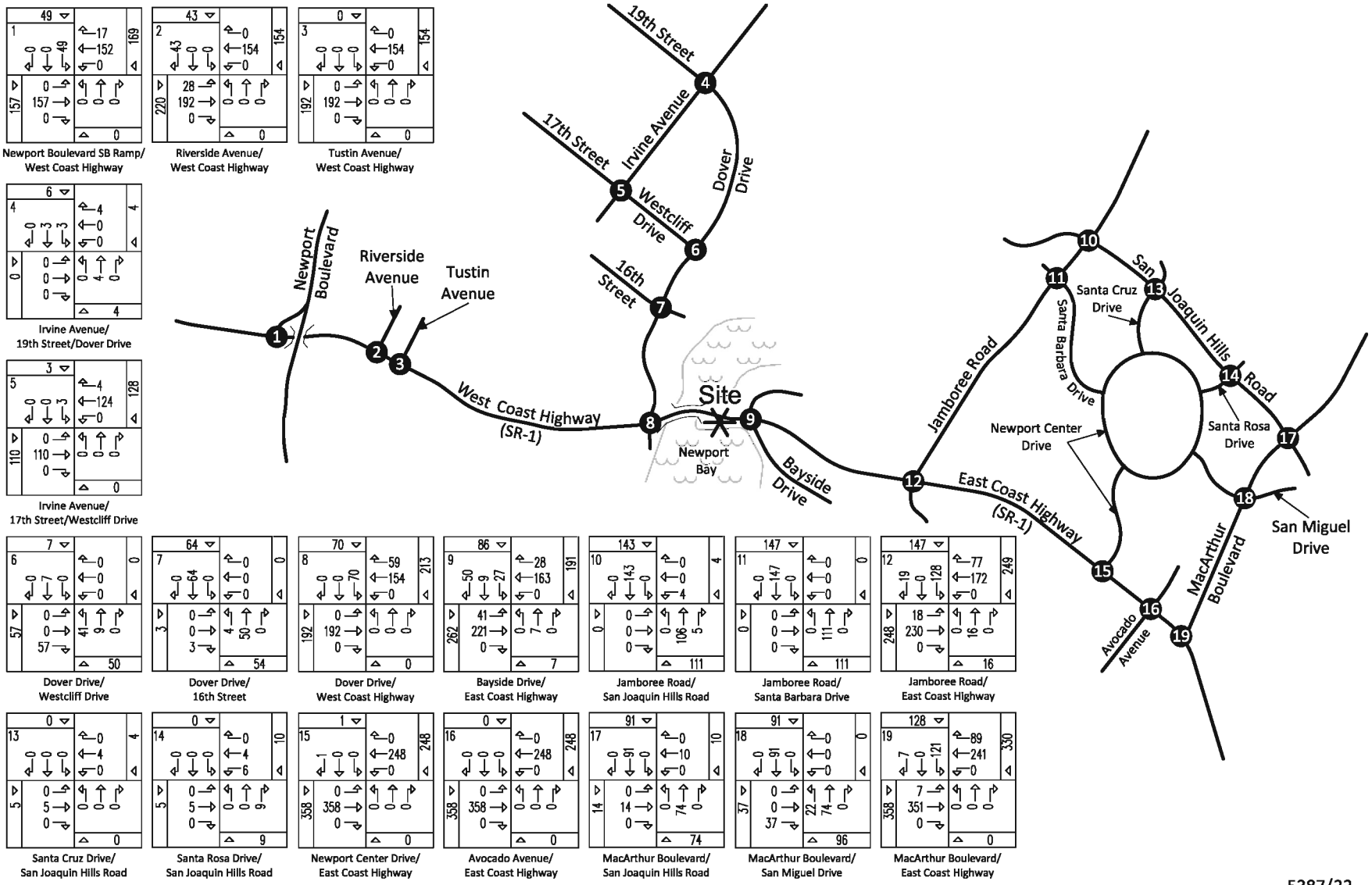
Figure 21
Cumulative Projects
Morning Peak Hour Intersection Turning Movement Volumes



5387/21

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 22
Cumulative Projects
Evening Peak Hour Intersection Turning Movement Volumes



5387/22

Intersection reference numbers are in upper left corner of turning movement boxes.

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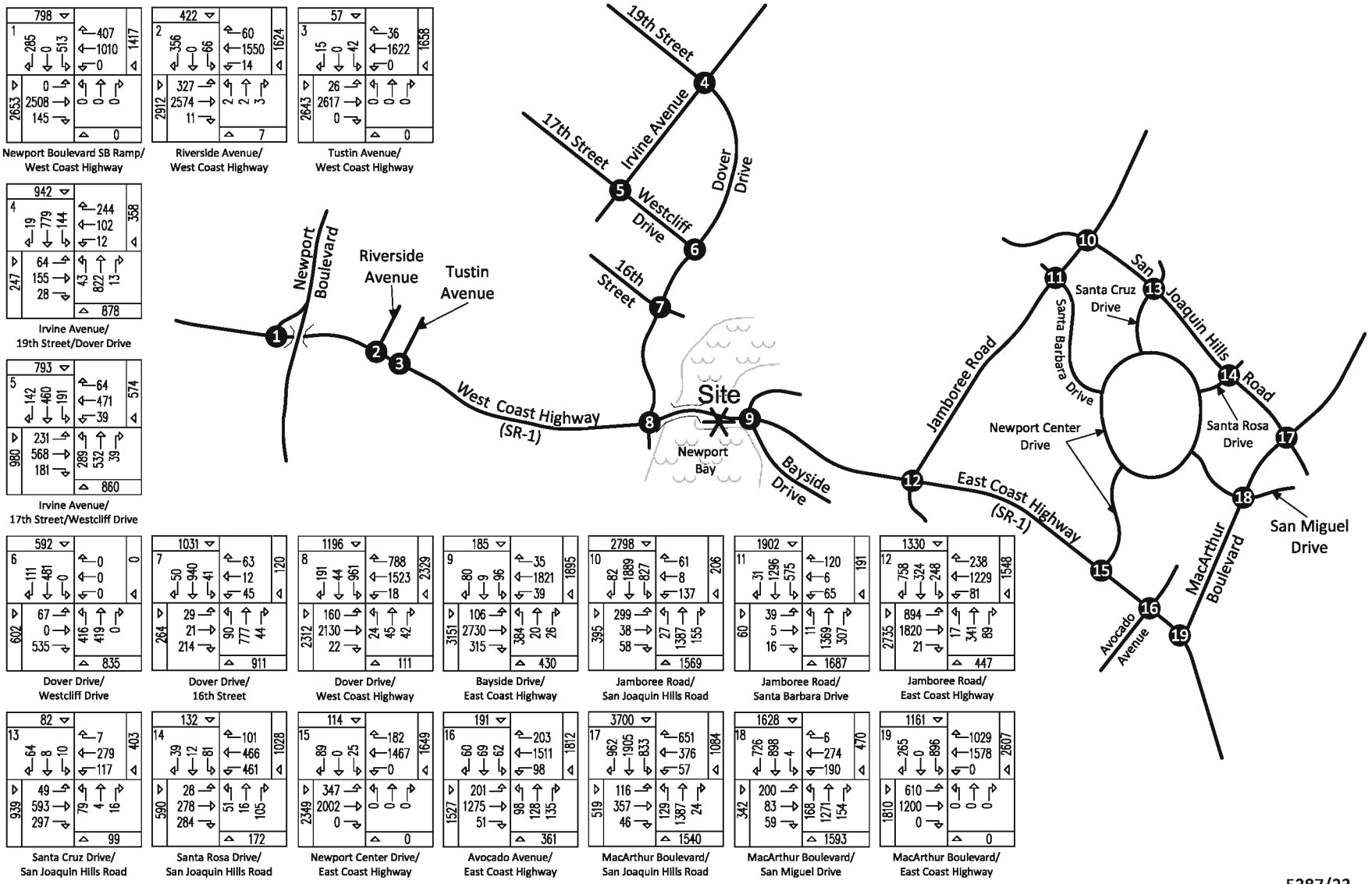
Figure 23
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour Intersection Turning Movement Volumes



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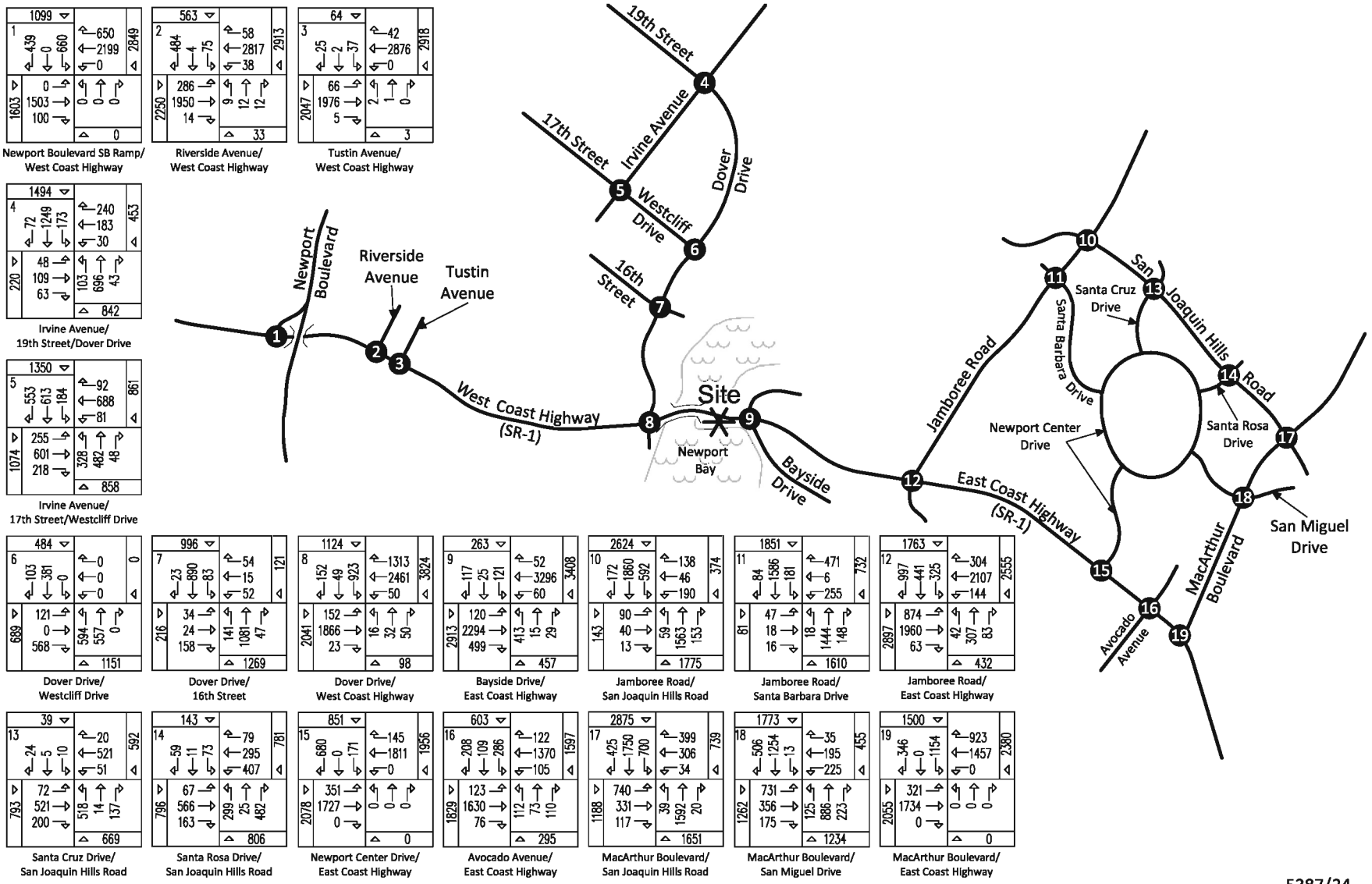
5387/23

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 24
Existing + Growth (2017) + Approved Projects + Cumulative Projects
Evening Peak Hour Intersection Turning Movement Volumes



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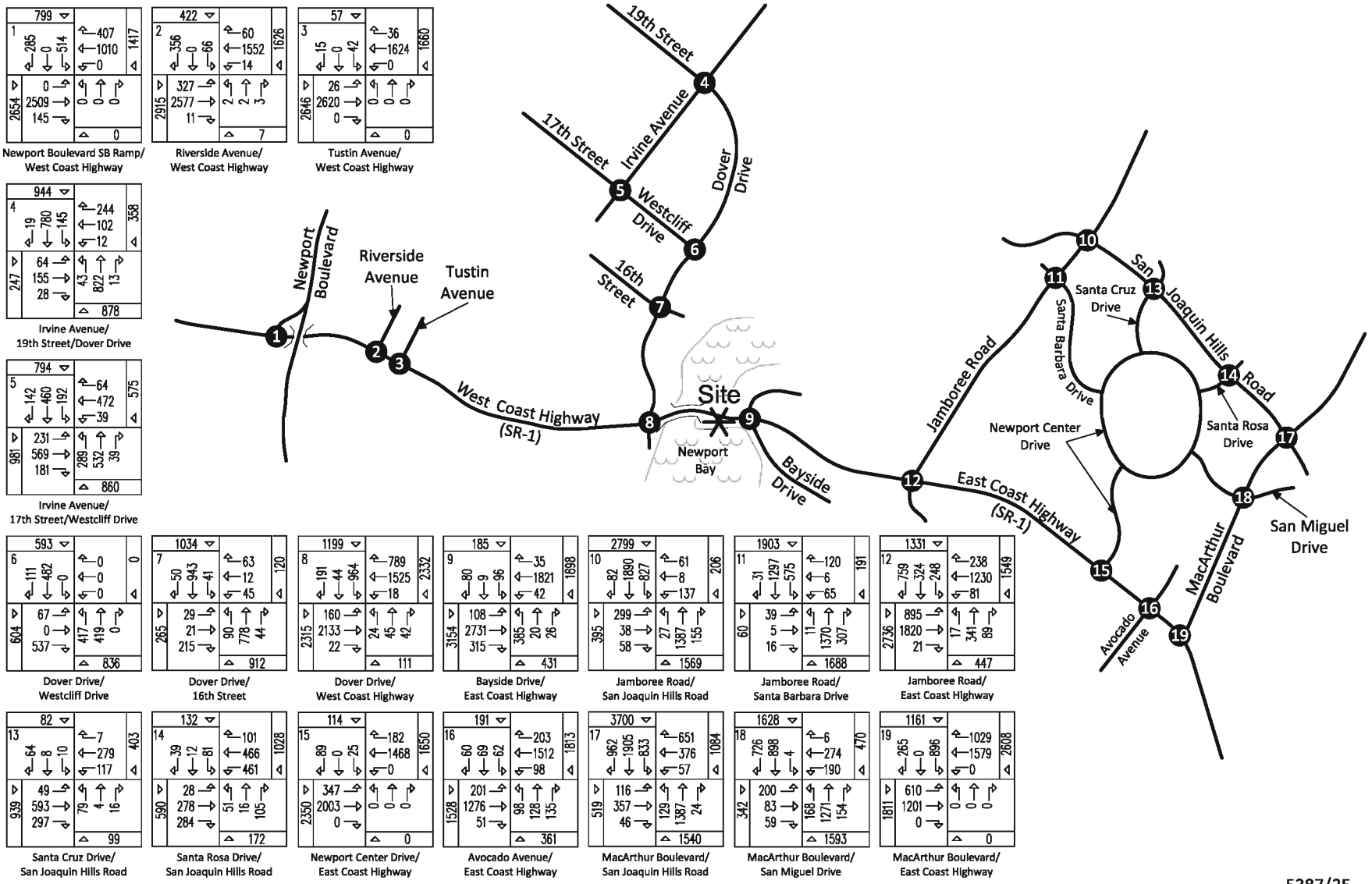
5387/24

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 25
Existing + Growth (2017) + Approved Projects + Cumulative Projects + Project Morning Peak Hour Intersection Turning Movement Volumes



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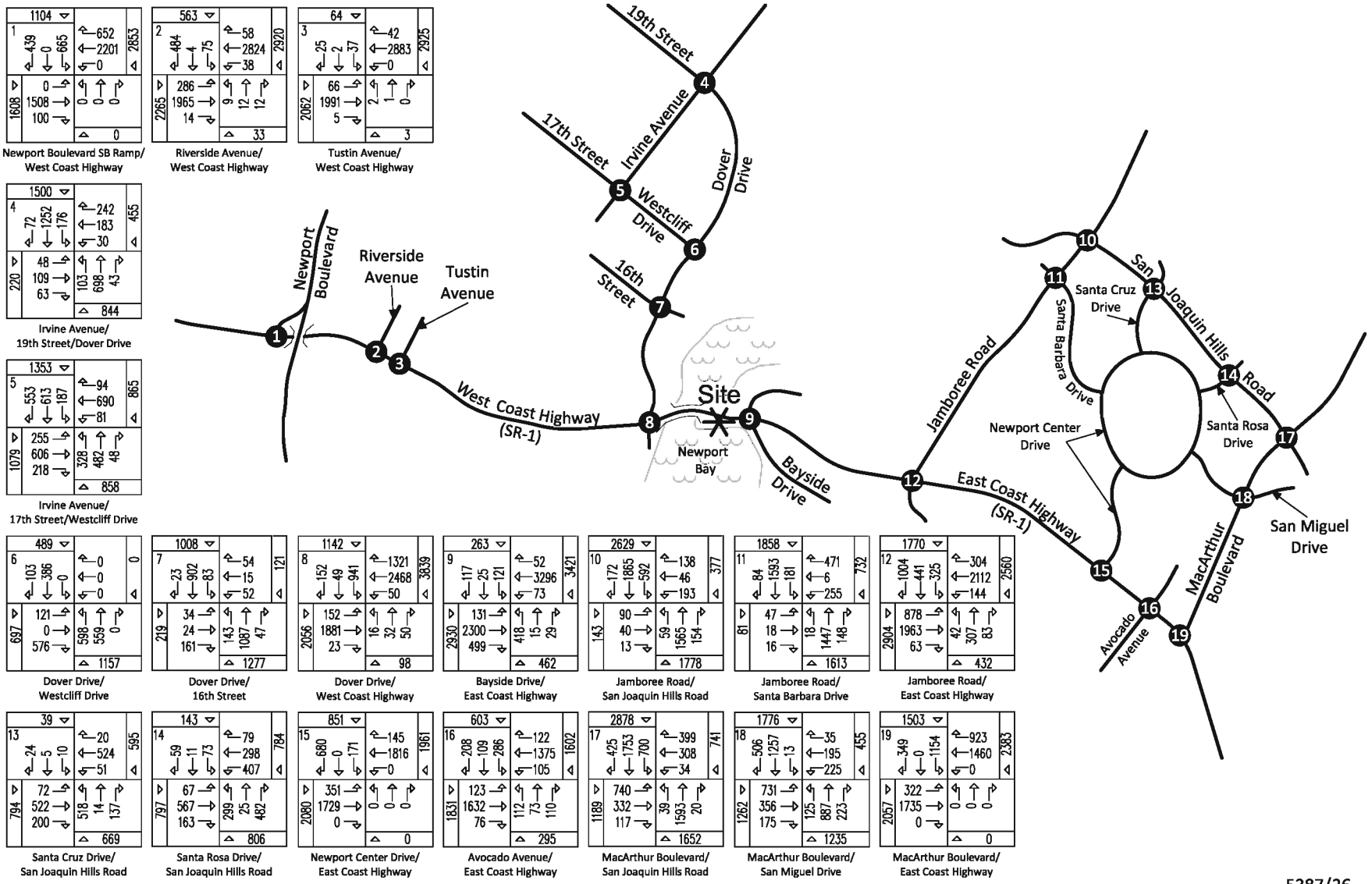
5387/25

Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 26
Existing + Growth (2017) + Approved Projects + Cumulative Projects + Project Evening Peak Hour Intersection Turning Movement Volumes



5387/26

Intersection reference numbers are in upper left corner of turning movement boxes.

8. Delay Analysis

Discussed below is the delay methodology required by the California Department of Transportation. The delay and Level of Service summary for the study area intersections are shown in Table 9.

Delay Methodology

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix H) based on the Highway Capacity Manual – Transportation Research Board Special Report 209. Level of Service definitions are included in Appendix H. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection.

Delay Calculations

The study area intersections currently operate at Level of Service C or better during the peak hours for existing traffic conditions (see Appendix H).

The study area intersections are projected to operate at Level of Service D or better during the peak hours for existing + growth (Year 2017) + approved projects + cumulative projects traffic conditions (see Appendix H).

The study area intersections are projected to operate at Level of Service D or better during the peak hours for existing + growth (Year 2017) + approved projects + cumulative projects + project traffic conditions (see Appendix H).

Based upon the delay methodology required by the California Department of Transportation, the delay and Level of Service summary for the study area intersections are shown in Table 9. As previously noted, the project is not projected to have a significant impact at the study area intersections.

Table 9

Intersection Delay and Level of Service Summary

Intersection	Peak Hour Delay (Seconds) - Level of Service							
	Existing		Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects		Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects + Project		Delay Increase	
	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening
Newport Boulevard SB Ramp (NS) at:								
West Coast Highway (EW)	11.2-B	11.2-B	15.6-B	12.5-B	15.6-B	12.5-B	0.0	0.0
Riverside Avenue (NS) at:								
West Coast Highway (EW)	8.4-A	13.5-B	9.6-A	18.7-B	9.7-A	18.9-B	+0.1	+0.2
Tustin Avenue (NS) at:								
West Coast Highway (EW)	24.2-C	3.8-A	46.5-D	4.3-A	46.7-D	4.3-A	+0.2	0.0
Dover Drive (NS) at:								
West Coast Highway (EW)	14.4-B	14.4-B	15.0-B	16.4-B	15.0-B	16.6-B	0.0	+0.2
Bayside Drive (NS) at:								
East Coast Highway (EW)	9.0-A	9.8-A	12.6-B	15.1-B	12.7-B	15.6-B	+0.1	+0.5

9. Orange County Congestion Management Program

This section discusses the Orange County Congestion Management Program (CMP). The purpose, prescribed methodology, and definition of a significant traffic impact are discussed.

County Congestion Management Program (CMP)

The CMP is a result of Proposition 111 which was a statewide initiative approved by the voters in June, 1990. The proposition allowed for a nine cent per gallon state gasoline tax increase over a five year period.

Proposition 111 explicitly stated that the new gas tax revenues were to be used to fix existing traffic problems and was not to be used to promote future development. For a city to get its share of the Proposition 111 gas tax, it has to follow certain procedures specified by the State Legislature. The legislation requires that a traffic impact analysis be prepared for new development. The traffic impact analysis is prepared to monitor and fix traffic problems caused by new development.

The Legislature requires that adjacent jurisdictions use a standard methodology for conducting a traffic impact analysis.

Although each county has developed standards for preparing traffic impact analyses, requirements do vary in detail from one county to another, but not in overall intent or concept. The general approach selected by each county for conducting traffic impact analyses has common elements.

According to the CMP, those proposed developments which meet the following criteria shall be evaluated:

- Development projects that generate more than 2,400 daily trips (The threshold is 1,600 or more trips per day for development projects that will directly access a CMP highway system link).

- Projects with a potential to create an impact of more than three percent of Level of Service E capacity.

Significance Criteria

To determine whether the addition of project generated trips results in a significant impact at the CMP study facility and thus requires mitigation, the Orange County CMP utilizes the following thresholds of significance:

- A significant project impact occurs when a proposed project increases traffic demand at a CMP study facility by more than three percent of capacity (V/C>0.03), causing or worsening Level of Service F (V/C > 1.00).

Based upon the CMP thresholds above, the project generated trips did not result in a significant impact at the study area intersections; therefore, no improvements are recommended at the study area intersections.

10. Recommendations

This section summarizes the recommended and required improvements based on the analysis presented in the previous sections.

Recommended Improvements

a. Site-specific circulation and access recommendations are depicted on Figure 28.

b. On-site parking shall be provided to meet City of Newport Beach parking code requirements. Parking layout shall comply with City parking lot standards (see Appendix I).

c. All dead end drive aisles shall be accompanied by a dedicated turn around space.

d. Tandem parking spaces shall meet City of Newport Beach parking code requirements and include attendant/valet service. A valet operation plan shall be required with project approval.

e. Sight distance at the project accesses shall be reviewed with respect to City of Newport Beach standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.

f. On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project and as approved by the City of Newport Beach.

Conclusions

a. As shown in Table 3 for the existing (Year 2014) + project analysis, the project generated trips did not result in a significant impact at the study area intersections (increase of one-percent or more at a study area intersection operating at worse than Level of Service D during the morning/evening peak hours); therefore, no improvements are recommended at the study area intersections.

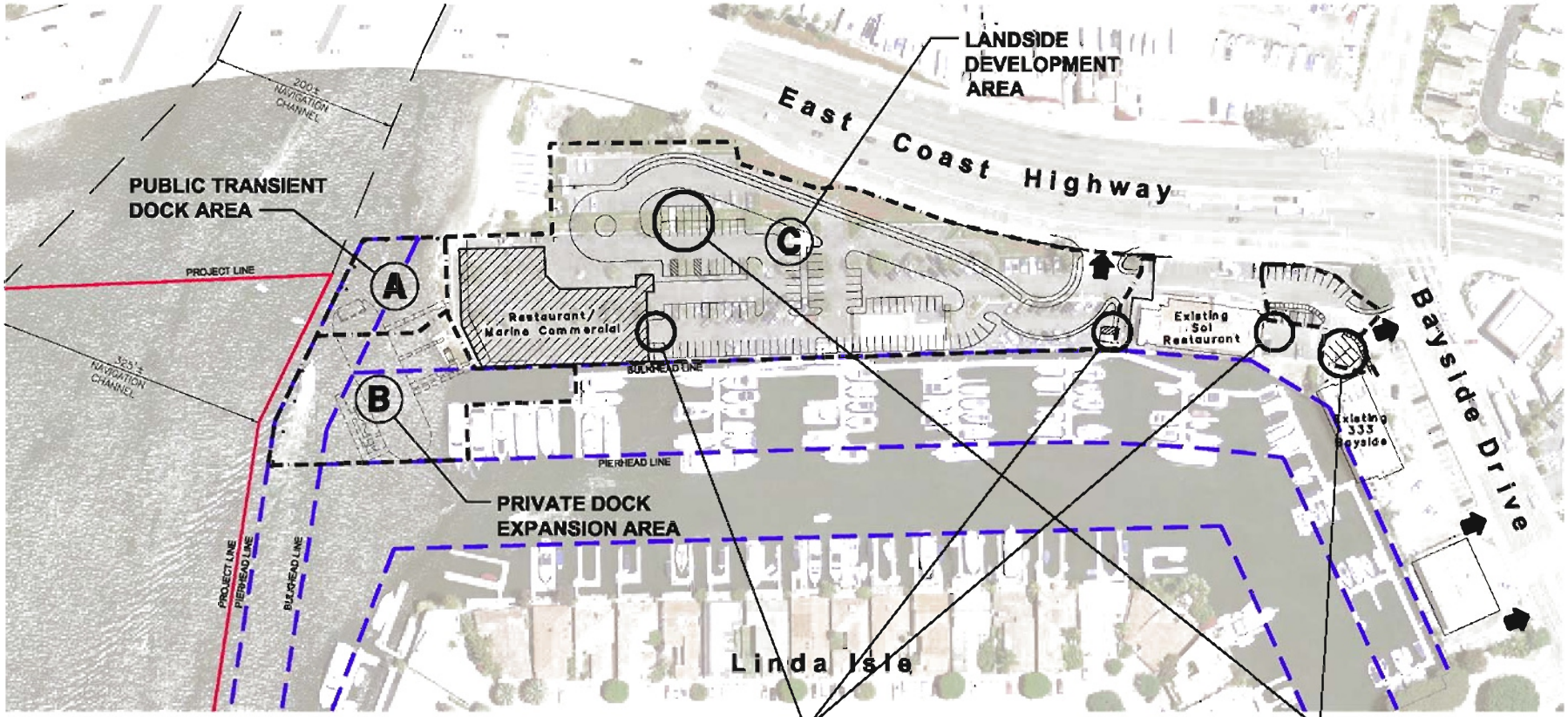
b. As shown in Table 6 for the TPO analysis, the project generated trips did not result in a significant impact at the study area intersections (increase of one-percent or more at a study area intersection operating at worse than Level of Service D during the morning/evening peak hours); therefore, no improvements are recommended at the study area intersections.

c. As shown in Table 8 for the CEQA analysis, the project generated trips did not result in a significant impact at the study area intersections (increase of one-percent or more at a study area intersection operating at worse than Level of Service D during the morning/evening peak hours); therefore, no improvements are recommended at the study area intersections.

d. Based upon the delay methodology required by the California Department of Transportation, the delay and Level of Service summary for the study area intersections are shown in Table 9. As previously noted, the project is projected to not have a significant impact at the study area intersections.

e. Based upon the CMP thresholds, the project generated trips did not result in a significant impact at the study area intersections; therefore, no improvements are recommended at the study area intersections.

Figure 27
Circulation Recommendations



On-site parking shall be provided to meet City of Newport Beach parking code requirements.

Sight distance at the project accesses shall be reviewed with respect to City of Newport Beach standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.

On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project and as approved by the City of Newport Beach.

All dead end drive aisles shall be accompanied by a dedicated turn around space.

Parking layout shall comply with City parking lot standards (see Appendix I).

Tandem parking spaces shall meet City of Newport Beach parking code requirements and include an attendant/valet service.

Legend

= Existing Access Driveway Location

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NTS

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Appendices

Appendix A	**Glossary of Transportation Terms**
Appendix B	**Year 2012/2013 Traffic Count Worksheets**
Appendix C	**Explanation and Calculation of Intersection Capacity Utilization**
Appendix D	**Approved Project Data**
Appendix E	**Regional Traffic Annual Growth Rate**
Appendix F	**TPO One-Percent Analysis Calculation Worksheets**
Appendix G	**Cumulative Project Data**
Appendix H	**Explanation and Calculation of Intersection Delay**
Appendix I	**City of Newport Beach Parking Lot Standards**

Please reference the included CD to view and print the Appendices.

For a printed copy of the Appendices, please contact us at:

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APPENDIX A

Glossary of Transportation Terms

GLOSSARY OF TRANSPORTATION TERMS

COMMON ABBREVIATIONS

AC:	Acres
ADT:	Average Daily Traffic
Caltrans:	California Department of Transportation
DU:	Dwelling Unit
ICU:	Intersection Capacity Utilization
LOS:	Level of Service
TSF:	Thousand Square Feet
V/C	Volume/Capacity
VMT:	Vehicle Miles Traveled

TERMS

AVERAGE DAILY TRAFFIC: The total volume during a year divided by the number of days in a year. Usually only weekdays are included.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A constriction along a travelway that limits the amount of traffic that can proceed downstream from its location.

CAPACITY: The maximum number of vehicles which can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

CHANNELIZATION: The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movements of both vehicles and pedestrians.

CLEARANCE INTERVAL: Nearly same as yellow time. If there is an all red interval after the end of a yellow, then that is also added into the clearance interval.

CORDON: An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

CYCLE LENGTH: The time period in seconds required for one complete signal cycle.

CUL-DE-SAC STREET: A local street open at one end only, and with special provisions for turning around.

DAILY CAPACITY: The daily volume of traffic that will result in a volume during the peak hour equal to the capacity of the roadway.

DAILY TRAFFIC: Same as average daily traffic.

DELAY: The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

DEMAND RESPONSIVE SIGNAL: Same as traffic-actuated signal.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DETECTOR: A device that responds to a physical stimulus and transmits a resulting impulse to the signal controller.

DESIGN SPEED: A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

DIRECTIONAL SPLIT: The percent of traffic in the peak direction at any point in time.

DIVERSION: The rerouting of peak hour traffic to avoid congestion.

FIXED TIME SIGNAL: Same as pretimed signal.

FORCED FLOW: Opposite of free flow.

FREE FLOW: Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

GAP: Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

HEADWAY: Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

INTERCONNECTED SIGNAL SYSTEM: A number of intersections that are connected to achieve signal progression.

LEVEL OF SERVICE: A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MINIMUM ACCEPTABLE GAP: Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

MULTI-MODAL: More than one mode; such as automobile, bus transit, rail rapid transit, and bicycle transportation modes.

OFFSET: The time interval in seconds between the beginning of green at one intersection and the beginning of green at an adjacent intersection.

PLATOON: A closely grouped component of traffic that is composed of several vehicles moving, or standing ready to move, with clear spaces ahead and behind.

ORIGIN-DESTINATION SURVEY: A survey to determine the point of origin and the point of destination for a given vehicle trip.

PASSENGER CAR EQUIVALENTS (PCE): One car is one Passenger Car Equivalent. A truck is equal to 2 or 3 Passenger Car Equivalents in that a truck requires longer to start, goes slower, and accelerates slower. Loaded trucks have a higher Passenger Car Equivalent than empty trucks.

PRETIMED SIGNAL: A type of traffic signal that directs traffic to stop and go on a predetermined time schedule without regard to traffic conditions.

PROGRESSION: A term used to describe the progressive movement of traffic through several signalized intersections.

SCREEN-LINE: An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

SIGNAL CYCLE: The time period in seconds required for one complete sequence of signal indications.

SIGNAL PHASE: The part of the signal cycle allocated to one or more traffic movements.

STARTING DELAY: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through a signalized intersection.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

TRIP: The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

TRIP-END: One end of a trip at either the origin or destination; i.e. each trip has two trip-ends. A trip-end occurs when a person, object, or message is transferred to or from a vehicle.

TRIP GENERATION RATE: The quantity of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

TRUCK: A vehicle having dual tires on one or more axles, or having more than two axles.

UNBALANCED FLOW: Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

VEHICLE MILES OF TRAVEL: A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

APPENDIX B

Year 2012/2013 Traffic Count Worksheets

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

File Name : H1302014
Site Code : 00003874
Start Date : 2/26/2013
Page No : 1

Groups Printed- Turning Movements

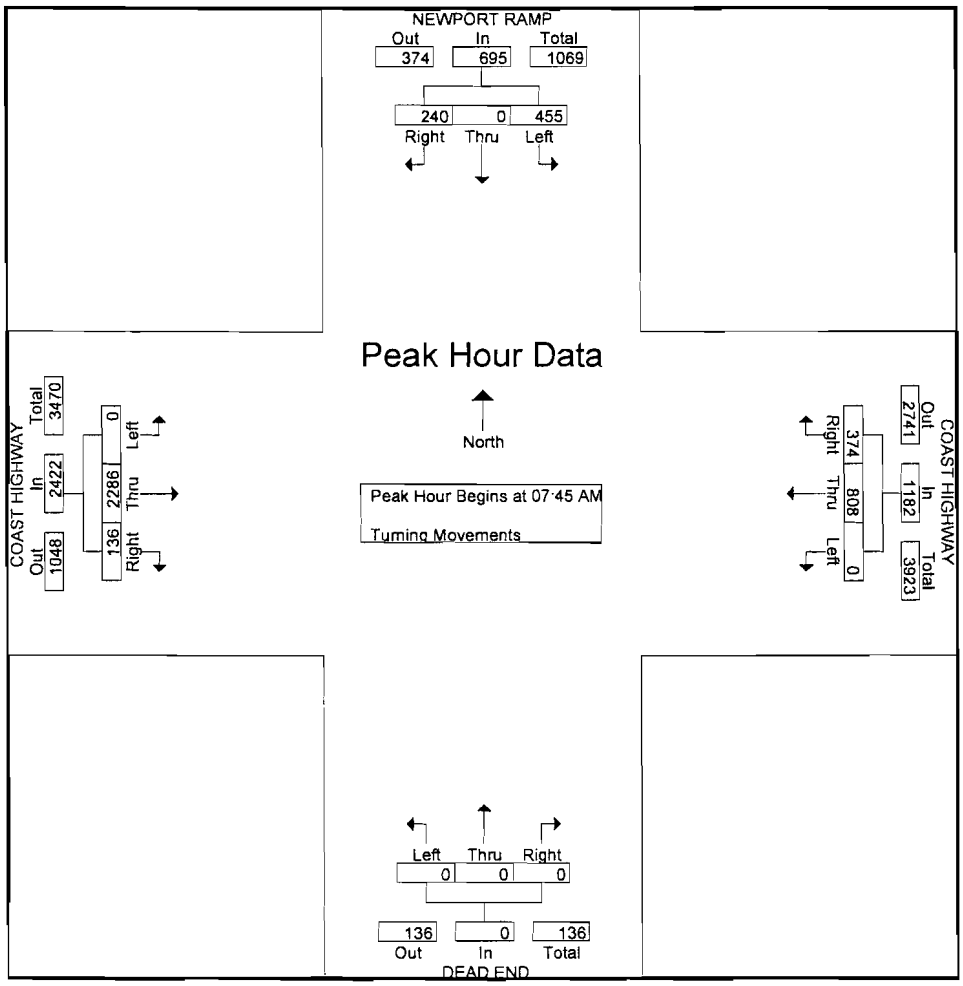
	NEWPORT RAMP Southbound			COAST HIGHWAY Westbound			DEAD END Northbound			COAST HIGHWAY Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	58	0	60	36	102	0	0	0	0	20	310	0	586
07:15 AM	47	0	77	47	141	0	0	0	0	14	432	0	758
07:30 AM	40	0	80	62	149	0	0	0	0	38	523	0	892
07:45 AM	65	0	122	101	210	0	0	0	0	36	677	0	1211
Total	210	0	339	246	602	0	0	0	0	108	1942	0	3447
08:00 AM	60	0	122	119	216	0	0	0	0	34	540	0	1091
08:15 AM	54	0	112	75	194	0	0	0	0	31	553	0	1019
08:30 AM	61	0	99	79	188	0	0	0	0	35	516	0	978
08:45 AM	62	0	115	90	200	0	0	0	0	34	481	0	982
Total	237	0	448	363	798	0	0	0	0	134	2090	0	4070
*** BREAK ***													
04:30 PM	97	0	138	119	390	0	0	0	0	25	241	0	1010
04:45 PM	66	0	132	142	339	0	0	0	0	21	250	1	951
Total	163	0	270	261	729	0	0	0	0	46	491	1	1961
05:00 PM	93	0	124	141	408	0	0	0	0	20	263	0	1049
05:15 PM	107	0	161	142	533	0	0	0	0	16	340	0	1299
05:30 PM	122	0	160	137	506	0	0	0	0	25	292	0	1242
05:45 PM	82	0	103	178	472	0	0	0	0	28	313	0	1176
Total	404	0	548	598	1919	0	0	0	0	89	1208	0	4766
06:00 PM	84	0	100	154	434	0	0	0	0	27	240	0	1039
06:15 PM	104	0	86	142	405	0	0	0	0	33	255	0	1025
Grand Total	1202	0	1791	1764	4887	0	0	0	0	437	6226	1	16308
Apprch %	40.2	0	59.8	26.5	73.5	0	0	0	0	6.6	93.4	0	
Total %	7.4	0	11	10.8	30	0	0	0	0	2.7	38.2	0	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

File Name : H1302014
Site Code : 00003874
Start Date : 2/26/2013

	NEWPORT RAMP Southbound				COAST HIGHWAY Westbound				DEAD END Northbound				COAST HIGHWAY 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	**65**	0	**122**	**187**	101	210	0	311	0	0	0	0	**36**	**677**	0	**713**	**1211**
08:00 AM	60	0	122	182	**119**	**216**	0	**335**	0	0	0	0	34	540	0	574	1091
08:15 AM	54	0	112	166	75	194	0	269	0	0	0	0	31	553	0	584	1019
08:30 AM	61	0	99	160	79	188	0	267	0	0	0	0	35	516	0	551	978
Total Volume	240	0	455	695	374	808	0	1182	0	0	0	0	136	2286	0	2422	4299
% App. Total	34.5	0	65.5		31.6	68.4	0		0	0	0		5.6	94.4	0		
PHF	.923	.000	.932	.929	.786	.935	.000	.882	.000	.000	.000	.000	.944	.844	.000	.849	.887

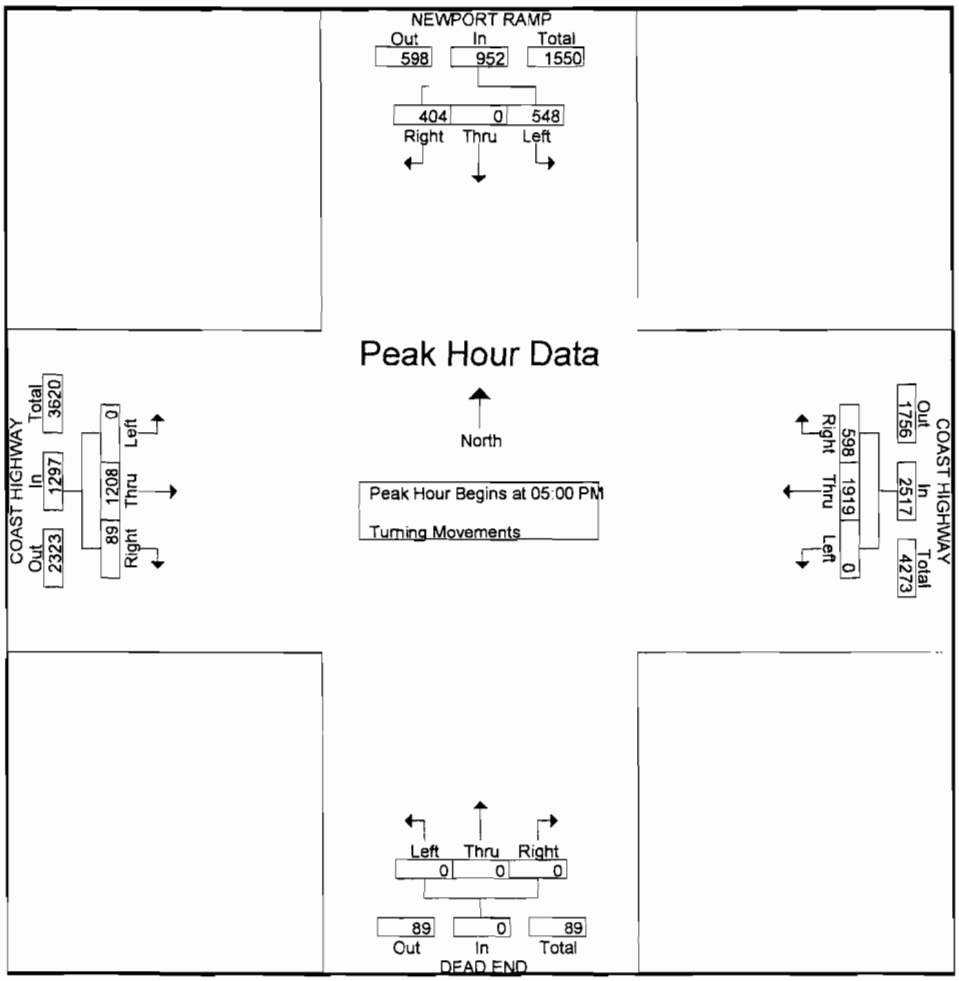


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

File Name : H1302014
Site Code : 00003874
Start Date : 2/26/2013
Page No : 3

	NEWPORT RAMP Southbound				COAST HIGHWAY Westbound				DEAD END Northbound				COAST HIGHWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	93	0	124	217	141	408	0	549	0	0	0	0	20	263	0	283	1049
05:15 PM	107	0	**161**	268	142	**533**	0	**675**	0	0	0	0	16	**340**	0	**356**	**1299**
05:30 PM	**122**	0	160	**282**	137	506	0	643	0	0	0	0	25	292	0	317	1242
05:45 PM	82	0	103	185	**178**	472	0	650	0	0	0	0	**28**	313	0	341	1176
Total Volume	404	0	548	952	598	1919	0	2517	0	0	0	0	89	1208	0	1297	4766
% App. Total	42.4	0	57.6		23.8	76.2	0		0	0	0		6.9	93.1	0		
PHF	.828	.000	.851	.844	.840	.900	.000	.932	.000	.000	.000	.000	.795	.888	.000	.911	.917



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

File Name : h1302016
Site Code : 00005061
Start Date : 2/28/2013
Page No : 1

Groups Printed- Turning Movements

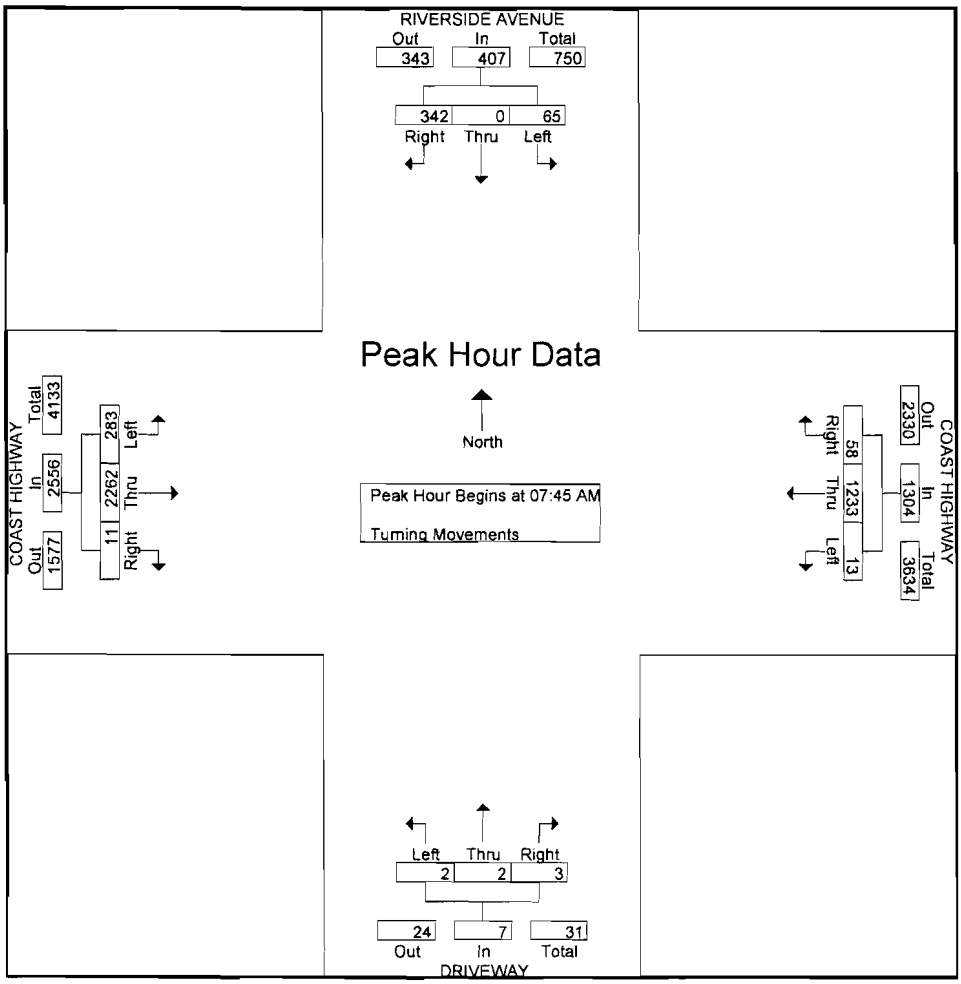
	RIVERSIDE AVENUE Southbound			COAST HIGHWAY Westbound			DRIVEWAY Northbound			COAST HIGHWAY Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	30	0	10	6	163	1	0	0	0	0	301	36	547
07:15 AM	45	0	14	6	196	0	0	0	0	0	362	46	669
07:30 AM	39	0	16	8	221	2	0	1	0	4	515	85	891
07:45 AM	99	0	17	16	291	1	2	2	0	4	535	97	1064
Total	213	0	57	36	871	4	2	3	0	8	1713	264	3171
08:00 AM	124	0	20	10	296	6	1	0	1	3	544	74	1079
08:15 AM	57	0	16	13	314	2	0	0	0	2	598	51	1053
08:30 AM	62	0	12	19	332	4	0	0	1	2	585	61	1078
08:45 AM	52	3	14	11	303	2	0	0	2	3	539	61	990
Total	295	3	62	53	1245	14	1	0	4	10	2266	247	4200
*** BREAK ***													
04:30 PM	89	1	15	20	570	10	2	2	6	4	397	58	1174
04:45 PM	93	1	28	21	485	12	4	0	9	4	341	91	1089
Total	182	2	43	41	1055	22	6	2	15	8	738	149	2263
05:00 PM	111	1	23	15	612	10	5	2	5	1	395	62	1242
05:15 PM	127	1	14	18	557	7	1	4	2	4	430	77	1242
05:30 PM	97	1	17	15	636	10	2	6	1	3	386	52	1226
05:45 PM	106	1	19	7	607	10	4	0	1	5	341	56	1157
Total	441	4	73	55	2412	37	12	12	9	13	1552	247	4867
06:00 PM	102	0	16	13	601	6	5	0	6	6	370	54	1179
06:15 PM	83	0	17	9	551	9	5	2	3	3	311	53	1046
Grand Total	1316	9	268	207	6735	92	31	19	37	48	6950	1014	16726
Apprch %	82.6	0.6	16.8	2.9	95.7	1.3	35.6	21.8	42.5	0.6	86.7	12.7	
Total %	7.9	0.1	1.6	1.2	40.3	0.6	0.2	0.1	0.2	0.3	41.6	6.1	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

File Name : h1302016
Site Code : 00005061
Start Date : 2/28/2013
Page No : 2

	RIVERSIDE AVENUE Southbound				COAST HIGHWAY Westbound				DRIVEWAY Northbound				COAST HIGHWAY 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	99	0	17	116	16	291	1	308	**2**	**2**	0	**4**	**4**	535	**97**	636	1064
08:00 AM	**124**	0	**20**	**144**	10	296	**6**	312	1	0	**1**	2	3	544	74	621	**1079**
08:15 AM	57	0	16	73	13	314	2	329	0	0	0	0	2	**598**	51	**651**	1053
08:30 AM	62	0	12	74	**19**	**332**	**4**	**355**	0	0	1	1	2	585	61	648	1078
Total Volume	342	0	65	407	58	1233	13	1304	3	2	2	7	11	2262	283	2556	**4274**
% App. Total	84	0	16		4.4	94.6	1		42.9	28.6	28.6		0.4	88.5	11.1		
PHF	.690	.000	.813	.707	.763	.928	.542	.918	.375	.250	.500	.438	.688	.946	.729	.982	.990

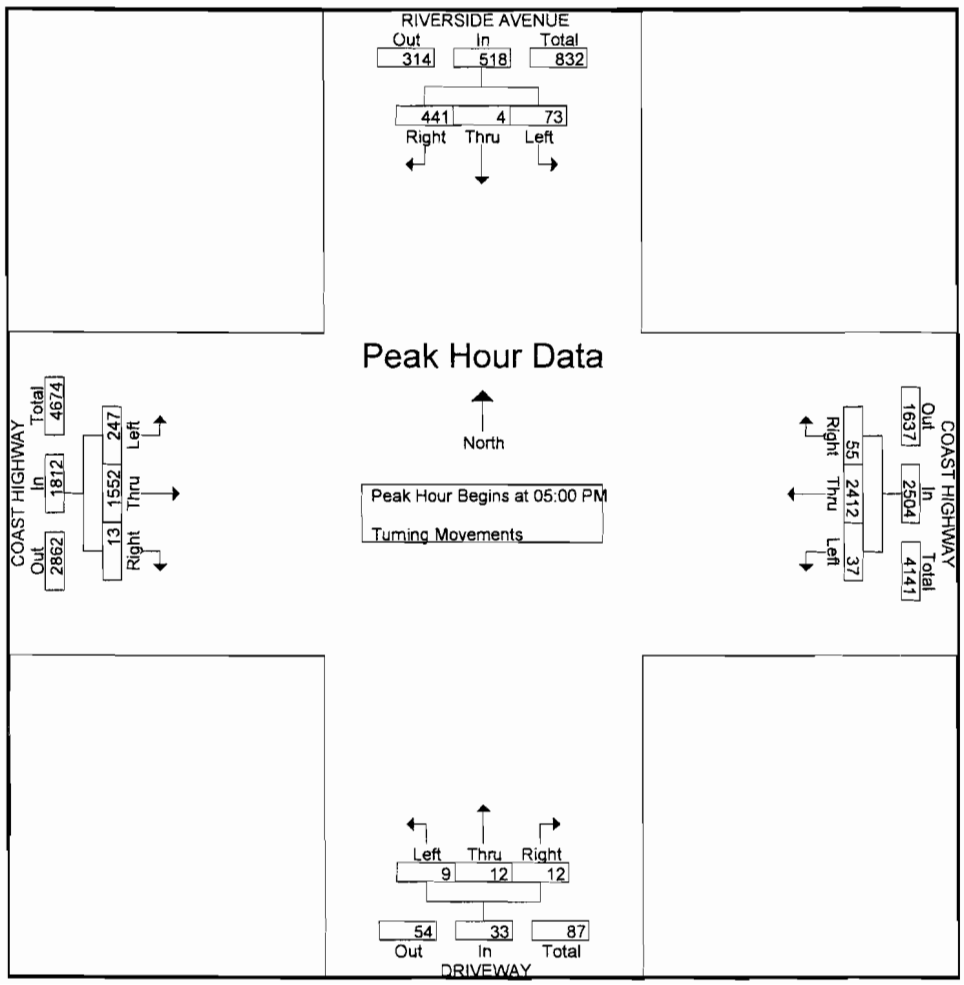


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

File Name : h1302016
Site Code : 00005061
Start Date : 2/28/2013
Page No : 3

	RIVERSIDE AVENUE Southbound				COAST HIGHWAY Westbound				DRIVEWAY Northbound				COAST HIGHWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	111	**1**	**23**	135	15	612	**10**	637	**5**	2	**5**	**12**	1	395	62	458	**1242**
05:15 PM	**127**	1	14	**142**	**18**	557	7	582	1	4	2	7	4	**430**	**77**	**511**	1242
05:30 PM	97	1	17	115	15	**636**	10	**661**	2	**6**	1	9	3	386	52	441	1226
05:45 PM	106	1	19	126	7	607	10	624	4	0	1	5	**5**	341	56	402	1157
Total Volume	441	4	73	518	55	2412	37	2504	12	12	9	33	13	1552	247	1812	4867
% App. Total	85.1	0.8	14.1		2.2	96.3	1.5		36.4	36.4	27.3		0.7	85.7	13.6		
PHF	.868	1.00	.793	.912	.764	.948	.925	.947	.600	.500	.450	.688	.650	.902	.802	.886	.980



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

File Name : h1302017
Site Code : 00005060
Start Date : 2/28/2013
Page No : 1

Groups Printed- Turning Movements

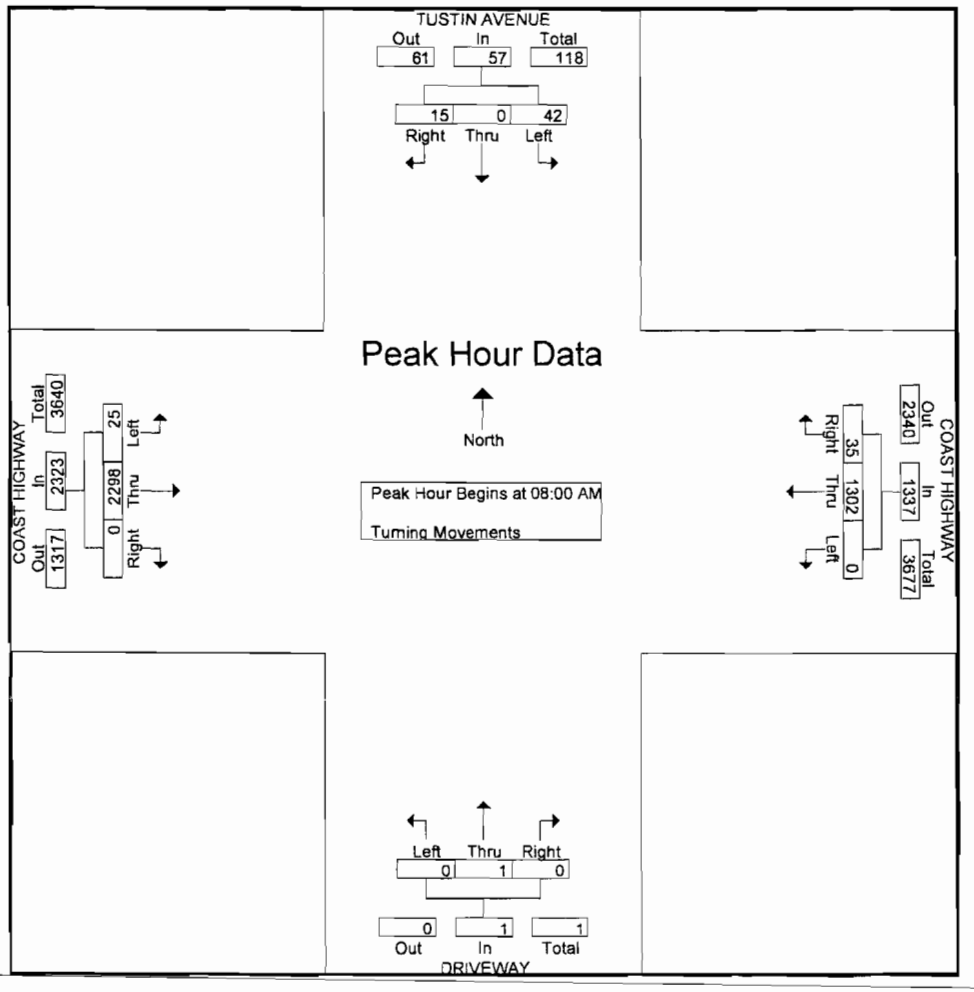
	TUSTIN AVENUE Southbound			COAST HIGHWAY Westbound			DRIVEWAY Northbound			COAST HIGHWAY Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	1	1	3	3	159	0	0	0	1	0	339	2	509
07:15 AM	3	0	3	1	199	0	0	0	1	0	371	6	584
07:30 AM	4	1	1	6	226	0	0	0	0	0	502	4	744
07:45 AM	3	0	7	33	310	0	0	0	0	0	529	19	901
Total	11	2	14	43	894	0	0	0	2	0	1741	31	2738
08:00 AM	6	0	13	8	295	0	0	1	0	0	553	6	882
08:15 AM	5	0	13	8	318	0	0	0	0	0	613	5	962
08:30 AM	3	0	9	10	344	0	0	0	0	0	578	11	955
08:45 AM	1	0	7	9	345	0	0	0	0	0	554	3	919
Total	15	0	42	35	1302	0	0	1	0	0	2298	25	3718
*** BREAK ***													
04:30 PM	9	0	7	14	552	0	0	0	0	3	391	26	1002
04:45 PM	8	1	9	10	543	0	3	0	1	2	347	19	943
Total	17	1	16	24	1095	0	3	0	1	5	738	45	1945
05:00 PM	8	1	6	10	591	0	0	0	0	3	391	18	1028
05:15 PM	6	1	10	14	580	0	0	0	1	0	443	15	1070
05:30 PM	8	0	8	11	651	0	0	0	0	2	379	14	1073
05:45 PM	3	0	13	5	644	0	0	1	1	0	362	16	1045
Total	25	2	37	40	2466	0	0	1	2	5	1575	63	4216
06:00 PM	5	0	9	5	608	0	0	0	0	4	368	16	1015
06:15 PM	7	0	3	7	575	0	0	0	1	6	321	11	931
Grand Total	80	5	121	154	6940	0	3	2	6	20	7041	191	14563
Apprch %	38.8	2.4	58.7	2.2	97.8	0	27.3	18.2	54.5	0.3	97.1	2.6	
Total %	0.5	0	0.8	1.1	47.7	0	0	0	0	0.1	48.3	1.3	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

File Name : h1302017
Site Code : 00005060
Start Date : 2/28/2013
Page No : 2

	TUSTIN AVENUE Southbound				COAST HIGHWAY Westbound				DRIVEWAY Northbound				COAST HIGHWAY 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	**6**	0	**13**	**19**	8	295	0	303	0	**1**	0	**1**	0	553	6	559	882
08:15 AM	5	0	13	18	8	318	0	326	0	0	0	0	0	**613**	5	**618**	**962**
08:30 AM	3	0	9	12	**10**	344	0	**354**	0	0	0	0	0	578	**11**	589	955
08:45 AM	1	0	7	8	9	**345**	0	354	0	0	0	0	0	554	3	557	919
Total Volume	15	0	42	57	35	1302	0	1337	0	1	0	1	0	2298	25	2323	3718
% App. Total	26.3	0	73.7		2.6	97.4	0		0	100	0		0	98.9	1.1		
PHF	.625	.000	.808	.750	.875	.943	.000	.944	.000	.250	.000	.250	.000	.937	.568	.940	.966

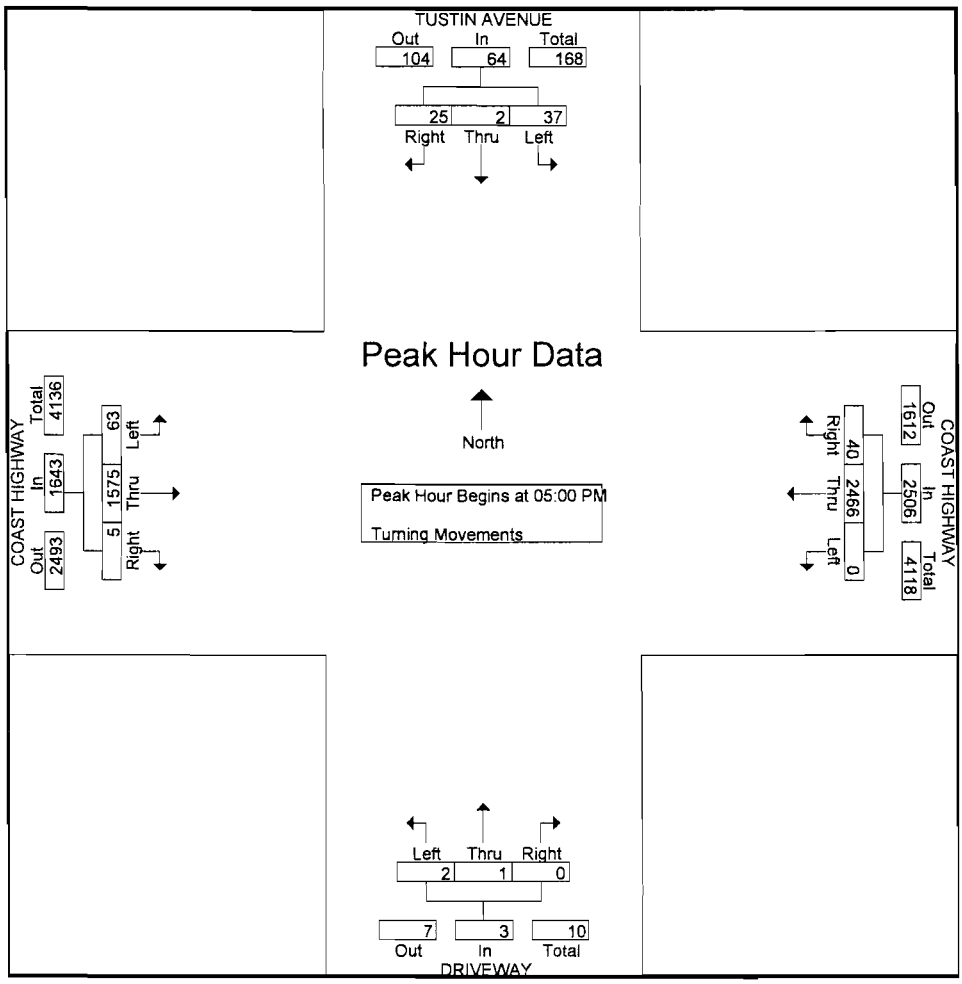


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

File Name : h1302017
Site Code : 00005060
Start Date : 2/28/2013
Page No : 3

	TUSTIN AVENUE Southbound				COAST HIGHWAY Westbound				DRIVEWAY Northbound				COAST HIGHWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**8**	**1**	6	15	10	591	0	601	0	0	0	0	**3**	391	**18**	412	1028
05:15 PM	6	1	10	**17**	**14**	580	0	594	0	0	**1**	1	0	**443**	15	**458**	1070
05:30 PM	8	0	8	16	11	**651**	0	**662**	0	0	0	0	2	379	14	395	**1073**
05:45 PM	3	0	**13**	16	5	644	0	649	0	**1**	1	**2**	0	362	16	378	1045
Total Volume	25	2	37	64	40	2466	0	2506	0	1	2	3	5	1575	63	1643	4216
% App. Total	39.1	3.1	57.8		1.6	98.4	0		0	33.3	66.7		0.3	95.9	3.8		
PHF	.781	.500	.712	.941	.714	.947	.000	.946	.000	.250	.500	.375	.417	.889	.875	.897	.982



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: IRVINE AVENUE
E-W Direction: DOVER DRIVE-19TH ST

File Name : H1204029
Site Code : 00005701
Start Date : 4/24/2012
Page No : 1

Groups Printed- Turning Movements

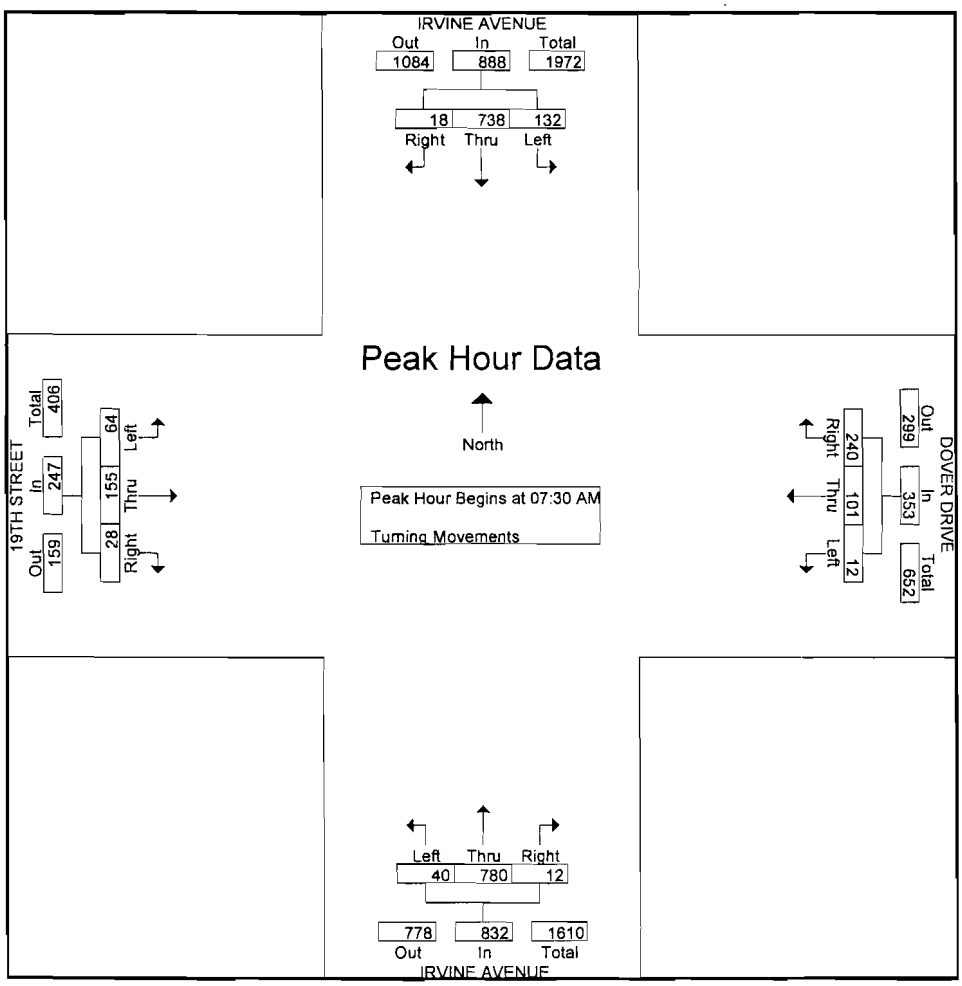
	IRVINE AVENUE Southbound			DOVER DRIVE Westbound			IRVINE AVENUE Northbound			19TH STREET Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	2	109	17	17	8	0	4	95	5	9	15	8	289
07:15 AM	5	107	18	26	8	3	1	102	4	6	19	10	309
07:30 AM	5	170	30	51	22	5	6	145	11	4	34	13	496
07:45 AM	0	300	44	66	22	1	2	241	8	8	51	12	755
Total	12	686	109	160	60	9	13	583	28	27	119	43	1849
08:00 AM	7	128	33	84	31	4	1	211	12	7	32	20	570
08:15 AM	6	140	25	39	26	2	3	183	9	9	38	19	499
08:30 AM	4	153	34	45	27	1	3	159	22	7	22	19	496
08:45 AM	9	151	27	43	25	0	3	167	17	16	29	15	502
Total	26	572	119	211	109	7	10	720	60	39	121	73	2067
*** BREAK ***													
04:30 PM	5	193	39	51	61	5	7	143	15	14	18	8	559
04:45 PM	14	277	39	56	46	8	10	126	43	18	38	13	688
Total	19	470	78	107	107	13	17	269	58	32	56	21	1247
05:00 PM	10	264	40	57	49	7	13	178	16	11	20	5	670
05:15 PM	21	310	37	56	48	5	12	175	23	19	26	17	749
05:30 PM	24	334	43	65	39	10	6	179	15	15	25	13	768
05:45 PM	20	299	38	58	45	7	6	150	17	12	23	13	688
Total	75	1207	158	236	181	29	37	682	71	57	94	48	2875
06:00 PM	16	293	48	47	43	9	6	156	14	4	24	7	667
06:15 PM	16	233	31	45	38	7	9	154	17	8	18	11	587
Grand Total	164	3461	543	806	538	74	92	2564	248	167	432	203	9292
Apprch %	3.9	83	13	56.8	37.9	5.2	3.2	88.3	8.5	20.8	53.9	25.3	
Total %	1.8	37.2	5.8	8.7	5.8	0.8	1	27.6	2.7	1.8	4.6	2.2	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: IRVINE AVENUE
E-W Direction: DOVER DRIVE-19TH ST

File Name : H1204029
Site Code : 00005701
Start Date : 4/24/2012
Page No : 2

	IRVINE AVENUE Southbound				DOVER DRIVE Westbound				IRVINE AVENUE Northbound				19TH STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	5	170	30	205	51	22	**5**	78	**6**	145	11	162	**4**	34	13	51	496
07:45 AM	0	**300**	**44**	**344**	66	22	1	89	2	**241**	8	**251**	8	**51**	12	**71**	**755**
08:00 AM	**7**	128	33	168	**84**	**31**	4	**119**	1	211	**12**	224	7	32	**20**	59	570
08:15 AM	6	140	25	171	39	26	2	67	3	183	9	195	**9**	38	19	66	499
Total Volume	18	738	132	888	240	101	12	353	12	780	40	832	28	155	64	247	2320
% App. Total	2	83.1	14.9		68	28.6	3.4		1.4	93.8	4.8		11.3	62.8	25.9		
PHF	.643	.615	.750	.645	.714	.815	.600	.742	.500	.809	.833	.829	.778	.760	.800	.870	.768

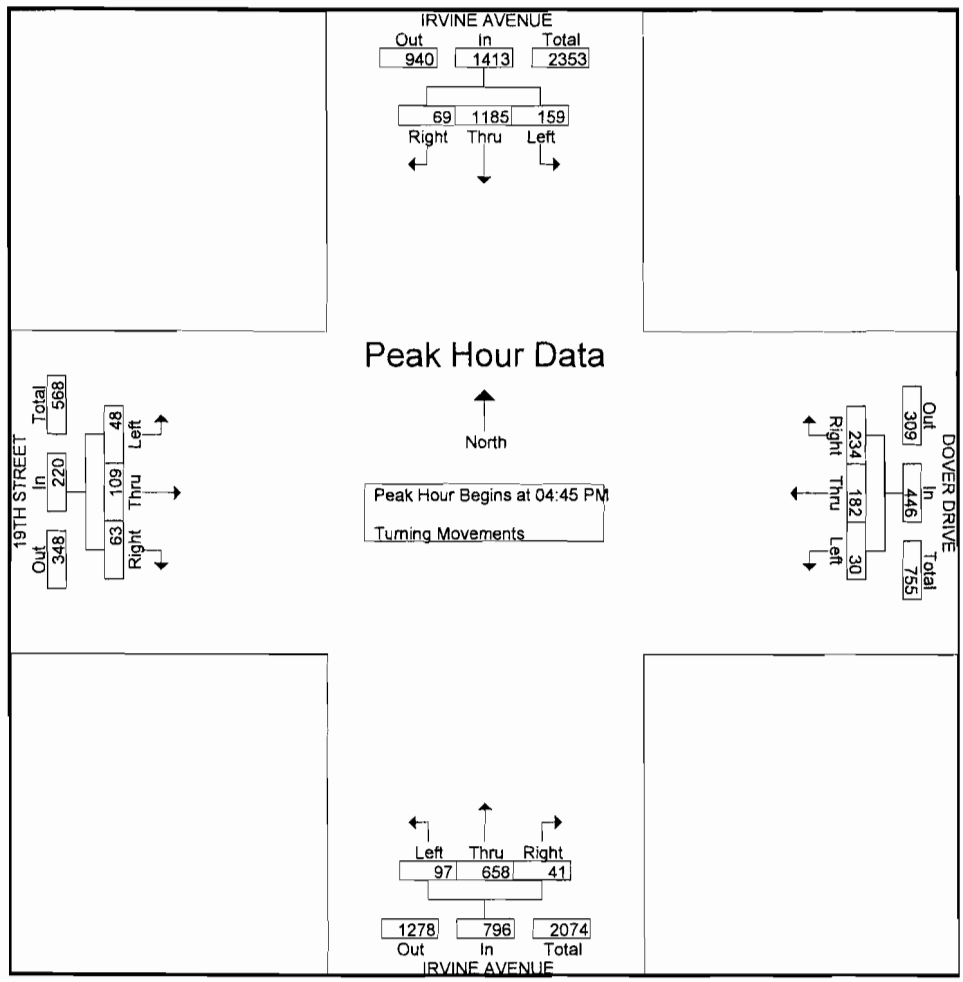


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: IRVINE AVENUE
E-W Direction: DOVER DRIVE-19TH ST

File Name : H1204029
Site Code : 00005701
Start Date : 4/24/2012
Page No : 3

	IRVINE AVENUE Southbound				DOVER DRIVE Westbound				IRVINE AVENUE Northbound				19TH STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	14	277	39	330	56	46	8	110	10	126	**43**	179	18	**38**	13	**69**	688
05:00 PM	10	264	40	314	57	**49**	7	113	**13**	178	16	207	11	20	5	36	670
05:15 PM	21	310	37	368	56	48	5	109	12	175	23	**210**	**19**	26	**17**	62	749
05:30 PM	**24**	**334**	**43**	**401**	**65**	39	**10**	**114**	6	**179**	15	200	15	25	13	53	**768**
Total Volume	69	1185	159	1413	234	182	30	446	41	658	97	796	63	109	48	220	2875
% App. Total	4.9	83.9	11.3		52.5	40.8	6.7		5.2	82.7	12.2		28.6	49.5	21.8		
PHF	.719	.887	.924	.881	.900	.929	.750	.978	.788	.919	.564	.948	.829	.717	.706	.797	.936



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: IRVINE AVENUE
E-W Direction: 17TH ST - WESTCLIFF DR

File Name : H1204030
Site Code : 00003873
Start Date : 5/3/2012
Page No : 1

Groups Printed- Turning Movements

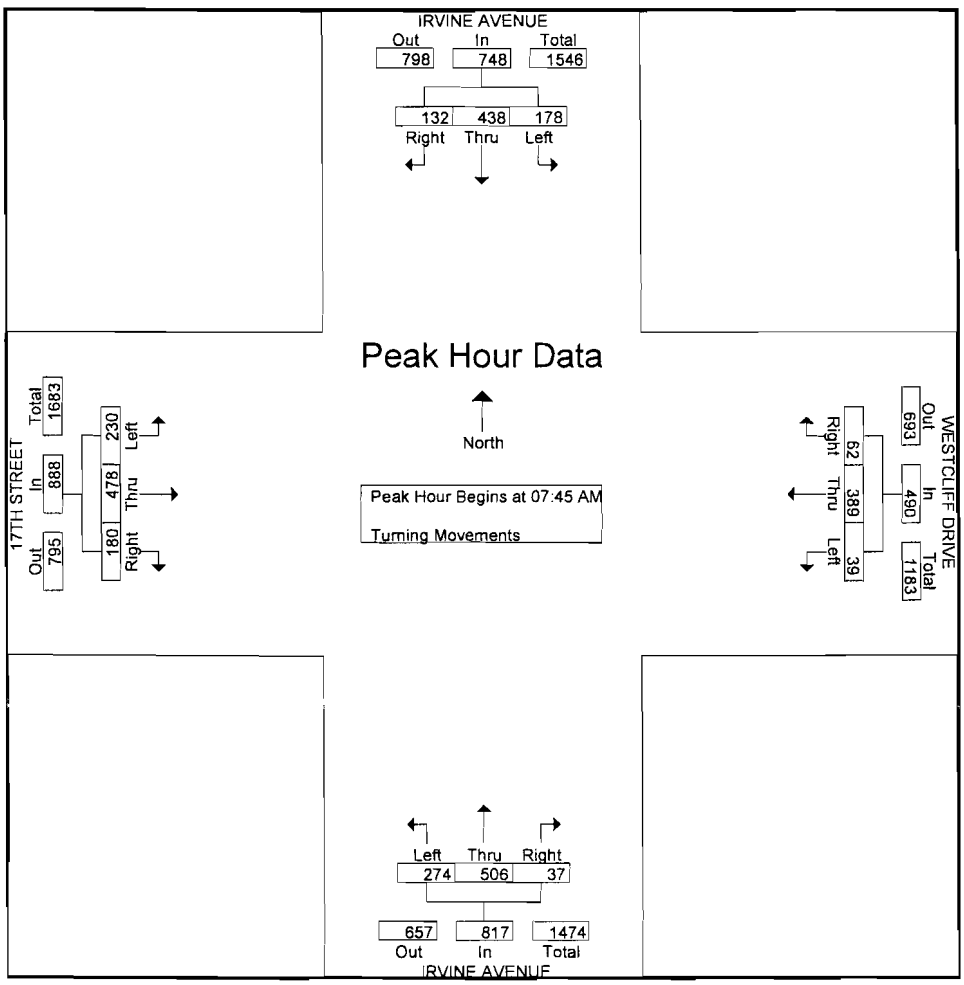
	IRVINE AVENUE Southbound			WESTCLIFF DRIVE Westbound			IRVINE AVENUE Northbound			17TH STREET Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	25	64	16	0	33	3	3	73	43	39	68	23	390
07:15 AM	26	43	13	4	42	5	3	64	59	30	80	31	400
07:30 AM	25	124	38	11	47	5	4	101	79	53	88	31	606
07:45 AM	25	194	71	18	74	5	6	130	69	80	116	53	841
Total	101	425	138	33	196	18	16	368	250	202	352	138	2237
08:00 AM	48	105	49	16	81	10	13	178	85	35	118	64	802
08:15 AM	25	63	30	12	109	7	8	108	71	28	131	49	641
08:30 AM	34	76	28	16	125	17	10	90	49	37	113	64	659
08:45 AM	50	88	58	14	135	14	4	100	68	35	116	40	722
Total	157	332	165	58	450	48	35	476	273	135	478	217	2824
*** BREAK ***													
04:30 PM	71	113	38	29	151	16	11	101	70	49	145	68	862
04:45 PM	72	113	71	17	162	15	9	95	81	46	125	77	883
Total	143	226	109	46	313	31	20	196	151	95	270	145	1745
05:00 PM	73	111	38	17	158	19	8	93	63	48	121	64	813
05:15 PM	118	142	59	38	136	16	9	128	79	55	126	58	964
05:30 PM	149	143	45	14	144	26	11	107	76	59	126	69	969
05:45 PM	135	164	38	21	143	17	9	139	81	60	109	50	966
Total	475	560	180	90	581	78	37	467	299	222	482	241	3712
06:00 PM	121	135	28	14	131	22	17	85	76	44	111	71	855
06:15 PM	94	134	35	10	143	15	12	72	73	70	125	60	843
Grand Total	1091	1812	655	251	1814	212	137	1664	1122	768	1818	872	12216
Apprch %	30.7	50.9	18.4	11	79.7	9.3	4.7	56.9	38.4	22.2	52.6	25.2	
Total %	8.9	14.8	5.4	2.1	14.8	1.7	1.1	13.6	9.2	6.3	14.9	7.1	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: IRVINE AVENUE
E-W Direction: 17TH ST - WESTCLIFF DR

File Name : H1204030
Site Code : 00003873
Start Date : 5/3/2012
Page No : 2

	IRVINE AVENUE Southbound				WESTCLIFF DRIVE Westbound				IRVINE AVENUE Northbound				17TH STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	25	**194**	**71**	**290**	**18**	74	5	97	6	130	69	205	**80**	116	53	**249**	**841**
08:00 AM	**48**	105	49	202	16	81	10	107	**13**	**178**	**85**	**276**	35	118	**64**	217	802
08:15 AM	25	63	30	118	12	109	7	128	8	108	71	187	28	**131**	49	208	641
08:30 AM	34	76	28	138	16	**125**	**17**	**158**	10	90	49	149	37	113	64	214	659
Total Volume	132	438	178	748	62	389	39	490	37	506	274	817	180	478	230	888	2943
% App. Total	17.6	58.6	23.8		12.7	79.4	8		4.5	61.9	33.5		20.3	53.8	25.9		
PHF	.688	.564	.627	.645	.861	.778	.574	.775	.712	.711	.806	.740	.563	.912	.898	.892	.875

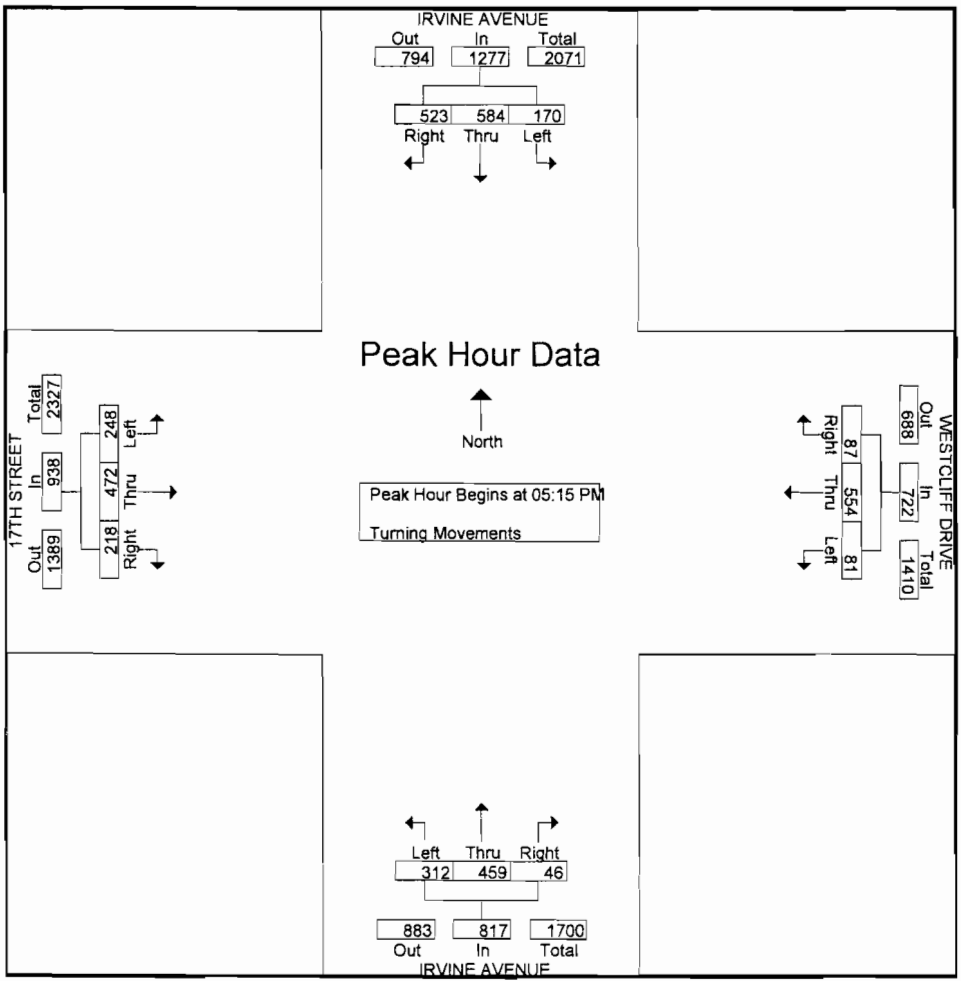


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: IRVINE AVENUE
E-W Direction: 17TH ST - WESTCLIFF DR

File Name : H1204030
Site Code : 00003873
Start Date : 5/3/2012

	IRVINE AVENUE Southbound				WESTCLIFF DRIVE Westbound				IRVINE AVENUE Northbound				17TH STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:15 PM																	
05:15 PM	118	142	**59**	319	**38**	136	16	**190**	9	128	79	216	55	**126**	58	239	964
05:30 PM	**149**	143	45	**337**	14	**144**	**26**	184	11	107	76	194	59	126	69	**254**	**969**
05:45 PM	135	**164**	38	337	21	143	17	181	9	**139**	**81**	**229**	**60**	109	50	219	966
06:00 PM	121	135	28	284	14	131	22	167	**17**	85	76	178	44	111	**71**	226	855
Total Volume	523	584	170	1277	87	554	81	722	46	459	312	817	218	472	248	938	3754
% App. Total	41	45.7	13.3		12	76.7	11.2		5.6	56.2	38.2		23.2	50.3	26.4		
PHF	.878	.890	.720	.947	.572	.962	.779	.950	.676	.826	.963	.892	.908	.937	.873	.923	.969



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: DOVER DRIVE
E-W Direction: WESTCLIFF DRIVE

File Name : H1204028
Site Code : 00000562
Start Date : 4/25/2012
Page No : 1

Groups Printed- Turning Movements

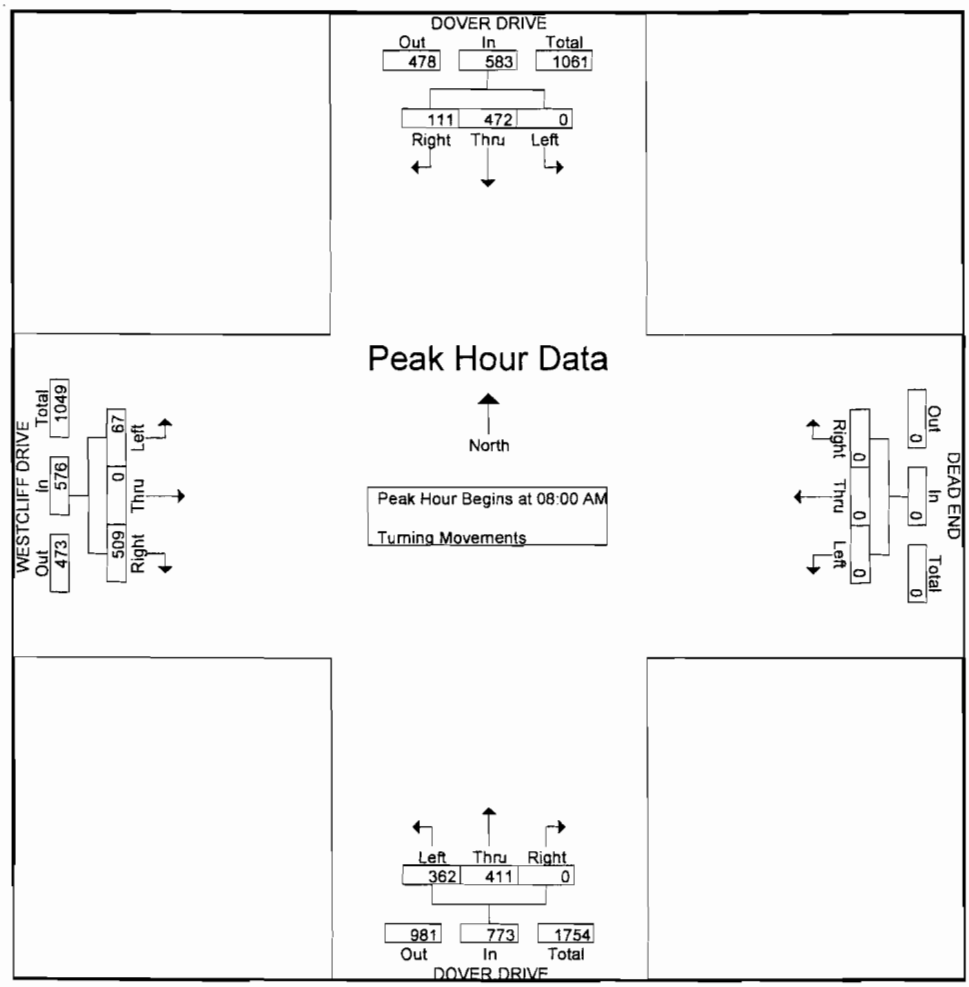
	DOVER DRIVE Southbound			DEAD END Westbound			DOVER DRIVE Northbound			WESTCLIFF DRIVE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	8	41	0	0	0	0	0	38	27	67	0	11	192
07:15 AM	16	84	0	0	0	0	0	39	25	75	0	11	250
07:30 AM	18	94	0	0	0	0	0	81	42	96	0	8	339
07:45 AM	31	121	0	0	0	0	0	109	63	155	0	13	492
Total	73	340	0	0	0	0	0	267	157	393	0	43	1273
08:00 AM	26	81	0	0	0	0	0	109	96	104	0	19	435
08:15 AM	15	84	0	0	0	0	0	86	75	130	0	16	406
08:30 AM	39	143	0	0	0	0	0	87	100	130	0	17	516
08:45 AM	31	164	0	0	0	0	0	129	91	145	0	15	575
Total	111	472	0	0	0	0	0	411	362	509	0	67	1932
*** BREAK ***													
04:30 PM	26	78	0	0	0	0	0	127	137	130	0	25	523
04:45 PM	19	83	0	0	0	0	0	123	123	126	0	36	510
Total	45	161	0	0	0	0	0	250	260	256	0	61	1033
05:00 PM	24	86	0	0	0	0	0	111	131	120	0	30	502
05:15 PM	26	91	0	0	0	0	0	150	150	146	0	26	589
05:30 PM	24	101	0	0	0	0	0	149	132	114	0	34	554
05:45 PM	29	91	0	0	0	0	0	133	137	123	0	31	544
Total	103	369	0	0	0	0	0	543	550	503	0	121	2189
06:00 PM	32	79	0	0	0	0	0	97	117	104	0	31	460
06:15 PM	20	83	0	0	0	0	0	118	102	83	0	23	429
Grand Total	384	1504	0	0	0	0	0	1686	1548	1848	0	346	7316
Apprch %	20.3	79.7	0	0	0	0	0	52.1	47.9	84.2	0	15.8	
Total %	5.2	20.6	0	0	0	0	0	23	21.2	25.3	0	4.7	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: DOVER DRIVE
E-W Direction: WESTCLIFF DRIVE

File Name : H1204028
Site Code : 00000562
Start Date : 4/25/2012

	DOVER DRIVE Southbound				DEAD END Westbound				DOVER DRIVE Northbound				WESTCLIFF DRIVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	26	81	0	107	0	0	0	0	0	109	96	205	104	0	**19**	123	435
08:15 AM	15	84	0	99	0	0	0	0	0	86	75	161	130	0	16	146	406
08:30 AM	**39**	143	0	182	0	0	0	0	0	87	**100**	187	130	0	17	147	516
08:45 AM	31	**164**	0	**195**	0	0	0	0	0	**129**	91	**220**	**145**	0	15	**160**	**575**
Total Volume	111	472	0	583	0	0	0	0	0	411	362	773	509	0	67	576	1932
% App. Total	19	81	0		0	0	0		0	53.2	46.8		88.4	0	11.6		
PHF	.712	.720	.000	.747	.000	.000	.000	.000	.000	.797	.905	.878	.878	.000	.882	.900	.840

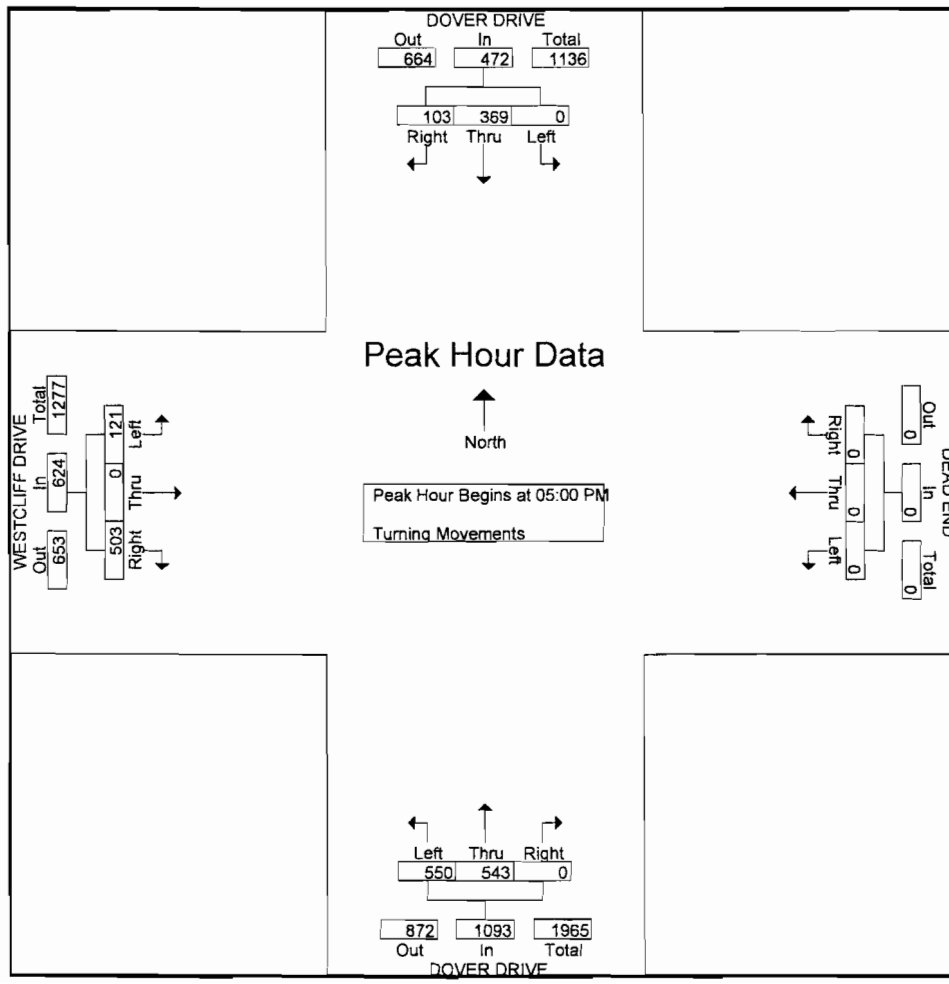


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: DOVER DRIVE
E-W Direction: WESTCLIFF DRIVE

File Name : H1204028
Site Code : 00000562
Start Date : 4/25/2012
Page No : 3

	DOVER DRIVE Southbound				DEAD END Westbound				DOVER DRIVE Northbound				WESTCLIFF DRIVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	24	86	0	110	0	0	0	0	0	111	131	242	120	0	30	150	502
05:15 PM	26	91	0	117	0	0	0	0	0	**150**	**150**	**300**	**146**	0	26	**172**	**589**
05:30 PM	24	**101**	0	**125**	0	0	0	0	0	149	132	281	114	0	**34**	148	554
05:45 PM	**29**	91	0	120	0	0	0	0	0	133	137	270	123	0	31	154	544
Total Volume	103	369	0	472	0	0	0	0	0	543	550	1093	503	0	121	624	2189
% App. Total	21.8	78.2	0		0	0	0		0	49.7	50.3		80.6	0	19.4		
PHF	.888	.913	.000	.944	.000	.000	.000	.000	.000	.905	.917	.911	.861	.000	.890	.907	.929



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: DOVER DRIVE
E-W Direction: 16TH STREET

File Name : h1204027
Site Code : 00005163
Start Date : 4/25/2012
Page No : 1

Groups Printed- Turning Movements

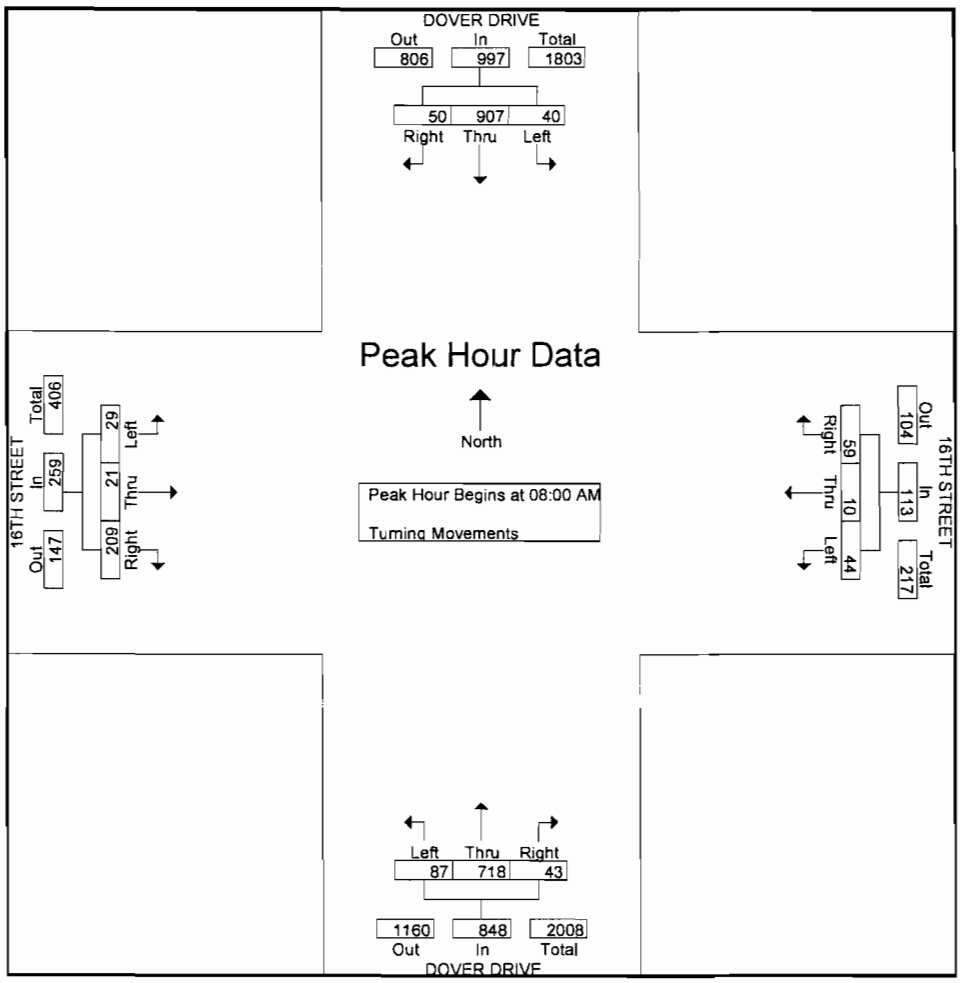
	DOVER DRIVE Southbound			16TH STREET Westbound			DOVER DRIVE Northbound			16TH STREET Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	1	109	5	7	1	4	2	53	8	25	1	5	221
07:15 AM	3	133	12	4	0	3	3	56	5	38	6	0	263
07:30 AM	4	180	5	12	0	21	9	107	23	46	1	3	411
07:45 AM	4	245	13	14	2	9	9	157	24	59	8	4	548
Total	12	667	35	37	3	37	23	373	60	168	16	12	1443
08:00 AM	3	194	12	16	1	6	15	193	23	53	4	2	522
08:15 AM	12	197	5	19	2	10	5	146	20	53	5	4	478
08:30 AM	24	236	11	12	5	17	9	176	21	40	3	10	564
08:45 AM	11	280	12	12	2	11	14	203	23	63	9	13	653
Total	50	907	40	59	10	44	43	718	87	209	21	29	2217
*** BREAK ***													
04:30 PM	6	188	21	17	2	6	5	234	23	38	3	5	548
04:45 PM	9	206	11	8	3	4	14	236	18	36	10	5	560
Total	15	394	32	25	5	10	19	470	41	74	13	10	1108
05:00 PM	4	190	32	15	5	10	13	229	29	37	6	10	580
05:15 PM	6	205	11	12	2	15	8	275	43	37	6	8	628
05:30 PM	7	226	20	12	3	16	14	253	22	39	5	8	625
05:45 PM	6	195	16	11	4	11	10	260	42	40	6	8	609
Total	23	816	79	50	14	52	45	1017	136	153	23	34	2442
06:00 PM	4	166	16	8	5	9	10	199	27	25	4	7	480
06:15 PM	8	177	18	8	2	5	10	214	32	21	4	2	501
Grand Total	112	3127	220	187	39	157	150	2991	383	650	81	94	8191
Apprch %	3.2	90.4	6.4	48.8	10.2	41	4.3	84.9	10.9	78.8	9.8	11.4	
Total %	1.4	38.2	2.7	2.3	0.5	1.9	1.8	36.5	4.7	7.9	1	1.1	

Transportation Studies, Inc
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: DOVER DRIVE
E-W Direction: 16TH STREET

File Name : h1204027
Site Code : 00005163
Start Date : 4/25/2012

	DOVER DRIVE Southbound				16TH STREET Westbound				DOVER DRIVE Northbound				16TH STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	3	194	**12**	209	16	1	6	23	**15**	193	**23**	231	53	**4**	2	59	522
08:15 AM	12	197	5	214	**19**	2	10	31	5	146	20	171	53	5	4	62	478
08:30 AM	**24**	236	11	271	12	**5**	**17**	**34**	9	176	21	206	40	3	10	53	564
08:45 AM	11	**280**	12	**303**	12	2	11	25	14	**203**	23	**240**	**63**	**9**	**13**	**85**	**653**
Total Volume	50	907	40	997	59	10	44	113	43	718	87	848	209	21	29	259	2217
% App. Total	5	91	4		52.2	8.8	38.9		5.1	84.7	10.3		80.7	8.1	11.2		
PHF	.521	.810	.833	.823	.776	.500	.647	.831	.717	.884	.946	.883	.829	.583	.558	.762	.849

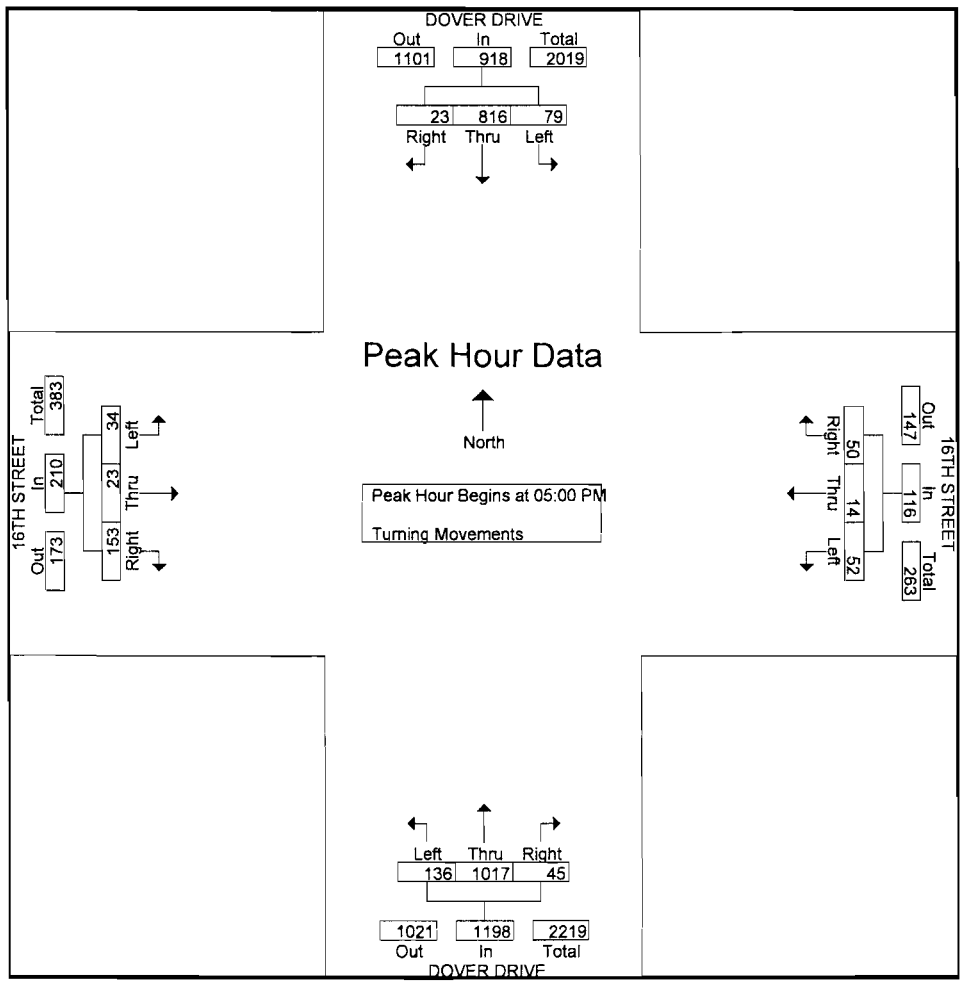


Transportation Studies, Inc.
2540 Walnut Avenue, Suite H
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: DOVER DRIVE
E-W Direction: 16TH STREET

File Name : h1204027
Site Code : 00005163
Start Date : 4/25/2012

	DOVER DRIVE Southbound				16TH STREET Westbound				DOVER DRIVE Northbound				16TH STREET Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**4**	190	**32**	226	**15**	**5**	10	30	13	229	29	271	37	**6**	**10**	53	580
05:15 PM	6	205	11	222	12	2	15	29	8	**275**	**43**	**326**	37	6	8	51	**628**
05:30 PM	**7**	**226**	20	**253**	12	3	**16**	**31**	**14**	253	22	289	39	5	8	52	625
05:45 PM	6	195	16	217	11	4	11	26	10	260	42	312	**40**	6	8	**54**	609
Total Volume	23	816	79	918	50	14	52	116	45	1017	136	1198	153	23	34	210	2442
% App. Total	2.5	88.9	8.6		43.1	12.1	44.8		3.8	84.9	11.4		72.9	11	16.2		
PHF	.821	.903	.617	.907	.833	.700	.813	.935	.804	.925	.791	.919	.956	.958	.850	.972	.972



Transportation Studies, Inc
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

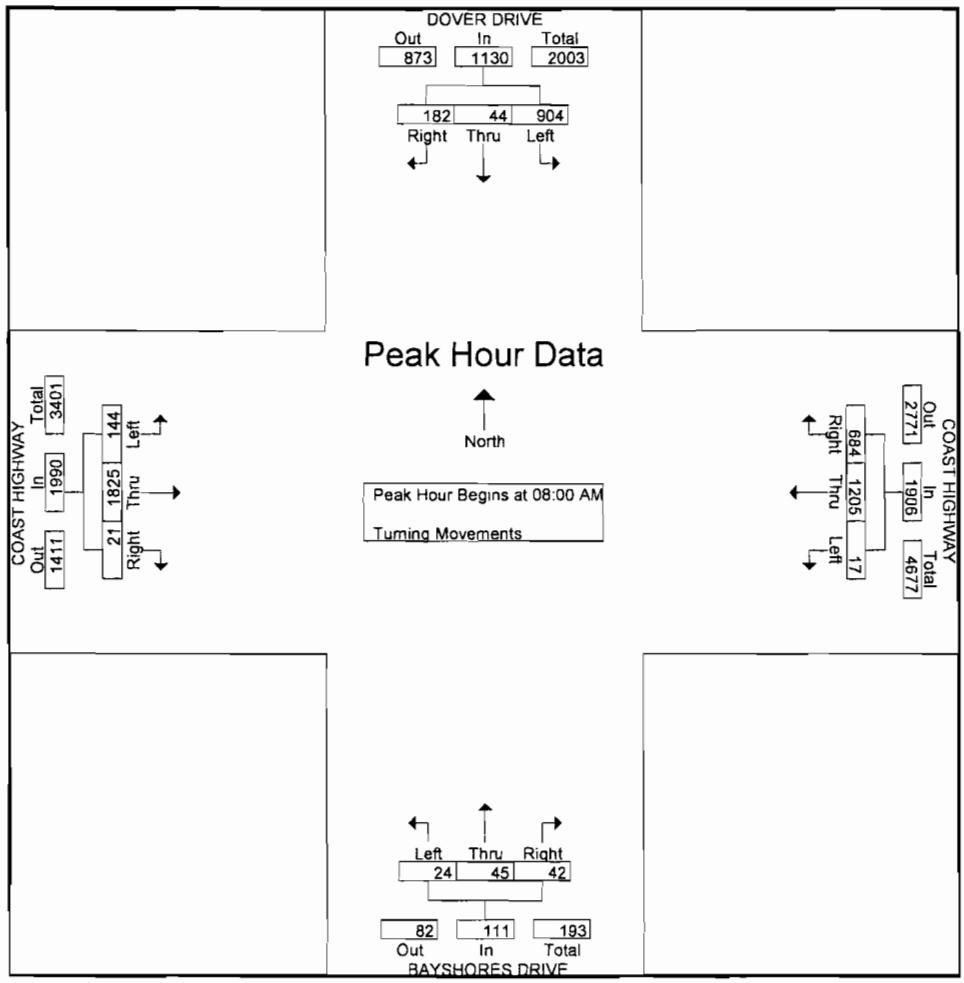
	DOVER DRIVE Southbound			COAST HIGHWAY Westbound			BAYSHORES DRIVE Northbound			COAST HIGHWAY Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	22	11	108	61	145	1	7	6	2	5	244	11	623
07:15 AM	35	6	174	63	189	1	5	6	3	8	282	16	788
07:30 AM	38	6	181	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	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

File Name : H1204023
Site Code : 00000554
Start Date : 4/25/2012

	DOVER DRIVE Southbound				COAST HIGHWAY Westbound				BAYSHORES DRIVE Northbound				COAST HIGHWAY 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	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

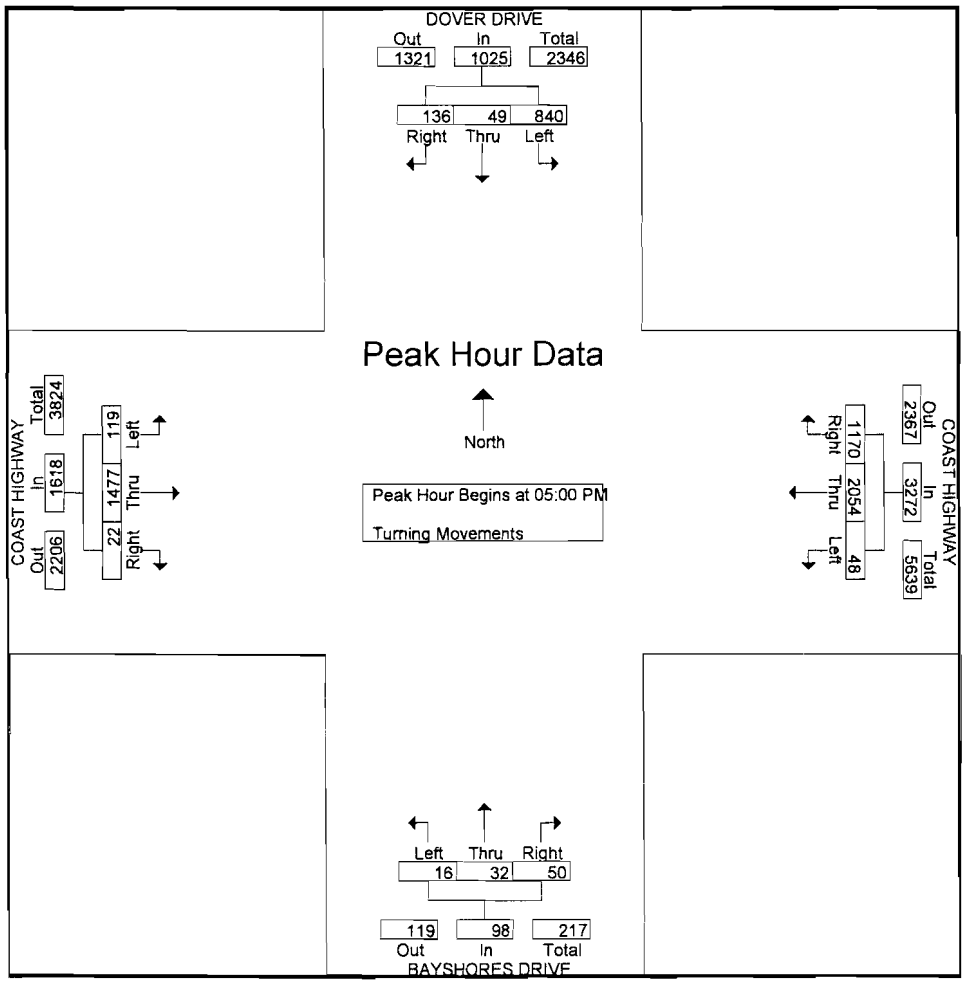


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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 : 3

	DOVER DRIVE Southbound				COAST HIGHWAY Westbound				BAYSHORES DRIVE Northbound				COAST HIGHWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	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



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

File Name : H1204022
Site Code : 00003873
Start Date : 5/1/2012
Page No : 1

Groups Printed- Turning Movements

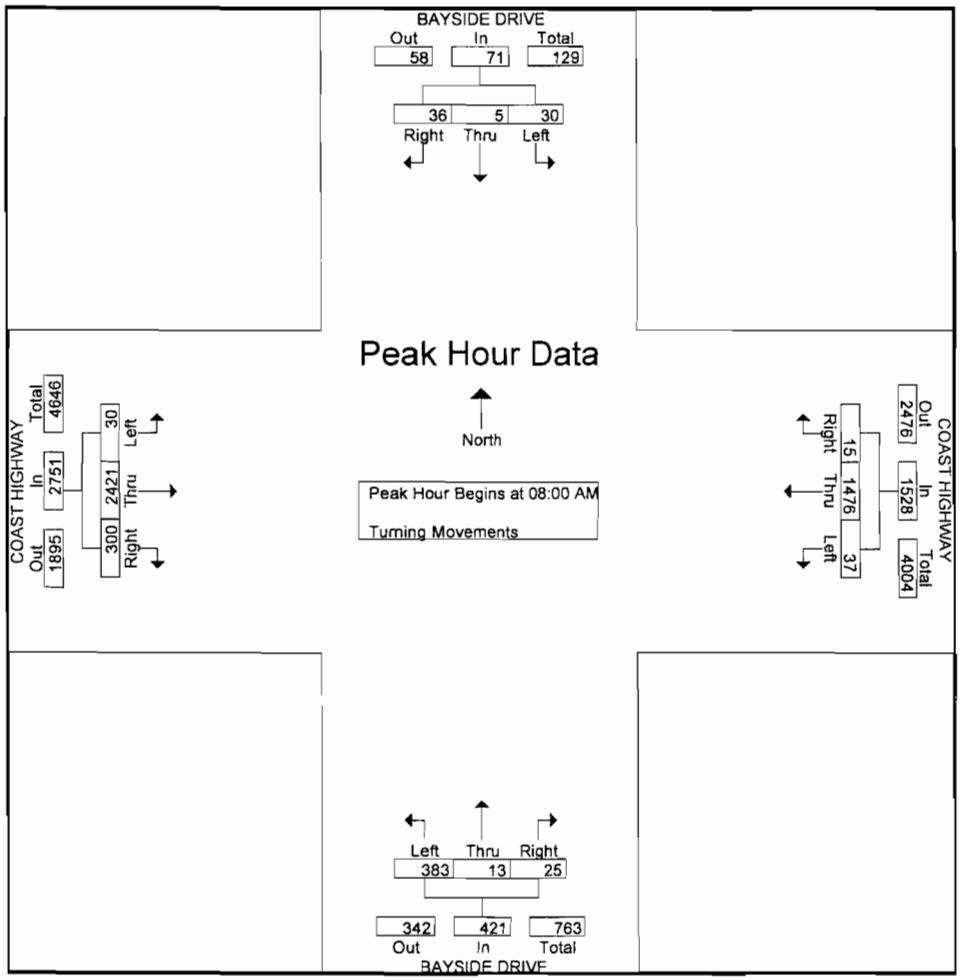
	BAYSIDE DRIVE Southbound			COAST HIGHWAY Westbound			BAYSIDE DRIVE Northbound			COAST HIGHWAY Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	4	0	5	1	168	3	6	0	56	45	311	7	606
07:15 AM	1	3	2	4	206	8	7	2	54	52	387	5	731
07:30 AM	10	1	1	3	232	5	9	0	63	54	460	6	844
07:45 AM	12	2	4	2	302	11	14	1	88	83	635	16	1170
Total	27	6	12	10	908	27	36	3	261	234	1793	34	3351
08:00 AM	5	1	9	3	337	9	5	1	88	82	601	10	1151
08:15 AM	10	1	10	3	385	9	4	1	87	61	605	5	1181
08:30 AM	10	0	6	7	353	8	3	4	97	75	585	7	1155
08:45 AM	11	3	5	2	401	11	13	7	111	82	630	8	1284
Total	36	5	30	15	1476	37	25	13	383	300	2421	30	4771
*** BREAK ***													
04:30 PM	10	1	6	10	615	13	10	2	112	151	463	16	1409
04:45 PM	17	0	10	8	617	18	9	0	107	125	410	12	1333
Total	27	1	16	18	1232	31	19	2	219	276	873	28	2742
05:00 PM	12	9	9	8	606	19	10	1	112	128	448	12	1374
05:15 PM	7	1	6	7	850	15	5	3	102	130	512	12	1650
05:30 PM	12	3	5	3	675	11	6	2	107	103	482	18	1427
05:45 PM	7	3	3	5	732	12	8	2	89	112	453	8	1434
Total	38	16	23	23	2863	57	29	8	410	473	1895	50	5885
06:00 PM	14	1	7	8	622	8	9	3	105	85	438	15	1315
06:15 PM	11	1	3	12	609	20	4	1	78	111	412	12	1274
Grand Total	153	30	91	86	7710	180	122	30	1456	1479	7832	169	19338
Apprch %	55.8	10.9	33.2	1.1	96.7	2.3	7.6	1.9	90.5	15.6	82.6	1.8	
Total %	0.8	0.2	0.5	0.4	39.9	0.9	0.6	0.2	7.5	7.6	40.5	0.9	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

File Name : H1204022
Site Code : 00003873
Start Date : 5/1/2012
Page No : 2

	BAYSIDE DRIVE Southbound				COAST HIGHWAY Westbound				BAYSIDE DRIVE Northbound				COAST HIGHWAY 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	5	1	9	15	3	337	9	349	5	1	88	94	**82**	601	**10**	693	1151
08:15 AM	10	1	**10**	**21**	3	385	9	397	4	1	87	92	61	605	5	671	1181
08:30 AM	10	0	6	16	7	353	8	368	3	4	97	104	75	585	7	667	1155
08:45 AM	**11**	**3**	5	19	2	**401**	**11**	**414**	**13**	**7**	**111**	**131**	82	**630**	8	**720**	**1284**
Total Volume	36	5	30	71	15	1476	37	1528	25	13	383	421	300	2421	30	2751	4771
% App. Total	50.7	7	42.3		1	96.6	2.4		5.9	3.1	91		10.9	88	1.1		
PHF	.818	.417	.750	.845	.536	.920	.841	.923	.481	.464	.863	.803	.915	.961	.750	.955	.929

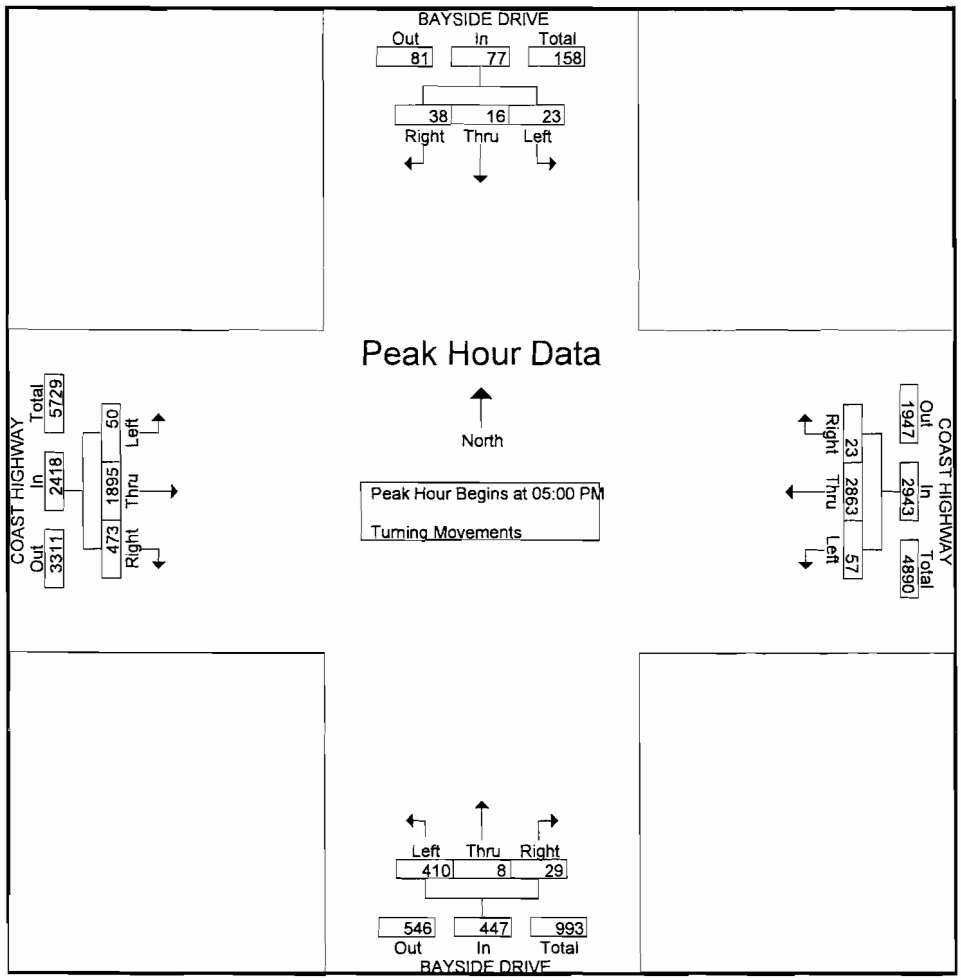


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

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

File Name : H1204022
Site Code : 00003873
Start Date : 5/1/2012

	BAYSIDE DRIVE Southbound				COAST HIGHWAY Westbound				BAYSIDE DRIVE Northbound				COAST HIGHWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**12**	**9**	**9**	**30**	**8**	606	**19**	633	**10**	1	**112**	**123**	128	448	12	588	1374
05:15 PM	7	1	6	14	7	**850**	15	**872**	5	**3**	102	110	**130**	**512**	12	**654**	**1650**
05:30 PM	12	3	5	20	3	675	11	689	6	2	107	115	103	482	**18**	603	1427
05:45 PM	7	3	3	13	5	732	12	749	8	2	89	99	112	453	8	573	1434
Total Volume	38	16	23	77	23	2863	57	2943	29	8	410	447	473	1895	50	2418	5885
% App. Total	49.4	20.8	29.9		0.8	97.3	1.9		6.5	1.8	91.7		19.6	78.4	2.1		
PHF	.792	.444	.639	.642	.719	.842	.750	.844	.725	.667	.915	.909	.910	.925	.694	.924	.892



TRAFFIC DATA SERVICES, INC.
(949) 679-3703
Summary of Vehicular Turning Movements

N/S ST : JAMBOREE RD
E/W ST: SAN JOAQUIN HILL RD
CITY: NEWPORT BEACH

FILENAME: 02120402
DATE: 3/13/12
DAY: TUESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:	1	3	1	2	3	1	1.5	1.5	1	1.5	1.5	1	
7:00 AM	1	194	19	133	265	5	41	3	8	14	3	4	690
15 AM	7	181	9	104	265	9	79	6	15	25	2	5	707
30 AM	3	313	17	110	272	7	84	4	10	30	0	8	858
45 AM	4	292	41	219	442	20	73	13	22	23	2	6	1157
8:00 AM	8	284	35	231	486	17	68	10	14	38	1	6	1198
15 AM	11	285	35	148	324	23	81	8	12	25	3	3	958
30 AM	3	249	29	146	352	18	77	7	10	37	2	2	932
45 AM	7	259	50	185	365	18	83	6	15	37	2	4	1031
PEAK HOUR BEGINS AT: 745 AM													PHF: 0.89
VOLUMES =	26	1110	140	744	1604	78	299	38	58	123	8	17	4245

FILENAME: 02120402P
DATE: 3/13/12
DAY: TUESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM	9	307	29	118	302	22	18	5	4	39	5	138	996
15 PM	8	311	31	118	301	29	14	6	11	36	7	141	1013
30 PM	15	340	30	85	392	37	12	6	5	42	5	141	1110
45 PM	14	351	33	155	375	29	24	9	2	44	8	152	1196
5:00 PM	14	375	40	118	362	46	28	6	4	44	11	187	1235
15 PM	15	274	26	97	349	39	18	7	2	43	17	114	1001
30 PM	12	289	32	144	439	50	19	14	5	47	10	119	1180
45 PM	20	292	22	129	367	79	20	6	1	33	6	71	1046
PEAK HOUR BEGINS AT: 1645 PM													PHF: 0.93
VOLUMES =	55	1289	131	514	1525	164	89	36	13	178	46	572	4612

COMMENTS:

TRAFFIC DATA SERVICES, INC.
(949) 679-3703
Summary of Vehicular Turning Movements

N/S ST: JAMBOREE RD
E/W ST: SANTA BARBARA
CITY: NEWPORT BEACH

FILENAME: 02120403
DATE: 3/14/12
DAY: WEDNESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:	2	3	1	2	3	1	1	1	1	1.5	0.5	1	
7:00 AM	3	124	53	113	141	1	4	1	1	11	2	17	471
15 AM	1	158	29	98	128	0	5	1	0	9	0	18	447
30 AM	0	251	62	121	154	3	15	3	1	12	1	13	636
45 AM	1	287	62	116	224	4	21	2	5	7	1	18	748
8:00 AM	2	265	73	170	282	8	8	0	4	13	0	21	846
15 AM	3	272	79	123	262	10	9	0	4	9	2	26	799
30 AM	2	291	71	129	269	7	8	2	3	8	3	24	817
45 AM	3	287	66	121	254	4	8	3	5	9	1	28	789
PEAK HOUR BEGINS AT: 800 AM													PHF: 0.96
VOLUMES =	10	1115	289	543	1067	29	33	5	16	39	6	99	3251

FILENAME: 02120403P
DATE: 3/14/12
DAY: WEDNESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM	5	294	34	51	287	9	7	2	2	55	2	67	815
15 PM	0	292	33	57	284	9	4	0	5	68	2	123	877
30 PM	9	272	36	49	334	7	3	2	3	59	0	115	889
45 PM	3	266	24	46	288	9	5	3	2	62	0	121	829
5:00 PM	1	248	31	39	322	18	11	4	1	58	4	108	845
15 PM	9	302	36	43	311	16	9	3	2	59	1	114	905
30 PM	4	315	31	36	328	19	11	4	8	64	0	119	939
45 PM	3	311	30	39	336	21	14	6	5	62	0	117	944
PEAK HOUR BEGINS AT: 1700 PM													PHF: 0.96
VOLUMES =	17	1176	128	157	1297	74	45	17	16	243	5	458	3633

COMMENTS:

TRAFFIC DATA SERVICES, INC.
(949) 679-3703
Summary of Vehicular Turning Movements

N/S ST : JAMBOREE RD
E/W ST: PACIFIC COAST HWY
CITY: NEWPORT BEACH

FILENAME: 02120404
DATE: 3/7/12
DAY: WEDNESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:	1	2	0	1	2	1	3	4	0	2	4	1	
7:00 AM	0	60	9	21	42	81	129	223	1	11	104	15	696
15 AM	4	94	18	19	37	95	171	235	5	9	152	41	880
30 AM	2	88	21	24	38	103	166	242	3	14	137	33	871
45 AM	6	67	26	43	86	165	260	481	5	15	190	23	1367
8:00 AM	3	66	25	54	70	142	186	346	3	19	211	22	1147
15 AM	3	111	15	56	73	148	191	362	2	23	271	28	1283
30 AM	5	96	22	39	62	139	151	368	9	19	249	29	1188
45 AM	6	69	19	43	66	150	204	460	11	14	256	21	1319
PEAK HOUR BEGINS AT: 745 AM													PHF: 0.91
VOLUMES =	17	340	88	192	291	594	788	1557	19	76	921	102	4985

FILENAME: 02120404P
DATE: 3/2/12
DAY: WEDNESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM	9	87	24	30	42	99	110	352	12	39	346	46	1196
15 PM	8	61	26	58	96	210	141	398	11	34	391	66	1500
30 PM	4	69	27	46	101	224	180	358	14	37	371	57	1488
45 PM	11	77	25	49	115	212	174	400	19	30	407	41	1560
5:00 PM	11	72	24	43	104	228	166	382	16	30	409	61	1546
15 PM	8	80	20	52	119	211	190	389	14	33	395	62	1573
30 PM	8	78	20	48	100	216	181	406	12	33	455	52	1609
45 PM	14	60	15	36	94	201	186	412	18	36	470	30	1572
PEAK HOUR BEGINS AT: 1700 PM													PHF: 0.98
VOLUMES =	41	290	79	179	417	856	723	1589	60	132	1729	205	6300

COMMENTS:

TRAFFIC DATA SERVICES, INC.
(949) 679-3703
Summary of Vehicular Turning Movements

N/S ST : SANTA CRUZ DR
E/W ST: SAN JOAQUIN HILLS RD
CITY: NEWPORT BEACH

FILENAME: 02120409
DATE: 3/20/12
DAY: TUESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:	2	0.5	0.5	1	1.5	0.5	1	3	0	1	3	0	
7:00 AM	13	0	5	6	5	8	10	44	39	19	55	4	208
15 AM	9	1	0	2	1	13	12	67	40	16	97	2	260
30 AM	18	0	4	3	1	23	6	72	48	28	117	2	322
45 AM	11	0	2	1	2	12	14	172	90	28	59	1	392
8:00 AM	8	0	1	1	0	20	12	141	69	31	62	0	345
15 AM	15	3	4	5	3	16	11	96	59	29	73	4	318
30 AM	14	1	6	3	2	16	12	103	74	27	71	2	331
45 AM	24	0	4	2	3	15	11	99	64	29	76	0	327
PEAK HOUR BEGINS AT: 745 AM													PHF: 0.88
VOLUMES =	48	4	13	10	7	64	49	512	292	115	265	7	1386

FILENAME: 02120409P
DATE: 3/20/12
DAY: TUESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM	129	3	24	0	0	4	14	75	21	5	83	7	365
15 PM	103	4	20	3	3	5	18	109	47	13	96	2	423
30 PM	127	0	18	2	1	6	15	114	52	11	112	9	467
45 PM	89	1	31	2	0	10	14	71	36	11	98	9	372
5:00 PM	175	7	33	1	1	9	12	123	52	18	125	5	561
15 PM	131	1	38	0	0	2	16	124	57	6	117	7	499
30 PM	107	4	33	5	2	7	28	118	43	11	104	4	466
45 PM	93	2	31	3	2	6	16	121	26	10	98	4	412
PEAK HOUR BEGINS AT: 1700 PM													PHF: 0.86
VOLUMES =	506	14	135	9	5	24	72	486	178	45	444	20	1938

COMMENTS:

TRAFFIC DATA SERVICES, INC.
(949) 679-3703
Summary of Vehicular Turning Movements

N/S ST : SANTA ROSA DR/BIG CANYON DR
E/W ST: SAN JOAQUIN HILLS RD
CITY: NEWPORT BEACH

FILENAME: 02120410
DATE: 3/21/12
DAY: WEDNESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:	1	1	1	1	1	1	1	3	0	2	3	0	
7:00 AM	6	5	21	12	4	2	17	21	24	81	72	33	298
15 AM	3	5	12	12	5	10	4	36	20	64	79	24	274
30 AM	4	3	17	15	3	6	4	69	42	91	135	13	402
45 AM	10	6	23	25	4	16	4	88	54	109	95	23	457
8:00 AM	9	3	13	21	2	10	15	48	58	122	101	32	434
15 AM	9	4	22	20	3	7	4	60	53	125	126	33	466
30 AM	11	2	25	18	0	13	12	52	48	103	76	19	379
45 AM	18	5	32	26	3	8	9	73	61	151	79	12	477
PEAK HOUR BEGINS AT: 730 AM													PHF: 0.94
VOLUMES =	32	16	75	81	12	39	27	265	207	447	457	101	1759

FILENAME: 02120410P
DATE: 3/21/12
DAY: WEDNESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM	39	8	124	19	3	15	17	97	26	75	58	21	502
15 PM	42	10	91	17	5	18	13	91	27	72	50	15	451
30 PM	38	8	114	16	2	11	12	111	33	65	68	29	507
45 PM	43	9	109	12	3	7	15	112	33	79	62	36	520
5:00 PM	60	3	126	16	2	13	18	165	32	69	73	21	598
15 PM	67	12	110	19	3	11	15	111	38	106	60	16	568
30 PM	49	6	102	24	2	20	18	142	34	98	74	27	596
45 PM	45	4	105	14	4	15	16	132	29	101	73	15	553
PEAK HOUR BEGINS AT: 1700 PM													PHF: 0.97
VOLUMES =	221	25	443	73	11	59	67	550	133	374	280	79	2315

COMMENTS:

TRAFFIC DATA SERVICES, INC.
(949) 679-3703
Summary of Vehicular Turning Movements

N/S ST : NEWPORT CENTER DR (S)
E/W ST: PACIFIC COAST HWY
CITY: NEWPORT BEACH

FILENAME: 02120418
DATE: 3/20/12
DAY: TUESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:	X	X	X	2	X	1	2	3	X	X	3	1	
7:00 AM				5		6	22	174			137	48	392
15 AM				7		8	33	256			168	44	516
30 AM				1		5	86	246			207	33	578
45 AM				5		12	92	377			249	54	789
8:00 AM				6		17	81	422			227	46	799
15 AM				3		15	84	430			239	48	819
30 AM				6		21	77	449			287	40	880
45 AM				4		16	73	417			298	36	844
PEAK HOUR BEGINS AT: 800 AM													PHF: 0.95
VOLUMES =	0	0	0	19	0	69	315	1718	0	0	1051	170	3342

FILENAME: 02120418P
DATE: 3/20/12
DAY: TUESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM				43		121	80	286			338	28	896
15 PM				51		127	90	322			361	33	984
30 PM				48		155	62	296			327	34	922
45 PM				37		148	89	318			353	31	976
5:00 PM				40		160	81	316			367	35	999
15 PM				48		172	68	328			355	33	1004
30 PM				39		155	76	306			341	29	946
45 PM				52		143	67	300			336	27	925
PEAK HOUR BEGINS AT: 1645 PM													PHF: 0.98
VOLUMES =	0	0	0	164	0	635	314	1268	0	0	1416	128	3925

COMMENTS:

TRAFFIC DATA SERVICES, INC.
(949) 679-3703
Summary of Vehicular Turning Movements

N/S ST : AVOCADO AVE
E/W ST: PACIFIC COAST HWY
CITY: NEWPORT BEACH

FILENAME: 02120420
DATE: 3/6/12
DAY: TUESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:	1	1	1	1.5	0.5	1	1	3	0	1	3	1	
7:00 AM	19	8	19	9	10	8	13	154	1	12	124	22	399
15 AM	18	16	16	11	3	9	14	189	4	18	158	13	469
30 AM	23	11	23	16	6	11	20	225	4	8	194	21	562
45 AM	25	18	28	17	10	7	33	302	7	8	206	19	680
8:00 AM	30	28	42	9	14	8	30	300	13	18	274	44	810
15 AM	18	33	31	16	18	16	37	252	13	27	268	43	772
30 AM	22	34	33	15	17	14	34	261	11	22	287	40	790
45 AM	28	33	29	17	20	12	39	258	12	26	272	38	784
PEAK HOUR BEGINS AT: 800 AM													PHF: 0.97
VOLUMES =	98	128	135	57	69	50	140	1071	49	93	1101	185	3156

FILENAME: 02120420P
DATE: 3/6/12
DAY: TUESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM	23	23	37	55	24	43	42	254	9	20	311	24	865
15 PM	28	20	22	57	22	37	34	307	16	16	298	20	877
30 PM	32	24	15	91	12	41	25	283	16	34	269	14	856
45 PM	31	24	20	51	18	36	35	297	14	16	246	21	809
5:00 PM	26	19	29	75	27	38	21	288	16	30	233	20	822
15 PM	28	18	28	64	22	36	29	307	19	24	278	29	882
30 PM	31	17	26	58	29	38	21	294	16	22	267	27	846
45 PM	27	19	27	56	31	27	18	310	20	24	277	28	864
PEAK HOUR BEGINS AT: 1700 PM													PHF: 0.97
VOLUMES =	112	73	110	253	109	139	89	1199	71	100	1055	104	3414

COMMENTS:

TRAFFIC DATA SERVICES, INC.
(949) 679-3703
Summary of Vehicular Turning Movements

N/S ST : MACARTHUR BLVD
E/W ST: SAN JOAQUIN HILL RD
CITY: NEWPORT BEACH

FILENAME: 02120406
DATE: 3/13/12
DAY: TUESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:	2	3	1	2	3	0	2	3	0	1	2	1	
7:00 AM	17	180	3	67	259	91	6	20	11	3	48	101	806
15 AM	28	262	6	98	229	118	12	29	5	4	93	140	1024
30 AM	22	326	5	124	276	168	26	53	11	3	107	172	1293
45 AM	28	314	6	151	333	199	22	65	14	13	101	166	1412
8:00 AM	34	305	3	212	421	217	18	82	11	15	96	184	1598
15 AM	36	311	4	201	437	211	21	88	13	10	82	157	1571
30 AM	24	298	6	192	434	214	20	91	10	12	99	161	1561
45 AM	27	312	9	187	426	209	17	86	12	14	83	149	1531
PEAK HOUR BEGINS AT: 800 AM													PHF: 0.98
VOLUMES =	121	1226	22	792	1718	851	76	347	46	51	360	651	6261

FILENAME: 02120406P
DATE: 3/13/12
DAY: TUESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM	16	355	6	138	281	64	125	82	20	12	84	146	1329
15 PM	14	388	3	185	334	66	158	83	26	4	71	111	1443
30 PM	14	356	4	154	373	82	161	69	27	6	66	116	1428
45 PM	8	347	2	172	336	89	166	73	24	6	78	91	1392
5:00 PM	7	349	4	176	410	103	162	81	30	10	77	97	1506
15 PM	6	339	3	164	428	92	158	90	36	9	71	95	1491
30 PM	8	335	1	152	383	101	142	81	28	7	69	90	1397
45 PM	8	330	3	149	376	88	136	77	19	8	66	93	1353
PEAK HOUR BEGINS AT: 1630 PM													PHF: 0.97
VOLUMES =	35	1391	13	666	1547	366	647	313	117	31	292	399	5817

COMMENTS:

TRAFFIC DATA SERVICES, INC.
(949) 679-3703
Summary of Vehicular Turning Movements

N/S ST : MACARTHUR BLVD
E/W ST: SAN MIGUEL DR
CITY: NEWPORT BEACH

FILENAME: 02120407
DATE: 3/14/12
DAY: WEDNESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:	2	3	1	2	3	1	3	2	0	2	2	0	
7:00 AM	10	147	27	1	203	79	15	5	12	14	22	0	535
15 AM	16	243	33	2	181	80	23	12	12	23	26	2	653
30 AM	13	308	50	2	183	96	20	13	10	29	24	2	750
45 AM	12	316	52	2	247	168	43	13	13	27	25	1	919
8:00 AM	29	281	44	1	230	177	53	22	10	60	53	4	964
15 AM	37	283	32	0	172	128	35	13	11	45	63	1	820
30 AM	32	279	29	1	191	164	51	23	7	42	58	0	877
45 AM	25	280	42	1	216	168	53	21	10	43	87	1	947
PEAK HOUR BEGINS AT: 800 AM													PHF: 0.94
VOLUMES =	123	1123	147	3	809	637	192	79	38	190	261	6	3608

FILENAME: 02120407P
DATE: 3/14/12
DAY: WEDNESDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM	28	225	52	6	203	142	128	78	24	40	63	6	995
15 PM	26	236	64	7	214	146	119	74	20	45	66	5	1022
30 PM	15	206	42	5	238	116	158	107	40	35	32	8	1002
45 PM	19	225	60	3	248	106	183	83	27	47	58	4	1063
5:00 PM	22	198	57	1	253	111	170	89	32	67	49	16	1065
15 PM	24	200	47	2	261	119	159	77	29	45	41	9	1013
30 PM	19	205	70	1	258	114	153	81	24	56	33	9	1023
45 PM	26	168	38	7	335	107	186	84	41	57	50	1	1100
PEAK HOUR BEGINS AT: 1700 PM													PHF: 0.95
VOLUMES =	91	771	212	11	1107	451	668	331	126	225	173	35	4201

COMMENTS:

TRAFFIC DATA SERVICES, INC.
(949) 679-3703
Summary of Vehicular Turning Movements

N/S ST : MACARTHUR BLVD
E/W ST: PACIFIC COAST HWY
CITY: NEWPORT BEACH

FILENAME: 02120408
DATE: 3/8/12
DAY: THURSDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
LANES:	X	X	X	2	X	1	2	3	X	X	3	1	
7:00 AM				149		21	48	110			152	160	640
15 AM				194		39	81	218			160	227	919
30 AM				144		48	118	194			198	215	917
45 AM				141		53	125	242			221	259	1041
8:00 AM				211		58	146	243			288	215	1161
15 AM				194		62	148	251			283	219	1157
30 AM				190		61	139	250			292	207	1139
45 AM				198		66	142	256			281	221	1164
PEAK HOUR BEGINS AT: 800 AM													PHF: 0.99
VOLUMES =	0	0	0	793	0	247	575	1000	0	0	1144	862	4621

FILENAME: 02120408P
DATE: 3/8/12
DAY: THURSDAY

PERIOD	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
BEGINS	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	Total
4:00 PM				119		58	80	322			241	212	1032
15 PM				180		66	85	319			281	218	1149
30 PM				182		74	87	321			279	182	1125
45 PM				188		68	95	285			283	177	1096
5:00 PM				260		81	65	326			286	183	1201
15 PM				253		94	81	324			273	201	1226
30 PM				228		81	62	317			286	194	1168
45 PM				240		67	90	310			291	211	1209
PEAK HOUR BEGINS AT: 1700 PM													PHF: 0.98
VOLUMES =	0	0	0	981	0	323	298	1277	0	0	1136	789	4804

COMMENTS:

APPENDIX C

Explanation and Calculation of
Intersection Capacity Utilization

EXPLANATION AND CALCULATION OF
INTERSECTION CAPACITY UTILIZATION

Overview

The ability of a roadway to carry traffic is referred to as capacity. The capacity is usually greater between intersections and less at intersections because traffic flows continuously between them and only during the green phase at them. Capacity at intersections is best defined in terms of vehicles per lane per hour of green. If capacity is 1,600 vehicles per lane per hour of green, and if the green phase is 50 percent of the cycle and there are three lanes, then the capacity is 1,600 times 50 percent times 3 lanes, or 2,400 vehicles per hour for that approach.

The technique used to compare the volume and capacity at an intersection is known as Intersection Capacity Utilization. Intersection Capacity Utilization, usually expressed as a decimal, is the proportion of an hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. If an intersection is operating at 0.800 of capacity (i.e., an Intersection Capacity Utilization of 0.800), then 0.200 of the traffic signal cycle is not used. The traffic signal could show red on all indications 0.200 of the time and the traffic signal would just accommodate approaching traffic.

Intersection Capacity Utilization analysis consists of (a) determining the proportion of traffic signal time needed to serve each conflicting movement of traffic, (b) summing the times for the movements, and (c) comparing the total time required to the total time available. For example, if for north-south traffic the northbound traffic is 1,600 vehicles per hour, the southbound traffic is 1,200 vehicles per hour, and the capacity of either direction is 3,200 vehicles per hour, then the northbound traffic is critical and requires 1,600/3,200 or 0.500 of the traffic signal time. If for east-west traffic, 0.300 of the traffic signal time is required, then it can be seen that the Intersection Capacity Utilization is 0.500 plus 0.300, or 0.800. When left turn arrows (left turn phasing) exist, they are incorporated into the analysis. The critical movements are usually the heavy left turn movements and the opposing through movements.

The Intersection Capacity Utilization technique is an ideal tool to quantify existing as well as future intersection operation. The impact of adding a lane can be quickly determined by examining the effect the lane has on the Intersection Capacity Utilization.

Intersection Capacity Utilization Worksheets That Follow This Discussion

The Intersection Capacity Utilization worksheet table contains the following information:

1. Peak hour turning movement volumes.
2. Number of lanes that serve each movement.
3. For right turn lanes, whether the lane is a free right turn lane, whether it has a right turn arrow, and the percent of right turns on red that are assumed.
4. Capacity assumed per lane.
5. Capacity available to serve each movement (number of lanes times capacity per lane).
6. Volume to capacity ratio for each movement.
7. Whether the movement's volume to capacity ratio is critical and adds to the Intersection Capacity Utilization value.
8. The yellow time or clearance interval assumed.
9. Adjustments for right turn movements.
10. The Intersection Capacity Utilization and Level of Service.

The Intersection Capacity Utilization worksheet also has two graphics on the same page. These two graphics show the following:

1. Peak hour turning movement volumes.
2. Number of lanes that serve each movement.
3. The approach and exit leg volumes.
4. The two-way leg volumes.
5. An estimate of daily traffic volumes that is fairly close to actual counts and is based strictly on the peak hour leg volumes multiplied by a factor.
6. Percent of daily traffic in peak hours.

7. Percent of peak hour leg volume that is inbound versus outbound.

A more detailed discussion of Intersection Capacity Utilization and Level of Service follows.

Level of Service

Level of Service is used to describe the quality of traffic flow. Levels of Service A to C operate quite well. Level of Service C is typically the standard to which rural roadways are designed.

Level of Service D is characterized by fairly restricted traffic flow. Level of Service D is the standard to which urban roadways are typically designed. Level of Service E is the maximum volume a facility can accommodate and will result in possible stoppages of momentary duration. Level of Service F occurs when a facility is overloaded and is characterized by stop-and-go traffic with stoppages of long duration.

A description of the various Levels of Service appears at the end of the Intersection Capacity Utilization description, along with the relationship between Intersection Capacity Utilization and Level of Service.

Signalized and Unsignalized Intersections

Although calculating an Intersection Capacity Utilization value for an unsignalized intersection is invalid, the presumption is that a traffic signal can be installed and the calculation shows whether the geometrics are capable of accommodating the expected volumes with a traffic signal. A traffic signal becomes warranted before Level of Service D is reached for a signalized intersection.

Traffic Signal Timing

The Intersection Capacity Utilization calculation assumes that a traffic signal is properly timed. It is possible to have an Intersection Capacity Utilization well below 1.000, yet have severe traffic congestion. This would occur if one or more movements is not getting sufficient green time to satisfy its demand, and excess green time exists on other movements. This is an operational problem that should be remedied.

Lane Capacity

Capacity is often defined in terms of roadway width; however, standard lanes have approximately the same capacity whether they are 11 or 14 feet wide. Our data indicates a typical lane, whether a through lane or a left turn lane, has a capacity of

approximately 1,750 vehicles per hour of green time, with nearly all locations showing a capacity greater than 1,600 vehicles per hour of green per lane. Right turn lanes have a slightly lower capacity; however 1,600 vehicles per hour is a valid capacity assumption for right turn lanes.

This finding is published in the August 1978 issue of the Institute of Transportation Engineers Journal in the article entitled, "Another Look at Signalized Intersection Capacity" by William Kunzman, P.E. A capacity of 1,600 vehicles per hour per lane with no yellow time penalty, or 1,700 vehicles per hour with a 0.030 or 0.050 yellow time penalty is reasonable.

Yellow Time

The yellow time can either be assumed to be completely used and no penalty applied, or it can be assumed to be only partially usable. Total yellow time accounts for approximately 0.100 of a traffic signal cycle, and a penalty of 0.030 to 0.050 is reasonable.

During peak hour traffic operation the yellow times are nearly completely used. If there is no left turn phasing, the left turn vehicles completely use the yellow time. Even if there is left turn phasing, the through traffic continues to enter the intersection on the yellow until just a split second before the red.

Shared Lanes

Shared lanes occur in many locations. A shared lane is often found at the end of an off ramp where the ramp forms an intersection with the cross street. Often at a diamond interchange off ramp, there are three lanes. In the case of a diamond interchange, the middle lane is sometimes shared, and the driver can turn left, go through, or turn right from that lane.

If one assumes a three lane off ramp as described above, and if one assumes that each lane has 1,600 capacity, and if one assumes that there are 1,000 left turns per hour, 500 right turns per hour, and 100 through vehicles per hour, then how should one assume that the three lanes operate. There are three ways that it is done.

One way is to just assume that all 1,600 vehicles (1,000 plus 500 plus 100) are served simultaneously by three lanes. When this is done, the capacity is 3 times 1,600 or 4,800, and the amount of green time needed to serve the ramp is 1,600 vehicles divided by 4,800 capacity or 33.3 percent. This assumption effectively assumes perfect lane distribution between the three lanes that is not realistic. It also means a left turn can be made from the right lane.

Another way is to equally split the capacity of a shared lane and in this case to assume there are 1.33 left turn lanes, 1.33 right turn lanes, and 0.33 through lanes. With this assumption, the critical movement is the left turns and the 1,000 left turns are served by a capacity of 1.33 times 1,600, or 2,133. The volume to capacity ratio of the critical move is 1,000 divided by 2,133 or 46.9 percent.

The first method results in a critical move of 33.3 percent and the second method results in a critical move of 46.9 percent. Neither is very accurate, and the difference in the calculated Level of Service will be approximately 1.5 Levels of Service (one Level of Service is 10 percent).

The way Kunzman Associates, Inc. does it is to assign fractional lanes in a reasonable way. In this example, it would be assumed that there is 1.1 right turn lanes, 0.2 through lanes, and 1.7 left turn lanes. The volume to capacity ratios for each movement would be 31.3 percent for the through traffic, 28.4 percent for the right turn movement, and 36.8 percent for the left turn movement. The critical movement would be the 36.8 percent for the left turns.

Right Turn on Red

Kunzman Associates, Inc. software treats right turn lanes in one of five different ways. Each right turn lane is classified into one of five cases. The five cases are (1) free right turn lane, (2) right turn lane with separate right turn arrow, (3) standard right turn lane with no right turns on red allowed, (4) standard right turn lane with a certain percentage of right turns on red allowed, and (5) separate right turn arrow and a certain percentage of right turns on red allowed.

Free Right Turn Lane

If it is a free right turn lane, then it is given a capacity of one full lane with continuous or 1.000 green time. A free right turn lane occurs when there is a separate approach lane for right turning vehicles, there is a separate departure lane for the right turning vehicles after they turn and are exiting the intersection, and the through cross street traffic does not interfere with the vehicles after they turn right.

Separate Right Turn Arrow

If there is a separate right turn arrow, then it is assumed that vehicles are given a green indication and can proceed on what is known as the left turn overlap.

The left turn overlap for a northbound right turn is the westbound left turn. When the left turn overlap has a green indication, the right turn lane is also given a green arrow

indication. Thus, if there is a northbound right turn arrow, then it can be turned green for the period of time that the westbound left turns are proceeding.

If there are more right turns than can be accommodated during the northbound through green and the time that the northbound right turn arrow is on, then an adjustment is made to the Intersection Capacity Utilization to account for the green time that needs to be added to the northbound through green to accommodate the northbound right turns.

Standard Right Turn Lane, No Right Turns on Red

A standard right turn lane, with no right turn on red assumed, proceeds only when there is a green indication displayed for the adjacent through movement. If additional green time is needed above that amount of time, then in the Intersection Capacity Utilization calculation a right turn adjustment green time is added above the green time that is needed to serve the adjacent through movement.

Standard Right Turn Lane, With Right Turns on Red

A standard right turn lane with say 20 percent of the right turns allowed to turn right on a red indication is calculated the same as the standard right turn case where there is no right turn on red allowed, except that the right turn adjustment is reduced to account for the 20 percent of the right turning vehicles that can logically turn right on a red light. The right turns on red are never allowed to exceed the time the overlap left turns take plus the unused part of the green cycle that the cross street traffic moving from left to right has.

As an example of how 20 percent of the cars are allowed to turn right on a red indication, assume that the northbound right turn volume needs 40 percent of the traffic signal cycle to be satisfied. To allow 20 percent of the northbound right turns to turn right on red, then during 8 percent of the traffic signal cycle (40 percent of traffic signal cycle times 20 percent that can turn right on red) right turns on red will be allowed if it is feasible.

For this example, assume that 15 percent of the traffic signal cycle is green for the northbound through traffic, and that means that 15 percent of the traffic signal cycle is available to satisfy northbound right turns. After the northbound through traffic has received its green, 25 percent of the traffic signal cycle is still needed to satisfy the northbound right turns (40 percent of the traffic signal cycle minus the 15 percent of the traffic signal cycle that the northbound through used).

Assume that the westbound left turns require a green time of 6 percent of the traffic signal cycle. This 6 percent of the traffic signal cycle is used by northbound right turns

on red. After accounting for the northbound right turns that occur on the westbound overlap left turn, 19 percent of the traffic signal cycle is still needed for the northbound right turns (25 percent of the cycle was needed after the northbound through green time was accounted for [see above paragraph], and 6 percent was served during the westbound left turn overlap). Also, at this point 6 percent of the traffic signal cycle has been used for northbound right turns on red, and still 2 percent more of the right turns will be allowed to occur on the red if there is unused eastbound through green time.

For purpose of this example, assume that the westbound through green is critical, and that 15 percent of the traffic signal cycle is unused by eastbound through traffic. Thus, 2 percent more of the traffic signal cycle can be used by the northbound right turns on red since there is 15 seconds of unused green time being given to the eastbound through traffic.

At this point, 8 percent of the traffic signal cycle was available to serve northbound right turning vehicles on red, and 15 percent of the traffic signal cycle was available to serve right turning vehicles on the northbound through green. So 23 percent of the traffic signal cycle has been available for northbound right turns.

Because 40 percent of the traffic signal cycle is needed to serve northbound right turns, there is still a need for 17 percent more of the traffic signal cycle to be available for northbound right turns. What this means is the northbound through traffic green time is increased by 17 percent of the cycle length to serve the unserved right turn volume, and a 17 percent adjustment is added to the Intersection Capacity Utilization to account for the northbound right turns that were not served on the northbound through green time or when right turns on red were assumed.

Separate Right Turn Arrow, With Right Turns on Red

A right turn lane with a separate right turn arrow, plus a certain percentage of right turns allowed on red is calculated the same way as a standard right turn lane with a certain percentage of right turns allowed on red, except the turns which occur on the right turn arrow are not counted as part of the percentage of right turns that occur on red.

Critical Lane Method

Intersection Capacity Utilization parallels another calculation procedure known as the Critical Lane Method with one exception. Critical Lane Method dimensions capacity in terms of standardized vehicles per hour per lane. A Critical Lane Method result of 800 vehicles per hour means that the intersection operates as though 800 vehicles were using a single lane continuously. If one assumes a lane capacity of 1,600 vehicles per

hour, then a Critical Lane Method calculation resulting in 800 vehicles per hour is the same as an Intersection Capacity Utilization calculation of 50 percent since 800/1,600 is 50 percent. It is our opinion that the Critical Lane Method is inferior to the Intersection Capacity Utilization method simply because a statement such as "The Critical Lane Method value is 800 vehicles per hour" means little to most persons, whereas a statement such as "The Intersection Capacity Utilization is 50 percent" communicates clearly. Critical Lane Method results directly correspond to Intersection Capacity Utilization results. The correspondence is as follows, assuming a lane capacity of 1,600 vehicles per hour and no clearance interval.

Critical Lane Method Result	**Intersection Capacity Utilization Result**
800 vehicles per hour	50 percent
960 vehicles per hour	60 percent
1,120 vehicles per hour	70 percent
1,280 vehicles per hour	80 percent
1,440 vehicles per hour	90 percent
1,600 vehicles per hour	100 percent
1,760 vehicles per hour	110 percent

INTERSECTION CAPACITY UTILIZATION
LEVEL OF SERVICE DESCRIPTION[1]

Level of Service	Description	Volume to Capacity Ratio
A	Level of Service A occurs when progression is extremely favorable and vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0.600 and below
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average delay.	0.601 to 0.700
C	Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	0.701 to 0.800
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	0.801 to 0.900
E	Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent.	0.901 to 1.000
F	Level of Service F is considered to be unacceptable to most drivers. This condition often occurs when oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	1.001 and up

[1]Source: Highway Capacity Manual Special Report 209, Transportation Research Board, National Research Council Washington D.C., 2000.

Existing (Year 2014)

Balboa Marina West
Existing (Year 2014
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.873
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	0 0	2	0 1	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	455	0	240	0	2286	136	0	808	374
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	460	0	242	0	2309	137	0	816	378
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	460	0	242	0	2309	0	0	816	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	460	0	242	0	2309	0	0	816	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	460	0	242	0	2309	0	0	816	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	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	0	3200	1600	0	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.00	0.15	0.00	0.72	0.00	0.00	0.17	0.00
Crit Moves:						****		****			****	

Balboa Marina West
Existing Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			2 0 0 0 1			0 0 2 0 1			0 0 3 0 1		
Volume Module:												
Base Vol:	0	0	0	548	0	404	0	1208	89	0	1919	598
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	553	0	408	0	1220	90	0	1938	604
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	553	0	408	0	1220	0	0	1938	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	553	0	408	0	1220	0	0	1938	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	553	0	408	0	1220	0	0	1938	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	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	0	3200	1600	0	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.26	0.00	0.38	0.00	0.00	0.40	0.00
Crit Moves:						****	****				****	

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.771
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	2	2	3	65	0	342	283	2262	11	13	1233	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	2	2	3	65	0	342	286	2285	11	13	1245	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	65	0	342	286	2285	11	13	1245	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	65	0	342	286	2285	11	13	1245	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	65	0	342	286	2285	11	13	1245	59
OvlAdjVol:						56						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.29	0.43	1.00	0.00	1.00	1.00	1.99	0.01	1.00	3.00	1.00
Final Sat.:	457	457	686	1600	0	1600	1600	3185	15	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.21	0.18	0.72	0.72	0.01	0.26	0.04
OvlAdjV/S:						0.04						
Crit Moves:		****		****				****		****		

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.789
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	9	12	12	73	4	441	247	1552	13	37	2412	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	9	12	12	73	4	441	249	1568	13	37	2436	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	12	12	73	4	441	249	1568	13	37	2436	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	12	12	73	4	441	249	1568	13	37	2436	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	12	12	73	4	441	249	1568	13	37	2436	56
OvlAdjVol:						192						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.37	0.36	0.95	0.05	1.00	1.00	1.98	0.02	1.00	3.00	1.00
Final Sat.:	436	582	582	1517	83	1600	1600	3173	27	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.02	0.05	0.05	0.28	0.16	0.49	0.49	0.02	0.51	0.03
OvlAdjV/S:						0.12						
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing Year 2014
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.761
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	1	0 0	1! 0	0	1	0 1	1 0	0 0	2 1	0
Volume Module:												
Base Vol:	0	0	0	42	0	15	25	2298	0	0	1302	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	42	0	15	25	2321	0	0	1315	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	42	0	15	25	2321	0	0	1315	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	42	0	15	25	2321	0	0	1315	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	42	0	15	25	2321	0	0	1315	35
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.00	0.74	0.00	0.26	1.00	2.00	0.00	0.00	2.92	0.08
Final Sat.:	0	0	1600	1179	0	421	1600	3200	0	0	4674	126
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.04	0.02	0.73	0.00	0.00	0.28	0.28
Crit Moves:						****		****				

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.608
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 0	0	0 1!	0 0	1	0 1	1 0	0	0 2	1 0
Volume Module:												
Base Vol:	2	1	0	37	2	25	63	1575	5	0	2466	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	2	1	0	37	2	25	64	1591	5	0	2491	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	1	0	37	2	25	64	1591	5	0	2491	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	1	0	37	2	25	64	1591	5	0	2491	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	1	0	37	2	25	64	1591	5	0	2491	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.67	0.33	0.00	0.58	0.03	0.39	1.00	1.99	0.01	0.00	2.95	0.05
Final Sat.:	1067	533	0	925	50	625	1600	3190	10	0	4723	77
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.04	0.04	0.04	0.50	0.50	0.00	0.53	0.53
Crit Moves:	****				****		****				****	

Balboa Marina West
Existing Year 2014
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Irvine Avenue (NS) at 19th Street/Dover Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.523
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 0	1	0	1 0 1	0	1
Volume Module:												
Base Vol:	40	780	12	132	738	18	64	155	28	12	101	240
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	796	12	135	753	18	64	155	28	12	101	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	796	12	135	753	18	64	155	28	12	101	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	796	12	135	753	18	64	155	28	12	101	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	796	12	135	753	18	64	155	28	12	101	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.85	0.15	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1355	245	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.25	0.01	0.08	0.24	0.01	0.04	0.11	0.11	0.01	0.06	0.15
Crit Moves:		****			****			****				****

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Irvine Avenue (NS) at 19th Street/Dover Drive (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.616
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	97	658	41	159	1185	69	48	109	63	30	182	234
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	671	42	162	1209	70	48	109	63	30	182	234
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	99	671	42	162	1209	70	48	109	63	30	182	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	671	42	162	1209	70	48	109	63	30	182	234
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	99	671	42	162	1209	70	48	109	63	30	182	234
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.63	0.37	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1014	586	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.21	0.03	0.10	0.38	0.04	0.03	0.11	0.11	0.02	0.11	0.15
Crit Moves:	****				****		****					****

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Irvine Avenue (NS) at 17th Street/Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.457
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	274	506	37	178	438	132	230	478	180	39	389	62
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	279	516	38	182	447	135	230	478	180	39	389	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	279	516	38	182	447	135	230	478	180	39	389	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	279	516	38	182	447	135	230	478	180	39	389	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	279	516	38	182	447	135	230	478	180	39	389	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	1.45	0.55	1.00	1.73	0.27
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	2325	875	1600	2760	440
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.02	0.06	0.14	0.08	0.07	0.21	0.21	0.02	0.14	0.14
Crit Moves:	****				****			****			****	

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Irvine Avenue (NS) at 17th Street/Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.711
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 2	0	1	2 0 2	0	1	2 0 1	1	0	1 0 1	1	0
Volume Module:												
Base Vol:	312	459	46	170	584	523	248	472	218	81	554	87
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	318	468	47	173	596	533	248	472	218	81	554	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	318	468	47	173	596	533	248	472	218	81	554	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	318	468	47	173	596	533	248	472	218	81	554	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	318	468	47	173	596	533	248	472	218	81	554	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	1.37	0.63	1.00	1.73	0.27
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	2189	1011	1600	2766	434
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.03	0.05	0.19	0.33	0.08	0.22	0.22	0.05	0.20	0.20
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Dover Drive (NS) at Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.429
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	0	0 0	1 0	1	2 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	362	411	0	0	472	111	67	0	509	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	362	411	0	0	472	111	67	0	509	0	0	0
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:	362	411	0	0	472	111	67	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	362	411	0	0	472	111	67	0	0	0	0	0
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:	362	411	0	0	472	111	67	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	1600	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.13	0.00	0.00	0.30	0.07	0.02	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

Balboa Marina West
Existing Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Dover Drive (NS) at Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.440
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	0	0	0 1	0 1	2 0	0 0	1	0	0 0	0 0 0
Volume Module:												
Base Vol:	550	543	0	0	369	103	121	0	503	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	550	543	0	0	369	103	121	0	503	0	0	0
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:	550	543	0	0	369	103	121	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	550	543	0	0	369	103	121	0	0	0	0	0
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:	550	543	0	0	369	103	121	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	1600	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.00	0.00	0.23	0.06	0.04	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Dover Drive (NS) at 16th Street (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.496
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	87	718	43	40	907	50	29	21	209	44	10	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	87	718	43	40	907	50	29	21	209	44	10	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	87	718	43	40	907	50	29	21	209	44	10	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	87	718	43	40	907	50	29	21	209	44	10	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	87	718	43	40	907	50	29	21	209	44	10	59
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.58	0.42	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	928	672	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.03	0.03	0.28	0.03	0.02	0.03	0.13	0.03	0.01	0.04
Crit Moves:	****				****				****	****		

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Dover Drive (NS) at 16th Street (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.495
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	136	1017	45	79	816	23	34	23	153	52	14	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	1017	45	79	816	23	34	23	153	52	14	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	1017	45	79	816	23	34	23	153	52	14	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	1017	45	79	816	23	34	23	153	52	14	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	1017	45	79	816	23	34	23	153	52	14	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.60	0.40	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	954	646	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.32	0.03	0.05	0.26	0.01	0.02	0.04	0.10	0.03	0.01	0.03
Crit Moves:		****		****					****	****		

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.619
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	1	1 0	3 0	1	0 1	2 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	24	45	42	904	44	182	144	1825	21	17	1205	684
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	24	45	42	904	44	182	147	1862	21	17	1229	698
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:	24	45	42	904	44	182	147	1862	21	17	1229	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	45	42	904	44	182	147	1862	21	17	1229	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:	24	45	42	904	44	182	147	1862	21	17	1229	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	1655	1545	4800	1600	1600	3200	4745	55	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.03	0.19	0.03	0.11	0.05	0.39	0.39	0.01	0.26	0.00
Crit Moves:		****		****				****		****		

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.681
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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
Lanes:	1 0	1 1	0	3 0	1 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	16	32	50	840	49	136	119	1477	22	48	2054	1170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	16	32	50	840	49	136	121	1507	22	49	2095	1193
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:	16	32	50	840	49	136	121	1507	22	49	2095	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	32	50	840	49	136	121	1507	22	49	2095	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:	16	32	50	840	49	136	121	1507	22	49	2095	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	4730	70	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.03	0.17	0.03	0.09	0.04	0.32	0.32	0.03	0.44	0.00
Crit Moves:			****	****			****				****	

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.651
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	383	13	25	30	5	36	30	2421	300	37	1476	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	383	13	25	30	5	36	31	2469	306	38	1506	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	383	13	25	30	5	36	31	2469	306	38	1506	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	383	13	25	30	5	36	31	2469	306	38	1506	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	383	13	25	30	5	36	31	2469	306	38	1506	15
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.73	0.09	0.18	1.00	0.12	0.88	1.00	3.00	1.00	1.00	3.96	0.04
Final Sat.:	4367	148	285	1600	195	1405	1600	4800	1600	1600	6336	64
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.02	0.03	0.03	0.02	0.51	0.19	0.02	0.24	0.24
Crit Moves:	****				****			****			****	

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.619
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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	
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1		1 0	3 1	0	
Volume Module:														
Base Vol:	410	8	29	23	16	38	50	1895	473		57	2863	23	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02		1.02	1.02	1.02	
Initial Bse:	410	8	29	23	16	38	51	1933	482		58	2920	23	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	410	8	29	23	16	38	51	1933	482		58	2920	23	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
Reduced Vol:	410	8	29	23	16	38	51	1933	482		58	2920	23	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	410	8	29	23	16	38	51	1933	482		58	2920	23	
Saturation Flow Module:														
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.76	0.05	0.19	1.00	0.30	0.70	1.00	3.00	1.00		1.00	3.97	0.03	
Final Sat.:	4403	86	311	1600	474	1126	1600	4800	1600		1600	6349	51	
Capacity Analysis Module:														
Vol/Sat:	0.09	0.09	0.09	0.01	0.03	0.03	0.03	0.40	0.30		0.04	0.46	0.46	
Crit Moves:	****			****			****					****		

Balboa Marina West
Existing Year 2014
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Jamboree Road (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	3 0	1	2 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	26	1110	140	744	1604	78	299	38	58	123	8	17
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	1132	143	759	1636	80	299	38	58	123	8	17
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:	27	1132	0	759	1636	0	299	38	58	123	8	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	1132	0	759	1636	0	299	38	58	123	8	17
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:	27	1132	0	759	1636	0	299	38	58	123	8	17
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	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:	0.02	0.24	0.00	0.24	0.34	0.00	0.09	0.02	0.04	0.04	0.01	0.01
Crit Moves:		****		****			****			****		

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Jamboree Road (NS) at San Joaquin Hills Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.521
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: 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:	Ignore			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	55	1289	131	514	1525	164	89	36	13	178	46	29
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	1315	134	524	1556	167	89	36	13	178	46	29
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:	56	1315	0	524	1556	0	89	36	13	178	46	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	1315	0	524	1556	0	89	36	13	178	46	29
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:	56	1315	0	524	1556	0	89	36	13	178	46	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	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:	0.04	0.27	0.00	0.16	0.32	0.00	0.03	0.02	0.01	0.06	0.03	0.02
Crit Moves:		****		****			****			****		

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Jamboree Road (NS) at Santa Barbara Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.493
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1 0	1	1 1	0 0	1
Volume Module:												
Base Vol:	10	1115	289	543	1067	29	33	5	16	39	6	99
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	1137	295	554	1088	30	33	5	16	39	6	99
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	1137	295	554	1088	30	33	5	16	39	6	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	1137	295	554	1088	30	33	5	16	39	6	99
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	1137	295	554	1088	30	33	5	16	39	6	99
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.73	0.27	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	1600	1600	1600	2773	427	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.24	0.18	0.17	0.23	0.02	0.02	0.00	0.01	0.01	0.01	0.06
Crit Moves:		****		****			****					****

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Jamboree Road (NS) at Santa Barbara Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.614
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 3	0	1	2 0 3	0	1	1 0 1	0	1	1 1 0	0	1
Volume Module:												
Base Vol:	17 1176		128	157 1297		74	45	17	16	243	5	458
Growth Adj:	1.02 1.02		1.02	1.02 1.02		1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17 1200		131	160 1323		75	45	17	16	243	5	458
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17 1200		131	160 1323		75	45	17	16	243	5	458
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
Reduced Vol:	17 1200		131	160 1323		75	45	17	16	243	5	458
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17 1200		131	160 1323		75	45	17	16	243	5	458
Saturation Flow Module:												
Sat/Lane:	1600 1600		1600	1600 1600		1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00 1.00		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	1.96	0.04	1.00
Final Sat.:	1600 4800		1600	3200 4800		1600	1600	1600	1600	3135	65	1600
Capacity Analysis Module:												
Vol/Sat:	0.01 0.25		0.08	0.05 0.28		0.05	0.03	0.01	0.01	0.08	0.08	0.29
Crit Moves:	****			****			****					****

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Jamboree Road (NS) at East Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.570
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: 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			
Lanes:	1	0	1	1	0		1	0	2	0	1		3	0	3	1	0		2	0	4	0	1	
Volume Module:																								
Base Vol:	17	340		88			192	291		594			788	1557		19			76	921		102		
Growth Adj:	1.00	1.00		1.00			1.02	1.02		1.02			1.02	1.02		1.02			1.02	1.02		1.02		
Initial Bse:	17	340		88			196	297		606			804	1588		19			78	939		104		
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:	17	340		88			196	297		0			804	1588		19			78	939		104		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Reduced Vol:	17	340		88			196	297		0			804	1588		19			78	939		104		
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:	17	340		88			196	297		0			804	1588		19			78	939		104		
Saturation Flow Module:																								
Sat/Lane:	1600	1600		1600			1600	1600		1600			1600	1600		1600			1600	1600		1600		
Adjustment:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Lanes:	1.00	1.59		0.41			1.00	2.00		1.00			3.00	3.95		0.05			2.00	4.00		1.00		
Final Sat.:	1600	2542		658			1600	3200		1600			4800	6323		77			3200	6400		1600		
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.13		0.13			0.12	0.09		0.00			0.17	0.25		0.25			0.02	0.15		0.07		
Crit Moves:		****						****						****							****			

Balboa Marina West
Existing Year 2014)
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Jamboree Road (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	2 0	1	3 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	41	290	79	179	417	856	723	1589	60	132	1729	205
Growth Adj:	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	41	290	79	183	425	873	737	1621	61	135	1764	209
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:	41	290	79	183	425	0	737	1621	61	135	1764	209
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	290	79	183	425	0	737	1621	61	135	1764	209
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:	41	290	79	183	425	0	737	1621	61	135	1764	209
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.57	0.43	1.00	2.00	1.00	3.00	3.85	0.15	2.00	4.00	1.00
Final Sat.:	1600	2515	685	1600	3200	1600	4800	6167	233	3200	6400	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.12	0.11	0.13	0.00	0.15	0.26	0.26	0.04	0.28	0.13
Crit Moves:		****			****			****			****	

Balboa Marina West
Existing Year 2014
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Santa Cruz Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.309
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 1	0	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	48	4	13	10	7	64	49	512	292	115	265	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	48	4	13	10	7	64	49	512	292	115	265	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:	48	4	13	10	7	64	49	512	292	115	265	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	4	13	10	7	64	49	512	292	115	265	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:	48	4	13	10	7	64	49	512	292	115	265	7
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	0.24	0.76	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.92	0.08
Final Sat.:	3200	376	1224	1600	1600	1600	1600	3200	1600	1600	4676	124
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.01	0.01	0.00	0.04	0.03	0.16	0.18	0.07	0.06	0.06
Crit Moves:	****					****			****	****		

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Santa Cruz Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.340
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	506	14	135	9	5	24	72	486	178	45	444	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	506	14	135	9	5	24	72	486	178	45	444	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	506	14	135	9	5	24	72	486	178	45	444	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	506	14	135	9	5	24	72	486	178	45	444	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	506	14	135	9	5	24	72	486	178	45	444	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.09	0.91	1.00	1.00	1.00	1.00	2.20	0.80	1.00	2.87	0.13
Final Sat.:	3200	150	1450	1600	1600	1600	1600	3513	1287	1600	4593	207
Capacity Analysis Module:												
Vol/Sat:	0.16	0.09	0.09	0.01	0.00	0.02	0.05	0.14	0.14	0.03	0.10	0.10
Crit Moves:	****					****		****			****	

Balboa Marina West
Existing Year 2014
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Santa Rosa Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.330
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	32	16	75	81	12	39	27	265	207	447	457	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	16	75	81	12	39	27	265	207	447	457	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	16	75	81	12	39	27	265	207	447	457	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	16	75	81	12	39	27	265	207	447	457	101
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	16	75	81	12	39	27	265	207	447	457	101
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.46	0.54
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	3200	1600	3200	3931	869
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.05	0.05	0.01	0.02	0.02	0.08	0.13	0.14	0.12	0.12
OvlAdjV/S:			0.00									
Crit Moves:		****		****					****	****		

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Santa Rosa Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.465
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	221	25	443	73	11	59	67	550	133	374	280	79
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	221	25	443	73	11	59	67	550	133	374	280	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	221	25	443	73	11	59	67	550	133	374	280	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	25	443	73	11	59	67	550	133	374	280	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	221	25	443	73	11	59	67	550	133	374	280	79
OvlAdjVol:			256									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.00	1.00	1.00	1.00	2.42	0.58	2.00	2.34	0.66
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	3865	935	3200	3744	1056
Capacity Analysis Module:												
Vol/Sat:	0.14	0.02	0.28	0.05	0.01	0.04	0.04	0.14	0.14	0.12	0.07	0.07
OvlAdjV/S:			0.16									
Crit Moves:			****	****				****		****		

Balboa Marina West
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Newport Center Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.371
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	19	0	69	315	1718	0	0	1051	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	19	0	69	321	1752	0	0	1072	173
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	19	0	0	321	1752	0	0	1072	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	19	0	0	321	1752	0	0	1072	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	19	0	0	321	1752	0	0	1072	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	0.01	0.00	0.00	0.10	0.37	0.00	0.00	0.22	0.00
Crit Moves:				****				****				

Balboa Marina West
Existing (Year 2014
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Newport Center Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.452
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	164	0	635	314	1268	0	0	1416	128
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	164	0	635	320	1293	0	0	1444	131
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	164	0	0	320	1293	0	0	1444	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	164	0	0	320	1293	0	0	1444	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	164	0	0	320	1293	0	0	1444	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	0.05	0.00	0.00	0.10	0.27	0.00	0.00	0.30	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing Year 2014
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avocado Avenue (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.451
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 1	0 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	98	128	135	57	69	50	140	1071	49	93	1101	165
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	98	128	135	57	69	50	143	1092	50	95	1123	168
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:	98	128	135	57	69	0	143	1092	50	95	1123	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	128	135	57	69	0	143	1092	50	95	1123	168
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:	98	128	135	57	69	0	143	1092	50	95	1123	168
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.00	1.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.08	0.04	0.04	0.00	0.09	0.23	0.03	0.06	0.23	0.11
Crit Moves:			****		****		****				****	

Balboa Marina West
Existing Year 2014
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avocado Avenue (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.502
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0	1	1 1	0	1	1 0 3	0	1	1 0 3	0	1
Volume Module:												
Base Vol:	112	73	110	253	109	139	89	1199	71	100	1055	104
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	112	73	110	253	109	139	91	1223	72	102	1076	106
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:	112	73	110	253	109	0	91	1223	72	102	1076	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	73	110	253	109	0	91	1223	72	102	1076	106
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:	112	73	110	253	109	0	91	1223	72	102	1076	106
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.40	0.60	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	2236	964	1600	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.05	0.07	0.11	0.11	0.00	0.06	0.25	0.05	0.06	0.22	0.07
Crit Moves:	****				****			****			****	

Balboa Marina West
Existing Year 2014
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 MacArthur Boulevard (NS) at San Joaquin Hills Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.641
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	121	1226	22	792	1718	851	76	347	46	51	360	651
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	1251	22	808	1752	868	76	347	46	51	360	651
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:	123	1251	22	808	1752	0	76	347	46	51	360	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	1251	22	808	1752	0	76	347	46	51	360	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	123	1251	22	808	1752	0	76	347	46	51	360	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	2.65	0.35	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	4238	562	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.26	0.01	0.25	0.37	0.00	0.02	0.08	0.08	0.03	0.11	0.00
Crit Moves:		****			****			****			****	

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 MacArthur Boulevard (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.734
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0 3	0	1	2 0 3	0	1	3 0 2	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	35 1391		13	666 1547		366	647 313		117	31 292		399
Growth Adj:	1.02 1.02		1.02	1.02 1.02		1.02	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	36 1419		13	679 1578		373	647 313		117	31 292		399
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:	36 1419		13	679 1578		0	647 313		117	31 292		0
Reduct Vol:	0 0		0	0 0		0	0 0		0	0 0		0
Reduced Vol:	36 1419		13	679 1578		0	647 313		117	31 292		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:	36 1419		13	679 1578		0	647 313		117	31 292		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 2.18		0.82	1.00 2.00		1.00
Final Sat.:	3200 4800		1600	3200 4800		1600	4800 3494		1306	1600 3200		1600
Capacity Analysis Module:												
Vol/Sat:	0.01 0.30		0.01	0.21 0.33		0.00	0.13 0.09		0.09	0.02 0.09		0.00
Crit Moves:	****			****			****			****		

Balboa Marina West
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Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 MacArthur Boulevard (NS) at San Miguel Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.529
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	123	1123	147	3	809	637	192	79	38	190	261	6
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	1145	150	3	825	650	192	79	38	190	261	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	1145	150	3	825	650	192	79	38	190	261	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	1145	150	3	825	650	192	79	38	190	261	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	1145	150	3	825	650	192	79	38	190	261	6
OvlAdjVol:						586						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.35	0.65	2.00	1.96	0.04
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2161	1039	3200	3128	72
Capacity Analysis Module:												
Vol/Sat:	0.04	0.24	0.09	0.00	0.17	0.41	0.04	0.04	0.04	0.06	0.08	0.08
OvlAdjV/S:						0.37						
Crit Moves:	****					****	****					****

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 MacArthur Boulevard (NS) at San Miguel Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.477
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3	0 1	2 0	3	0 1	3 0	1	1 0	2 0	1	1 0
Volume Module:												
Base Vol:	91	771	212	11	1107	451	668	331	126	225	173	35
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	93	786	216	11	1129	460	668	331	126	225	173	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	93	786	216	11	1129	460	668	331	126	225	173	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	93	786	216	11	1129	460	668	331	126	225	173	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	93	786	216	11	1129	460	668	331	126	225	173	35
OvlAdjVol:						232						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.45	0.55	2.00	1.66	0.34
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2318	882	3200	2662	538
Capacity Analysis Module:												
Vol/Sat:	0.03	0.16	0.14	0.00	0.24	0.29	0.14	0.14	0.14	0.07	0.07	0.06
OvlAdjV/S:						0.14						
Crit Moves:	****				****				****	****		

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 MacArthur Boulevard (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.679
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	793	0	247	575	1000	0	0	1144	862
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	809	0	252	587	1020	0	0	1167	879
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	809	0	0	587	1020	0	0	1167	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	809	0	0	587	1020	0	0	1167	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	809	0	0	587	1020	0	0	1167	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	0.25	0.00	0.00	0.18	0.21	0.00	0.00	0.24	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 MacArthur Boulevard (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.649
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	2 0	0 0	1	2 0	3 0	0	0 0	3 0	1
Volume Module:												
Base Vol:	0	0	0	981	0	323	298	1277	0	0	1136	789
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	1001	0	329	304	1303	0	0	1159	805
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	1001	0	0	304	1303	0	0	1159	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	1001	0	0	304	1303	0	0	1159	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	1001	0	0	304	1303	0	0	1159	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	0.31	0.00	0.00	0.09	0.27	0.00	0.00	0.24	0.00
Crit Moves:				****			****				****	

Existing (Year 2014) + Project

Balboa Marina West
Existing (Year 2014) + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.873
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	2 0	0 0	1	0 0	2 0	1	0 0	3 0	1
Volume Module:												
Base Vol:	0	0	0	455	0	240	0	2286	136	0	808	374
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	460	0	242	0	2309	137	0	816	378
Added Vol:	0	0	0	1	0	0	0	1	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	461	0	242	0	2310	137	0	816	378
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	461	0	242	0	2310	0	0	816	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	461	0	242	0	2310	0	0	816	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	461	0	242	0	2310	0	0	816	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	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	0	3200	1600	0	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.00	0.15	0.00	0.72	0.00	0.00	0.17	0.00
Crit Moves:						****		****			****	

Balboa Marina West
Existing (Year 2014) + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	2	0 0	0 1	0	0 2	0 1	0	0 3	0 1
Volume Module:												
Base Vol:	0	0	0	548	0	404	0	1208	89	0	1919	598
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	553	0	408	0	1220	90	0	1938	604
Added Vol:	0	0	0	5	0	0	0	5	0	0	2	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	558	0	408	0	1225	90	0	1940	606
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	558	0	408	0	1225	0	0	1940	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	558	0	408	0	1225	0	0	1940	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	558	0	408	0	1225	0	0	1940	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	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	0	3200	1600	0	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.26	0.00	0.38	0.00	0.00	0.40	0.00
Crit Moves:						****	****				****	

Balboa Marina West
Existing Year 2014 + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	2	2	3	65	0	342	283	2262	11	13	1233	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	2	2	3	65	0	342	286	2285	11	13	1245	59
Added Vol:	0	0	0	0	0	0	0	3	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	2	3	65	0	342	286	2288	11	13	1246	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	65	0	342	286	2288	11	13	1246	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	65	0	342	286	2288	11	13	1246	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	65	0	342	286	2288	11	13	1246	59
OvlAdjVol:						56						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.29	0.43	1.00	0.00	1.00	1.00	1.99	0.01	1.00	3.00	1.00
Final Sat.:	457	457	686	1600	0	1600	1600	3185	15	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.21	0.18	0.72	0.72	0.01	0.26	0.04
OvlAdjV/S:						0.04						
Crit Moves:		****		****				****		****		

Balboa Marina West
Existing (Year 2014) + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.790
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1	1 0	1 0	3 0	1
Volume Module:												
Base Vol:	9	12	12	73	4	441	247	1552	13	37	2412	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	9	12	12	73	4	441	249	1568	13	37	2436	56
Added Vol:	0	0	0	0	0	0	0	15	0	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	12	12	73	4	441	249	1583	13	37	2443	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	12	12	73	4	441	249	1583	13	37	2443	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	12	12	73	4	441	249	1583	13	37	2443	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	12	12	73	4	441	249	1583	13	37	2443	56
OvlAdjVol:						192						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.37	0.36	0.95	0.05	1.00	1.00	1.98	0.02	1.00	3.00	1.00
Final Sat.:	436	582	582	1517	83	1600	1600	3174	26	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.02	0.05	0.05	0.28	0.16	0.50	0.50	0.02	0.51	0.03
OvlAdjV/S:						0.12						
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing (Year 2014) - Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.762
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 1	0 0	1! 0	0	1 0	1	1 0	0 0	2	1 0
Volume Module:												
Base Vol:	0	0	0	42	0	15	25	2298	0	0	1302	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	42	0	15	25	2321	0	0	1315	35
Added Vol:	0	0	0	0	0	0	0	3	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	42	0	15	25	2324	0	0	1316	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	42	0	15	25	2324	0	0	1316	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	42	0	15	25	2324	0	0	1316	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	42	0	15	25	2324	0	0	1316	35
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.00	0.74	0.00	0.26	1.00	2.00	0.00	0.00	2.92	0.08
Final Sat.:	0	0	1600	1179	0	421	1600	3200	0	0	4674	126
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.04	0.02	0.73	0.00	0.00	0.28	0.28
Crit Moves:						****		****				

Balboa Marina West
Existing Year 2014 - Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.610
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	0	0 0	1! 0	0	1 0	1 1	0	0 0	2 1	0
Volume Module:												
Base Vol:	2	1	0	37	2	25	63	1575	5	0	2466	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	2	1	0	37	2	25	64	1591	5	0	2491	40
Added Vol:	0	0	0	0	0	0	0	15	0	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	1	0	37	2	25	64	1606	5	0	2498	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	1	0	37	2	25	64	1606	5	0	2498	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	1	0	37	2	25	64	1606	5	0	2498	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	1	0	37	2	25	64	1606	5	0	2498	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.67	0.33	0.00	0.58	0.03	0.39	1.00	1.99	0.01	0.00	2.95	0.05
Final Sat.:	1067	533	0	925	50	625	1600	3190	10	0	4724	76
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.04	0.04	0.04	0.50	0.50	0.00	0.53	0.53
Crit Moves:	****				****		****				****	

Balboa Marina West
Existing (Year 2014) + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Irvine Avenue (NS) at 19th Street/Dover Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.523
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	40	780	12	132	738	18	64	155	28	12	101	240
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	796	12	135	753	18	64	155	28	12	101	240
Added Vol:	0	0	0	1	1	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	796	12	136	754	18	64	155	28	12	101	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	796	12	136	754	18	64	155	28	12	101	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	796	12	136	754	18	64	155	28	12	101	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	796	12	136	754	18	64	155	28	12	101	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.85	0.15	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1355	245	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.25	0.01	0.08	0.24	0.01	0.04	0.11	0.11	0.01	0.06	0.15
Crit Moves:		****		****			****					****

Balboa Marina West
Existing Year 2014 + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Irvine Avenue (NS) at 19th Street/Dover Drive (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.617
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 2	0	1	1	0 2	0	1	1	0 0	1	0	1	0 1	0	1
Volume Module:																
Base Vol:	97	658	41		159	1185	69		48	109	63		30	182	234	
Growth Adj:	1.02	1.02	1.02		1.02	1.02	1.02		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	99	671	42		162	1209	70		48	109	63		30	182	234	
Added Vol:	0	1	0		3	3	0		0	0	0		0	0	1	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	99	672	42		165	1212	70		48	109	63		30	182	235	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	99	672	42		165	1212	70		48	109	63		30	182	235	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	99	672	42		165	1212	70		48	109	63		30	182	235	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	99	672	42		165	1212	70		48	109	63		30	182	235	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	0.63	0.37		1.00	1.00	1.00	
Final Sat.:	1600	3200	1600		1600	3200	1600		1600	1014	586		1600	1600	1600	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.21	0.03		0.10	0.38	0.04		0.03	0.11	0.11		0.02	0.11	0.15	
Crit Moves:	****					****			****						****	

Balboa Marina West
Existing (Year 2014) + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Irvine Avenue (NS) at 17th Street/Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.457
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	274	506	37	178	438	132	230	478	180	39	389	62
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	279	516	38	182	447	135	230	478	180	39	389	62
Added Vol:	0	0	0	1	0	0	0	1	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	279	516	38	183	447	135	230	479	180	39	389	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	279	516	38	183	447	135	230	479	180	39	389	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	279	516	38	183	447	135	230	479	180	39	389	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	279	516	38	183	447	135	230	479	180	39	389	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	1.45	0.55	1.00	1.73	0.27
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	2326	874	1600	2760	440
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.02	0.06	0.14	0.08	0.07	0.21	0.21	0.02	0.14	0.14
Crit Moves:	****				****			****			****	

Balboa Marina West
Existing Year 2014 + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Irvine Avenue (NS) at 17th Street/Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.712
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	312	459	46	170	584	523	248	472	218	81	554	87
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	318	468	47	173	596	533	248	472	218	81	554	87
Added Vol:	0	0	0	3	0	0	0	5	0	0	2	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	318	468	47	176	596	533	248	477	218	81	556	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	318	468	47	176	596	533	248	477	218	81	556	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	318	468	47	176	596	533	248	477	218	81	556	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	318	468	47	176	596	533	248	477	218	81	556	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	1.37	0.63	1.00	1.73	0.27
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	2196	1004	1600	2763	437
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.03	0.06	0.19	0.33	0.08	0.22	0.22	0.05	0.20	0.20
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing (Year 2014) + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Dover Drive (NS) at Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.430
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	0	0	0 1	0 1	2 0	0 0	1	0	0 0	0 0 0
Volume Module:												
Base Vol:	362	411	0	0	472	111	67	0	509	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	362	411	0	0	472	111	67	0	509	0	0	0
Added Vol:	1	0	0	0	1	0	0	0	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	363	411	0	0	473	111	67	0	511	0	0	0
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:	363	411	0	0	473	111	67	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	363	411	0	0	473	111	67	0	0	0	0	0
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:	363	411	0	0	473	111	67	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	1600	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.13	0.00	0.00	0.30	0.07	0.02	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

Balboa Marina West
Existing Year 2014 + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Dover Drive (NS) at Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.445
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	0	0	0 1	0 1	2 0	0 0	1	0	0 0	0 0 0
Volume Module:												
Base Vol:	550	543	0	0	369	103	121	0	503	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	550	543	0	0	369	103	121	0	503	0	0	0
Added Vol:	4	2	0	0	5	0	0	0	8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	554	545	0	0	374	103	121	0	511	0	0	0
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:	554	545	0	0	374	103	121	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	554	545	0	0	374	103	121	0	0	0	0	0
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:	554	545	0	0	374	103	121	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	1600	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.00	0.00	0.23	0.06	0.04	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

Balboa Marina West
Existing (Year 2014) - Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Dover Drive (NS) at 16th Street (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.498
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	87	718	43	40	907	50	29	21	209	44	10	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	87	718	43	40	907	50	29	21	209	44	10	59
Added Vol:	0	1	0	0	3	0	0	0	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	87	719	43	40	910	50	29	21	210	44	10	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	87	719	43	40	910	50	29	21	210	44	10	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	87	719	43	40	910	50	29	21	210	44	10	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	87	719	43	40	910	50	29	21	210	44	10	59
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.58	0.42	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	928	672	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.03	0.03	0.28	0.03	0.02	0.03	0.13	0.03	0.01	0.04
Crit Moves:	****				****				****	****		

Balboa Marina West
Existing (Year 2014) + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Dover Drive (NS) at 16th Street (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.499
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	136	1017	45	79	816	23	34	23	153	52	14	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	1017	45	79	816	23	34	23	153	52	14	50
Added Vol:	1	6	0	0	13	0	0	0	3	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	137	1023	45	79	829	23	34	23	156	52	14	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	137	1023	45	79	829	23	34	23	156	52	14	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	1023	45	79	829	23	34	23	156	52	14	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	137	1023	45	79	829	23	34	23	156	52	14	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.60	0.40	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	954	646	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.32	0.03	0.05	0.26	0.01	0.02	0.04	0.10	0.03	0.01	0.03
Crit Moves:		****		****					****	****		

Balboa Marina West
Existing (Year 2014) + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.620
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	1	1 0	3 0	1	0 1	2 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	24	45	42	904	44	182	144	1825	21	17	1205	684
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	24	45	42	904	44	182	147	1862	21	17	1229	698
Added Vol:	0	0	0	4	0	0	0	3	0	0	1	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	45	42	908	44	182	147	1865	21	17	1230	699
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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:	24	45	42	908	44	182	147	1865	21	17	1230	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	45	42	908	44	182	147	1865	21	17	1230	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:	24	45	42	908	44	182	147	1865	21	17	1230	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	1655	1545	4800	1600	1600	3200	4745	55	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.03	0.19	0.03	0.11	0.05	0.39	0.39	0.01	0.26	0.00
Crit Moves:		****		****				****		****		

Balboa Marina West
Existing Year 2014 - Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.686
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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
Lanes:	1 0	1	1 0	3 0	1	0 1	2 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	16	32	50	840	49	136	119	1477	22	48	2054	1170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	16	32	50	840	49	136	121	1507	22	49	2095	1193
Added Vol:	0	0	0	18	0	0	0	15	0	0	7	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	32	50	858	49	136	121	1522	22	49	2102	1201
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:	16	32	50	858	49	136	121	1522	22	49	2102	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	32	50	858	49	136	121	1522	22	49	2102	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:	16	32	50	858	49	136	121	1522	22	49	2102	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	4730	70	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.03	0.18	0.03	0.09	0.04	0.32	0.32	0.03	0.44	0.00
Crit Moves:			****	****			****				****	

Balboa Marina West
Existing (Year 2014) + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.654
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	383	13	25	30	5	36	30	2421	300	37	1476	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	383	13	25	30	5	36	31	2469	306	38	1506	15
Added Vol:	1	0	0	0	0	0	2	1	0	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	384	13	25	30	5	36	33	2470	306	41	1506	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	384	13	25	30	5	36	33	2470	306	41	1506	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	384	13	25	30	5	36	33	2470	306	41	1506	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	384	13	25	30	5	36	33	2470	306	41	1506	15
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.73	0.09	0.18	1.00	0.12	0.88	1.00	3.00	1.00	1.00	3.96	0.04
Final Sat.:	4368	148	284	1600	195	1405	1600	4800	1600	1600	6336	64
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.02	0.03	0.03	0.02	0.51	0.19	0.03	0.24	0.24
Crit Moves:	****				****			****			****	

Balboa Marina West
Existing Year 2014) - Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.627
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	410	8	29	23	16	38	50	1895	473	57	2863	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	410	8	29	23	16	38	51	1933	482	58	2920	23
Added Vol:	5	0	0	0	0	0	11	6	0	13	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	415	8	29	23	16	38	62	1939	482	71	2920	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	415	8	29	23	16	38	62	1939	482	71	2920	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	415	8	29	23	16	38	62	1939	482	71	2920	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	415	8	29	23	16	38	62	1939	482	71	2920	23
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.76	0.05	0.19	1.00	0.30	0.70	1.00	3.00	1.00	1.00	3.97	0.03
Final Sat.:	4407	85	308	1600	474	1126	1600	4800	1600	1600	6349	51
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.01	0.03	0.03	0.04	0.40	0.30	0.04	0.46	0.46
Crit Moves:		****			****		****				****	

Balboa Marina West
Existing Year 2014, - Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Jamboree Road (NS) at San Joaquin Hills Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.605
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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
Lanes:	1 0	3 0	1	2 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	26	1110	140	744	1604	78	299	38	58	123	8	17
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	1132	143	759	1636	80	299	38	58	123	8	17
Added Vol:	0	0	0	0	1	0	0	0	0	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	1132	143	759	1637	80	299	38	58	124	8	17
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:	27	1132	0	759	1637	0	299	38	58	124	8	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	1132	0	759	1637	0	299	38	58	124	8	17
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:	27	1132	0	759	1637	0	299	38	58	124	8	17
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	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:	0.02	0.24	0.00	0.24	0.34	0.00	0.09	0.02	0.04	0.04	0.01	0.01
Crit Moves:		****		****			****			****		

Balboa Marina West
Existing (Year 2014) + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Jamboree Road (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.523
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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:	Ignore			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	55	1289	131	514	1525	164	89	36	13	178	46	29
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	1315	134	524	1556	167	89	36	13	178	46	29
Added Vol:	0	2	1	0	5	0	0	0	0	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	1317	135	524	1561	167	89	36	13	181	46	29
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:	56	1317	0	524	1561	0	89	36	13	181	46	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	1317	0	524	1561	0	89	36	13	181	46	29
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:	56	1317	0	524	1561	0	89	36	13	181	46	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	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:	0.04	0.27	0.00	0.16	0.33	0.00	0.03	0.02	0.01	0.06	0.03	0.02
Crit Moves:		****		****			****			****		

Balboa Marina West
Existing (Year 2014) + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Jamboree Road (NS) at Santa Barbara Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.493
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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
Lanes:	1 0 3	0	1	2 0 3	0	1	1 0 1	0	1	1 1 0	0	1
Volume Module:												
Base Vol:	10 1115		289	543 1067		29	33	5	16	39	6	99
Growth Adj:	1.02 1.02		1.02	1.02 1.02		1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10 1137		295	554 1088		30	33	5	16	39	6	99
Added Vol:	0 1		0	0 2		0	0	0	0	0	0	0
PasserByVol:	0 0		0	0 0		0	0	0	0	0	0	0
Initial Fut:	10 1138		295	554 1090		30	33	5	16	39	6	99
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10 1138		295	554 1090		30	33	5	16	39	6	99
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
Reduced Vol:	10 1138		295	554 1090		30	33	5	16	39	6	99
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10 1138		295	554 1090		30	33	5	16	39	6	99
Saturation Flow Module:												
Sat/Lane:	1600 1600		1600	1600 1600		1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00 1.00		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	1.73	0.27	1.00
Final Sat.:	1600 4800		1600	3200 4800		1600	1600	1600	1600	2773	427	1600
Capacity Analysis Module:												
Vol/Sat:	0.01 0.24		0.18	0.17 0.23		0.02	0.02	0.00	0.01	0.01	0.01	0.06
Crit Moves:	****			****			****					****

Balboa Marina West
Existing Year 2014) + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Jamboree Road (NS) at Santa Barbara Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.615
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1 0	1	1 1	0 0	1
Volume Module:												
Base Vol:	17	1176	128	157	1297	74	45	17	16	243	5	458
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	1200	131	160	1323	75	45	17	16	243	5	458
Added Vol:	0	4	0	0	8	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	1204	131	160	1331	75	45	17	16	243	5	458
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	1204	131	160	1331	75	45	17	16	243	5	458
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	1204	131	160	1331	75	45	17	16	243	5	458
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	1204	131	160	1331	75	45	17	16	243	5	458
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.96	0.04	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	1600	1600	1600	3135	65	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.25	0.08	0.05	0.28	0.05	0.03	0.01	0.01	0.08	0.08	0.29
Crit Moves:		****		****			****					****

Balboa Marina West
Existing (Year 2014) + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Jamboree Road (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.571
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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
Lanes:	1 0	1	1 0	1 0	2	0 1	3 0	3	1 0	2 0	4	0 1
Volume Module:												
Base Vol:	17	340	88	192	291	594	788	1557	19	76	921	102
Growth Adj:	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	17	340	88	196	297	606	804	1588	19	78	939	104
Added Vol:	0	0	0	0	0	2	1	0	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	340	88	196	297	608	805	1588	19	78	940	104
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:	17	340	88	196	297	0	805	1588	19	78	940	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	340	88	196	297	0	805	1588	19	78	940	104
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:	17	340	88	196	297	0	805	1588	19	78	940	104
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.59	0.41	1.00	2.00	1.00	3.00	3.95	0.05	2.00	4.00	1.00
Final Sat.:	1600	2542	658	1600	3200	1600	4800	6323	77	3200	6400	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.13	0.13	0.12	0.09	0.00	0.17	0.25	0.25	0.02	0.15	0.07
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing Year 2014 + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Jamboree Road (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.660
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	3 0	3	1 0	2 0	4	0 1
Volume Module:												
Base Vol:	41	290	79	179	417	856	723	1589	60	132	1729	205
Growth Adj:	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	41	290	79	183	425	873	737	1621	61	135	1764	209
Added Vol:	0	0	0	0	0	8	4	2	0	0	5	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	290	79	183	425	881	741	1623	61	135	1769	209
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:	41	290	79	183	425	0	741	1623	61	135	1769	209
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	290	79	183	425	0	741	1623	61	135	1769	209
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:	41	290	79	183	425	0	741	1623	61	135	1769	209
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.57	0.43	1.00	2.00	1.00	3.00	3.85	0.15	2.00	4.00	1.00
Final Sat.:	1600	2515	685	1600	3200	1600	4800	6167	233	3200	6400	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.12	0.11	0.13	0.00	0.15	0.26	0.26	0.04	0.28	0.13
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing (Year 2014, - Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Santa Cruz Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.309
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 1	0	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	48	4	13	10	7	64	49	512	292	115	265	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	48	4	13	10	7	64	49	512	292	115	265	7
Added Vol:	0	0	0	0	0	0	0	0	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	4	13	10	7	64	49	512	292	115	266	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:	48	4	13	10	7	64	49	512	292	115	266	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	4	13	10	7	64	49	512	292	115	266	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:	48	4	13	10	7	64	49	512	292	115	266	7
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	0.24	0.76	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.92	0.08
Final Sat.:	3200	376	1224	1600	1600	1600	1600	3200	1600	1600	4677	123
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.01	0.01	0.00	0.04	0.03	0.16	0.18	0.07	0.06	0.06
Crit Moves:	****					****			****	****		

Balboa Marina West
Existing Year 2014, + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Santa Cruz Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.340
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: A

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	2	0	0	1	0		1	0	1	1	0		1	0	2	1	0		1	0	2	1	0	
Volume Module:																								
Base Vol:	506	14	135				9	5	24				72	486	178				45	444	20			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	506	14	135				9	5	24				72	486	178				45	444	20			
Added Vol:	0	0	0				0	0	0				0	1	0				0	3	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	506	14	135				9	5	24				72	487	178				45	447	20			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	506	14	135				9	5	24				72	487	178				45	447	20			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	506	14	135				9	5	24				72	487	178				45	447	20			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	506	14	135				9	5	24				72	487	178				45	447	20			
Saturation Flow Module:																								
Sat/Lane:	1600	1600	1600				1600	1600	1600				1600	1600	1600				1600	1600	1600			
Adjustment:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Lanes:	2.00	0.09	0.91				1.00	1.00	1.00				1.00	2.20	0.80				1.00	2.87	0.13			
Final Sat.:	3200	150	1450				1600	1600	1600				1600	3515	1285				1600	4594	206			
Capacity Analysis Module:																								
Vol/Sat:	0.16	0.09	0.09				0.01	0.00	0.02				0.05	0.14	0.14				0.03	0.10	0.10			
Crit Moves:	****								****					****					****					

Baboa Marina West
Existing (Year 2014 + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Santa Rosa Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.330
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2	1 0	2 0	2	1 0
Volume Module:												
Base Vol:	32	16	75	81	12	39	27	265	207	447	457	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	16	75	81	12	39	27	265	207	447	457	101
Added Vol:	0	0	0	0	0	0	0	0	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	16	75	81	12	39	27	265	207	447	458	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	16	75	81	12	39	27	265	207	447	458	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	16	75	81	12	39	27	265	207	447	458	101
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	16	75	81	12	39	27	265	207	447	458	101
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.46	0.54
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	3200	1600	3200	3933	867
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.05	0.05	0.01	0.02	0.02	0.08	0.13	0.14	0.12	0.12
OvlAdjV/S:			0.00									
Crit Moves:	****			****					****	****		

Balboa Marina West
Existing Year 2014) + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Santa Rosa Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.465
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	221	25	443	73	11	59	67	550	133	374	280	79
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	221	25	443	73	11	59	67	550	133	374	280	79
Added Vol:	0	0	0	0	0	0	0	1	0	0	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	221	25	443	73	11	59	67	551	133	374	283	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	221	25	443	73	11	59	67	551	133	374	283	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	25	443	73	11	59	67	551	133	374	283	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	221	25	443	73	11	59	67	551	133	374	283	79
OvlAdjVol:			256									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.00	1.00	1.00	1.00	2.42	0.58	2.00	2.35	0.65
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	3867	933	3200	3752	1048
Capacity Analysis Module:												
Vol/Sat:	0.14	0.02	0.28	0.05	0.01	0.04	0.04	0.14	0.14	0.12	0.08	0.08
OvlAdjV/S:			0.16									
Crit Moves:			****	****				****		****		

Balboa Marina West
Existing Year 2014, + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Newport Center Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.371
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	2	0 0	0 1	2	0 3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	19	0	69	315	1718	0	0	1051	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	19	0	69	321	1752	0	0	1072	173
Added Vol:	0	0	0	0	0	0	0	0	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	19	0	69	321	1752	0	0	1073	173
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	19	0	0	321	1752	0	0	1073	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	19	0	0	321	1752	0	0	1073	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	19	0	0	321	1752	0	0	1073	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	0.01	0.00	0.00	0.10	0.37	0.00	0.00	0.22	0.00
Crit Moves:				****				****				

Balboa Marina West
Existing Year 2014 + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Newport Center Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.453
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	164	0	635	314	1268	0	0	1416	128
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	164	0	635	320	1293	0	0	1444	131
Added Vol:	0	0	0	0	0	0	0	2	0	0	5	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	164	0	635	320	1295	0	0	1449	131
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	164	0	0	320	1295	0	0	1449	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	164	0	0	320	1295	0	0	1449	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	164	0	0	320	1295	0	0	1449	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	0.05	0.00	0.00	0.10	0.27	0.00	0.00	0.30	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing Year 2014 + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Avocado Avenue (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.451
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 1	0 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	98	128	135	57	69	50	140	1071	49	93	1101	165
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	98	128	135	57	69	50	143	1092	50	95	1123	168
Added Vol:	0	0	0	0	0	0	0	0	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	98	128	135	57	69	50	143	1092	50	95	1124	168
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:	98	128	135	57	69	0	143	1092	50	95	1124	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	128	135	57	69	0	143	1092	50	95	1124	168
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:	98	128	135	57	69	0	143	1092	50	95	1124	168
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.00	1.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.08	0.04	0.04	0.00	0.09	0.23	0.03	0.06	0.23	0.11
Crit Moves:			****		****		****				****	

Balboa Marina West
Existing Year 2014 + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Avocado Avenue (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.502
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0	1	1 1	0	0 1	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	112	73	110	253	109	139	89	1199	71	100	1055	104
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	112	73	110	253	109	139	91	1223	72	102	1076	106
Added Vol:	0	0	0	0	0	0	0	2	0	0	5	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	112	73	110	253	109	139	91	1225	72	102	1081	106
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:	112	73	110	253	109	0	91	1225	72	102	1081	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	73	110	253	109	0	91	1225	72	102	1081	106
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:	112	73	110	253	109	0	91	1225	72	102	1081	106
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.40	0.60	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	2236	964	1600	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.05	0.07	0.11	0.11	0.00	0.06	0.26	0.05	0.06	0.23	0.07
Crit Moves:	****				****			****			****	

Balboa Marina West
Existing Year 2014 - Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 MacArthur Boulevard (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.642
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	121	1226	22	792	1718	851	76	347	46	51	360	651
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	1251	22	808	1752	868	76	347	46	51	360	651
Added Vol:	0	0	0	0	1	0	0	0	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	123	1251	22	808	1753	868	76	347	46	51	361	651
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:	123	1251	22	808	1753	0	76	347	46	51	361	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	1251	22	808	1753	0	76	347	46	51	361	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:	123	1251	22	808	1753	0	76	347	46	51	361	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	2.65	0.35	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	4238	562	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.26	0.01	0.25	0.37	0.00	0.02	0.08	0.08	0.03	0.11	0.00
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing Year 2014 + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 MacArthur Boulevard (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.735
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	35	1391	13	666	1547	366	647	313	117	31	292	399
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	1419	13	679	1578	373	647	313	117	31	292	399
Added Vol:	0	1	0	0	3	0	0	1	0	0	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	1420	13	679	1581	373	647	314	117	31	295	399
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:	36	1420	13	679	1581	0	647	314	117	31	295	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1420	13	679	1581	0	647	314	117	31	295	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:	36	1420	13	679	1581	0	647	314	117	31	295	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	2.19	0.81	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	3497	1303	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.30	0.01	0.21	0.33	0.00	0.13	0.09	0.09	0.02	0.09	0.00
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing Year (2014) + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 MacArthur Boulevard (NS) at San Miguel Drive (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.529
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: 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			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	123	1123	147	3	809	637	192	79	38	190	261	6
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	1145	150	3	825	650	192	79	38	190	261	6
Added Vol:	0	0	0	0	1	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	125	1145	150	3	826	650	192	79	38	190	261	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	1145	150	3	826	650	192	79	38	190	261	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	1145	150	3	826	650	192	79	38	190	261	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	1145	150	3	826	650	192	79	38	190	261	6
OvlAdjVol:						586						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.35	0.65	2.00	1.96	0.04
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2161	1039	3200	3128	72
Capacity Analysis Module:												
Vol/Sat:	0.04	0.24	0.09	0.00	0.17	0.41	0.04	0.04	0.04	0.06	0.08	0.08
OvlAdjV/S:						0.37						
Crit Moves:	****					****	****					****

Balboa Marina West
Existing Year 2014 + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 MacArthur Boulevard (NS) at San Miguel Drive (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.478
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: 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			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	91	771	212	11	1107	451	668	331	126	225	173	35
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	93	786	216	11	1129	460	668	331	126	225	173	35
Added Vol:	0	1	0	0	3	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	93	787	216	11	1132	460	668	331	126	225	173	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	93	787	216	11	1132	460	668	331	126	225	173	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	93	787	216	11	1132	460	668	331	126	225	173	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	93	787	216	11	1132	460	668	331	126	225	173	35
OvlAdjVol:						232						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.45	0.55	2.00	1.66	0.34
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2318	882	3200	2662	538
Capacity Analysis Module:												
Vol/Sat:	0.03	0.16	0.14	0.00	0.24	0.29	0.14	0.14	0.14	0.07	0.07	0.06
OvlAdjV/S:						0.14						
Crit Moves:	****				****				****	****		

Balboa Marina West
Existing Year 2014) + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 MacArthur Boulevard (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.679
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2	0 0	0 1	2	0 3	0 0	0	0 3	0 1
Volume Module:												
Base Vol:	0	0	0	793	0	247	575	1000	0	0	1144	862
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	809	0	252	587	1020	0	0	1167	879
Added Vol:	0	0	0	0	0	1	0	0	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	809	0	253	587	1020	0	0	1168	879
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	809	0	0	587	1020	0	0	1168	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	809	0	0	587	1020	0	0	1168	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	809	0	0	587	1020	0	0	1168	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	0.25	0.00	0.00	0.18	0.21	0.00	0.00	0.24	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing Year 2014 + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 MacArthur Boulevard (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.650
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2	0 0	0 1	2	0 3	0 0	0	0 3	0 1
Volume Module:												
Base Vol:	0	0	0	981	0	323	298	1277	0	0	1136	789
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	1001	0	329	304	1303	0	0	1159	805
Added Vol:	0	0	0	0	0	3	1	1	0	0	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	1001	0	332	305	1304	0	0	1162	805
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	1001	0	0	305	1304	0	0	1162	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	1001	0	0	305	1304	0	0	1162	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	1001	0	0	305	1304	0	0	1162	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	0.31	0.00	0.00	0.10	0.27	0.00	0.00	0.24	0.00
Crit Moves:				****			****				****	

Existing + Growth (Year 2017) + Approved Projects

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.931
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	2	0	0	0	1	0	0	2	0	1	0	0	3	0	1
Volume Module:												
Base Vol:	0	0	0	455	0	240	0	2286	136	0	808	374
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	473	0	250	0	2377	141	0	840	389
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	26	0	35	0	31	4	0	46	6
Initial Fut:	0	0	0	499	0	285	0	2408	145	0	886	395
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	499	0	285	0	2408	0	0	886	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	499	0	285	0	2408	0	0	886	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	499	0	285	0	2408	0	0	886	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	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	0	3200	1600	0	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.18	0.00	0.75	0.00	0.00	0.18	0.00
Crit Moves:						****		****			****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.701
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	0 0	2	0 1	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	548	0	404	0	1208	89	0	1919	598
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	570	0	420	0	1256	93	0	1996	622
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	41	0	19	0	90	7	0	51	11
Initial Fut:	0	0	0	611	0	439	0	1346	100	0	2047	633
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	611	0	439	0	1346	0	0	2047	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	611	0	439	0	1346	0	0	2047	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	611	0	439	0	1346	0	0	2047	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	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	0	3200	1600	0	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.27	0.00	0.42	0.00	0.00	0.43	0.00
Crit Moves:						****	****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.833
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	2	2	3	65	0	342	283	2262	11	13	1233	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	2	2	3	65	0	342	294	2352	11	14	1282	60
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	1	0	1	0	128	0	0	96	0
Initial Fut:	2	2	3	66	0	343	294	2480	11	14	1378	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	66	0	343	294	2480	11	14	1378	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	66	0	343	294	2480	11	14	1378	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	66	0	343	294	2480	11	14	1378	60
OvlAdjVol:						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:	0.28	0.29	0.43	1.00	0.00	1.00	1.00	1.99	0.01	1.00	3.00	1.00
Final Sat.:	457	457	686	1600	0	1600	1600	3185	15	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.21	0.18	0.78	0.78	0.01	0.29	0.04
OvlAdjV/S:						0.03						
Crit Moves:		****			****				****		****	

Balboa Marina West
Existing - Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.836
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	9	12	12	73	4	441	247	1552	13	37	2412	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	9	12	12	73	4	441	257	1614	14	38	2508	57
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	2	0	0	1	144	0	0	155	1
Initial Fut:	9	12	12	75	4	441	258	1758	14	38	2663	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	12	12	75	4	441	258	1758	14	38	2663	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	12	12	75	4	441	258	1758	14	38	2663	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	12	12	75	4	441	258	1758	14	38	2663	58
OvlAdjVol:						183						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.37	0.36	0.95	0.05	1.00	1.00	1.98	0.02	1.00	3.00	1.00
Final Sat.:	436	582	582	1519	81	1600	1600	3176	24	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.02	0.05	0.05	0.28	0.16	0.55	0.55	0.02	0.55	0.04
OvlAdjV/S:						0.11						
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.824
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	1	0 0	1! 0	0	1 0	1 1	0	0 0	2 1	0
Volume Module:												
Base Vol:	0	0	0	42	0	15	25	2298	0	0	1302	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	42	0	15	26	2390	0	0	1354	36
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	133	0	0	96	0
Initial Fut:	0	0	0	42	0	15	26	2523	0	0	1450	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:	0	0	0	42	0	15	26	2523	0	0	1450	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	42	0	15	26	2523	0	0	1450	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:	0	0	0	42	0	15	26	2523	0	0	1450	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:	0.00	0.00	1.00	0.74	0.00	0.26	1.00	2.00	0.00	0.00	2.93	0.07
Final Sat.:	0	0	1600	1179	0	421	1600	3200	0	0	4682	118
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.04	0.02	0.79	0.00	0.00	0.31	0.31
Crit Moves:						****		****				

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.658
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 0	0	0 1!	0 0	1	0 1	1 0	0	0 2	1 0
Volume Module:												
Base Vol:	2	1	0	37	2	25	63	1575	5	0	2466	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	2	1	0	37	2	25	66	1638	5	0	2565	42
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	146	0	0	157	0
Initial Fut:	2	1	0	37	2	25	66	1784	5	0	2722	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	1	0	37	2	25	66	1784	5	0	2722	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	1	0	37	2	25	66	1784	5	0	2722	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	1	0	37	2	25	66	1784	5	0	2722	42
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.67	0.33	0.00	0.58	0.03	0.39	1.00	1.99	0.01	0.00	2.95	0.05
Final Sat.:	1067	533	0	925	50	625	1600	3191	9	0	4728	72
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.04	0.04	0.04	0.56	0.56	0.00	0.58	0.58
Crit Moves:	****				****		****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Irvine Avenue (NS) at 19th Street/Dover Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.535
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	40	780	12	132	738	18	64	155	28	12	101	240
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	819	13	139	775	19	64	155	28	12	101	240
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	1	1	0	2	1	0	0	0	0	0	1	2
Initial Fut:	43	820	13	141	776	19	64	155	28	12	102	242
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	820	13	141	776	19	64	155	28	12	102	242
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	820	13	141	776	19	64	155	28	12	102	242
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	820	13	141	776	19	64	155	28	12	102	242
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.85	0.15	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1355	245	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.01	0.09	0.24	0.01	0.04	0.11	0.11	0.01	0.06	0.15
Crit Moves:		****		****			****					****

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Irvine Avenue (NS) at 19th Street/Dover Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.631
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	97	658	41	159	1185	69	48	109	63	30	182	234
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:	102	691	43	167	1244	72	48	109	63	30	182	234
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	1	1	0	3	2	0	0	0	0	0	1	2
Initial Fut:	103	692	43	170	1246	72	48	109	63	30	183	236
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	103	692	43	170	1246	72	48	109	63	30	183	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	692	43	170	1246	72	48	109	63	30	183	236
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	103	692	43	170	1246	72	48	109	63	30	183	236
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.63	0.37	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1014	586	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.03	0.11	0.39	0.05	0.03	0.11	0.11	0.02	0.11	0.15
Crit Moves:	****				****		****					****

Balboa Marina West
Existing + Growth Year 2017, - Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Irvine Avenue (NS) at 17th Street/Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.466
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2	0 1	2 0	2	0 1	2 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	274	506	37	178	438	132	230	478	180	39	389	62
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:	288	531	39	187	460	139	230	478	180	39	389	62
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	1	1	0	1	0	3	1	4	1	0	6	0
Initial Fut:	289	532	39	188	460	142	231	482	181	39	395	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	289	532	39	188	460	142	231	482	181	39	395	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	289	532	39	188	460	142	231	482	181	39	395	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	289	532	39	188	460	142	231	482	181	39	395	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	1.45	0.55	1.00	1.73	0.27
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	2326	874	1600	2766	434
Capacity Analysis Module:												
Vol/Sat:	0.09	0.17	0.02	0.06	0.14	0.09	0.07	0.21	0.21	0.02	0.14	0.14
Crit Moves:	****				****			****			****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Irvine Avenue (NS) at 17th Street/Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.732
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	312	459	46	170	584	523	248	472	218	81	554	87
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:	328	482	48	179	613	549	248	472	218	81	554	87
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	2	0	4	7	19	0	0	10	1
Initial Fut:	328	482	48	181	613	553	255	491	218	81	564	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	328	482	48	181	613	553	255	491	218	81	564	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	328	482	48	181	613	553	255	491	218	81	564	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	328	482	48	181	613	553	255	491	218	81	564	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	1.39	0.61	1.00	1.73	0.27
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	2216	984	1600	2768	432
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.03	0.06	0.19	0.35	0.08	0.22	0.22	0.05	0.20	0.20
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing + Growth (Year 2017) - Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Dover Drive (NS) at Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.431
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	0	0	0 1	0 1	2 0	0 0	1	0	0 0	0 0 0
Volume Module:												
Base Vol:	362	411	0	0	472	111	67	0	509	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	362	411	0	0	472	111	67	0	509	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	1	4	0	0	2	0	0	0	2	0	0	0
Initial Fut:	363	415	0	0	474	111	67	0	511	0	0	0
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:	363	415	0	0	474	111	67	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	363	415	0	0	474	111	67	0	0	0	0	0
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:	363	415	0	0	474	111	67	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	1600	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.13	0.00	0.00	0.30	0.07	0.02	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Dover Drive (NS) at Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.444
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	0	0 0	1 0	1	2 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	550	543	0	0	369	103	121	0	503	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	550	543	0	0	369	103	121	0	503	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	3	5	0	0	5	0	0	0	8	0	0	0
Initial Fut:	553	548	0	0	374	103	121	0	511	0	0	0
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:	553	548	0	0	374	103	121	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	553	548	0	0	374	103	121	0	0	0	0	0
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:	553	548	0	0	374	103	121	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	1600	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.00	0.00	0.23	0.06	0.04	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Dover Drive (NS) at 16th Street (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.499
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	87	718	43	40	907	50	29	21	209	44	10	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	87	718	43	40	907	50	29	21	209	44	10	59
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	1	2	1	1	2	0	0	0	2	1	2	4
Initial Fut:	88	720	44	41	909	50	29	21	211	45	12	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	88	720	44	41	909	50	29	21	211	45	12	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	720	44	41	909	50	29	21	211	45	12	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	88	720	44	41	909	50	29	21	211	45	12	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.58	0.42	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	928	672	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.03	0.03	0.28	0.03	0.02	0.03	0.13	0.03	0.01	0.04
Crit Moves:	****				****				****	****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Dover Drive (NS) at 16th Street (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.503
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	136	1017	45	79	816	23	34	23	153	52	14	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	1017	45	79	816	23	34	23	153	52	14	50
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	1	14	2	4	10	0	0	1	2	0	1	4
Initial Fut:	137	1031	47	83	826	23	34	24	155	52	15	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	137	1031	47	83	826	23	34	24	155	52	15	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	1031	47	83	826	23	34	24	155	52	15	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	137	1031	47	83	826	23	34	24	155	52	15	54
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.59	0.41	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	938	662	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.32	0.03	0.05	0.26	0.01	0.02	0.04	0.10	0.03	0.01	0.03
Crit Moves:		****		****					****	****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	1	1 0	3 0	1	0 1	2 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	24	45	42	904	44	182	144	1825	21	17	1205	684
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:	24	45	42	904	44	182	151	1916	22	18	1265	718
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	19	0	9	9	120	0	0	86	9
Initial Fut:	24	45	42	923	44	191	160	2036	22	18	1351	727
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:	24	45	42	923	44	191	160	2036	22	18	1351	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	45	42	923	44	191	160	2036	22	18	1351	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:	24	45	42	923	44	191	160	2036	22	18	1351	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	1655	1545	4800	1600	1600	3200	4749	51	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.03	0.19	0.03	0.12	0.05	0.43	0.43	0.01	0.28	0.00
Crit Moves:		****		****				****		****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.737
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	1	1 0	3 0	1	0 1	2 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	16	32	50	840	49	136	119	1477	22	48	2054	1170
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:	16	32	50	840	49	136	125	1551	23	50	2157	1229
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	13	0	16	27	123	0	0	150	26
Initial Fut:	16	32	50	853	49	152	152	1674	23	50	2307	1255
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:	16	32	50	853	49	152	152	1674	23	50	2307	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	32	50	853	49	152	152	1674	23	50	2307	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:	16	32	50	853	49	152	152	1674	23	50	2307	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	4735	65	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.03	0.18	0.03	0.10	0.05	0.35	0.35	0.03	0.48	0.00
Crit Moves:			****	****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.708
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	383	13	25	30	5	36	30	2421	300	37	1476	15
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:	383	13	25	30	5	36	32	2542	315	39	1550	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	1	0	1	44	0	18	35	95	0	0	64	0
Initial Fut:	384	13	26	74	5	54	67	2637	315	39	1614	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	384	13	26	74	5	54	67	2637	315	39	1614	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	384	13	26	74	5	54	67	2637	315	39	1614	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	384	13	26	74	5	54	67	2637	315	39	1614	16
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.73	0.09	0.18	1.00	0.08	0.92	1.00	3.00	1.00	1.00	3.96	0.04
Final Sat.:	4357	148	295	1600	136	1464	1600	4800	1600	1600	6338	62
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.05	0.04	0.04	0.04	0.55	0.20	0.02	0.25	0.25
Crit Moves:		****		****				****		****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.695
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	410	8	29	23	16	38	50	1895	473	57	2863	23
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:	410	8	29	23	16	38	53	1990	497	60	3006	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	3	0	0	71	0	29	26	83	2	0	127	0
Initial Fut:	413	8	29	94	16	67	79	2073	499	60	3133	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:	413	8	29	94	16	67	79	2073	499	60	3133	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	413	8	29	94	16	67	79	2073	499	60	3133	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:	413	8	29	94	16	67	79	2073	499	60	3133	24
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.76	0.05	0.19	1.00	0.19	0.81	1.00	3.00	1.00	1.00	3.97	0.03
Final Sat.:	4405	85	309	1600	308	1292	1600	4800	1600	1600	6351	49
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.06	0.05	0.05	0.05	0.43	0.31	0.04	0.49	0.49
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Jamboree Road (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	3 0	1	2 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	26	1110	140	744	1604	78	299	38	58	123	8	17
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:	27	1166	147	781	1684	82	299	38	58	123	8	17
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	80	5	46	141	0	0	0	0	10	0	44
Initial Fut:	27	1246	152	827	1825	82	299	38	58	133	8	61
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:	27	1246	0	827	1825	0	299	38	58	133	8	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	1246	0	827	1825	0	299	38	58	133	8	61
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:	27	1246	0	827	1825	0	299	38	58	133	8	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	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:	0.02	0.26	0.00	0.26	0.38	0.00	0.09	0.02	0.04	0.04	0.01	0.04
Crit Moves:		****		****			****			****		

Balboa Marina West
Existing + Growth (Year 2017) - Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Jamboree Road (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.603
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	3 0	1	2 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	55	1289	131	514	1525	164	89	36	13	178	46	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:	58	1353	138	540	1601	172	89	36	13	178	46	29
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	1	104	10	52	116	0	1	4	0	8	0	109
Initial Fut:	59	1457	148	592	1717	172	90	40	13	186	46	138
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:	59	1457	0	592	1717	0	90	40	13	186	46	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	1457	0	592	1717	0	90	40	13	186	46	138
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:	59	1457	0	592	1717	0	90	40	13	186	46	138
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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:	0.04	0.30	0.00	0.18	0.36	0.00	0.03	0.03	0.01	0.06	0.03	0.09
Crit Moves:		****		****			****					****

Balboa Marina West
Existing - Growth (Year 2017) - Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Jamboree Road (NS) at Santa Barbara Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.534
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1 0	1	1 1	0 0	1
Volume Module:												
Base Vol:	10	1115	289	543	1067	29	33	5	16	39	6	99
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:	11	1171	303	570	1120	30	33	5	16	39	6	99
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	55	4	5	108	1	6	0	0	26	0	21
Initial Fut:	11	1226	307	575	1228	31	39	5	16	65	6	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	1226	307	575	1228	31	39	5	16	65	6	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	1226	307	575	1228	31	39	5	16	65	6	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	1226	307	575	1228	31	39	5	16	65	6	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	1.00	1.00	1.83	0.17	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	1600	1600	1600	2930	270	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.26	0.19	0.18	0.26	0.02	0.02	0.00	0.01	0.02	0.02	0.08
Crit Moves:		****		****			****					****

Balboa Marina West
Existing + Growth Year 2017 + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Jamboree Road (NS) at Santa Barbara Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.658
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1 0	1	1 1	0 0	1
Volume Module:												
Base Vol:	17	1176	128	157	1297	74	45	17	16	243	5	458
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:	18	1235	134	165	1362	78	45	17	16	243	5	458
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	98	14	16	77	6	2	1	0	12	1	13
Initial Fut:	18	1333	148	181	1439	84	47	18	16	255	6	471
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	1333	148	181	1439	84	47	18	16	255	6	471
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	1333	148	181	1439	84	47	18	16	255	6	471
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	1333	148	181	1439	84	47	18	16	255	6	471
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.95	0.05	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	1600	1600	1600	3126	74	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.28	0.09	0.06	0.30	0.05	0.03	0.01	0.01	0.08	0.08	0.29
Crit Moves:		****		****			****					****

Balboa Marina West
Existing + Growth (Year 2017) - Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Jamboree Road (NS) at East Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.608
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 1	1	0	1	0 2	0	1	3	0 3	1	0	2	0 4	0	1
Volume Module:																
Base Vol:	17	340	88		192	291	594		788	1557	19		76	921	102	
Growth Adj:	1.00	1.00	1.00		1.05	1.05	1.05		1.05	1.05	1.05		1.05	1.05	1.05	
Initial Bse:	17	340	88		202	306	624		827	1635	20		80	967	107	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	1	1		8	1	120		53	84	1		1	49	2	
Initial Fut:	17	341	89		210	307	744		880	1719	21		81	1016	109	
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:	17	341	89		210	307	0		880	1719	21		81	1016	109	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	17	341	89		210	307	0		880	1719	21		81	1016	109	
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:	17	341	89		210	307	0		880	1719	21		81	1016	109	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.59	0.41		1.00	2.00	1.00		3.00	3.95	0.05		2.00	4.00	1.00	
Final Sat.:	1600	2538	662		1600	3200	1600		4800	6323	77		3200	6400	1600	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.13	0.13		0.13	0.10	0.00		0.18	0.27	0.27		0.03	0.16	0.07	
Crit Moves:		****			****				****					****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Jamboree Road (NS) at East Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.721
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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	
Lanes:	1	0 1	1	0	1	0 2	0	1	3	0 3	1	0	2	0 4	0	1
Volume Module:																
Base Vol:	41	290	79		179	417	856		723	1589	60		132	1729	205	
Growth Adj:	1.00	1.00	1.00		1.05	1.05	1.05		1.05	1.05	1.05		1.05	1.05	1.05	
Initial Bse:	41	290	79		188	438	899		759	1668	63		139	1815	215	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	1	1	4		9	3	79		97	62	0		5	120	12	
Initial Fut:	42	291	83		197	441	978		856	1730	63		144	1935	227	
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:	42	291	83		197	441	0		856	1730	63		144	1935	227	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	42	291	83		197	441	0		856	1730	63		144	1935	227	
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:	42	291	83		197	441	0		856	1730	63		144	1935	227	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.56	0.44		1.00	2.00	1.00		3.00	3.86	0.14		2.00	4.00	1.00	
Final Sat.:	1600	2490	710		1600	3200	1600		4800	6175	225		3200	6400	1600	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.12	0.12		0.12	0.14	0.00		0.18	0.28	0.28		0.04	0.30	0.14	
Crit Moves:		****			****				****					****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Santa Cruz Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.323
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 1	0	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	48	4	13	10	7	64	49	512	292	115	265	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	48	4	13	10	7	64	49	512	292	115	265	7
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	31	0	3	0	1	0	0	78	5	2	10	0
Initial Fut:	79	4	16	10	8	64	49	590	297	117	275	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:	79	4	16	10	8	64	49	590	297	117	275	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	4	16	10	8	64	49	590	297	117	275	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:	79	4	16	10	8	64	49	590	297	117	275	7
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	0.20	0.80	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.93	0.07
Final Sat.:	3200	320	1280	1600	1600	1600	1600	3200	1600	1600	4681	119
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.01	0.01	0.01	0.04	0.03	0.18	0.19	0.07	0.06	0.06
Crit Moves:	****					****			****	****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Santa Cruz Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.358
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0	1 0	1	0 1	1 0	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	506	14	135	9	5	24	72	486	178	45	444	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	506	14	135	9	5	24	72	486	178	45	444	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	12	0	2	1	0	0	0	30	22	6	73	0
Initial Fut:	518	14	137	10	5	24	72	516	200	51	517	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	518	14	137	10	5	24	72	516	200	51	517	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	518	14	137	10	5	24	72	516	200	51	517	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	518	14	137	10	5	24	72	516	200	51	517	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.09	0.91	1.00	1.00	1.00	1.00	2.16	0.84	1.00	2.89	0.11
Final Sat.:	3200	148	1452	1600	1600	1600	1600	3459	1341	1600	4621	179
Capacity Analysis Module:												
Vol/Sat:	0.16	0.09	0.09	0.01	0.00	0.02	0.05	0.15	0.15	0.03	0.11	0.11
Crit Moves:	****					****		****		****		

Balboa Marina West
Existing + Growth (Year 2017, - Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Santa Rosa Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.379
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2	1 0	2 0	2	1 0
Volume Module:												
Base Vol:	32	16	75	81	12	39	27	265	207	447	457	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	16	75	81	12	39	27	265	207	447	457	101
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	19	0	27	0	0	0	1	10	77	5	5	0
Initial Fut:	51	16	102	81	12	39	28	275	284	452	462	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	16	102	81	12	39	28	275	284	452	462	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	16	102	81	12	39	28	275	284	452	462	101
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	16	102	81	12	39	28	275	284	452	462	101
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.46	0.54
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	3200	1600	3200	3939	861
Capacity Analysis Module:												
Vol/Sat:	0.03	0.01	0.06	0.05	0.01	0.02	0.02	0.09	0.18	0.14	0.12	0.12
OvlAdjV/S:			0.00									
Crit Moves:		****		****					****	****		

Balboa Marina West
Existing + Growth Year 2017 + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Santa Rosa Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.500
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	221	25	443	73	11	59	67	550	133	374	280	79
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	221	25	443	73	11	59	67	550	133	374	280	79
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	78	0	30	0	0	0	0	11	30	27	11	0
Initial Fut:	299	25	473	73	11	59	67	561	163	401	291	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	299	25	473	73	11	59	67	561	163	401	291	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	299	25	473	73	11	59	67	561	163	401	291	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	299	25	473	73	11	59	67	561	163	401	291	79
OvlAdjVol:			273									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.00	1.00	1.00	1.00	2.32	0.68	2.00	2.36	0.64
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	3719	1081	3200	3775	1025
Capacity Analysis Module:												
Vol/Sat:	0.19	0.02	0.30	0.05	0.01	0.04	0.04	0.15	0.15	0.13	0.08	0.08
OvlAdjV/S:			0.17									
Crit Moves:	****					****		****		****		

Balboa Marina West
Existing + Growth (Year 2017, - Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Newport Center Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.396
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	19	0	69	315	1718	0	0	1051	170
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:	0	0	0	19	0	69	331	1804	0	0	1104	179
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	6	0	20	15	61	0	0	21	3
Initial Fut:	0	0	0	25	0	89	346	1865	0	0	1125	182
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	25	0	0	346	1865	0	0	1125	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	25	0	0	346	1865	0	0	1125	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	25	0	0	346	1865	0	0	1125	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	0.01	0.00	0.00	0.11	0.39	0.00	0.00	0.23	0.00
Crit Moves:				****				****				

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Newport Center Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.489
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	164	0	635	314	1268	0	0	1416	128
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:	0	0	0	164	0	635	330	1331	0	0	1487	134
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	7	0	44	21	38	0	0	76	11
Initial Fut:	0	0	0	171	0	679	351	1369	0	0	1563	145
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	171	0	0	351	1369	0	0	1563	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	171	0	0	351	1369	0	0	1563	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	171	0	0	351	1369	0	0	1563	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	0.05	0.00	0.00	0.11	0.29	0.00	0.00	0.33	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing + Growth Year 2017) + Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Avocado Avenue (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.497
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 1	0 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	98	128	135	57	69	50	140	1071	49	93	1101	165
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:	98	128	135	57	69	50	147	1125	51	98	1156	173
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	5	0	10	54	13	0	0	13	30
Initial Fut:	98	128	135	62	69	60	201	1138	51	98	1169	203
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:	98	128	135	62	69	0	201	1138	51	98	1169	203
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	128	135	62	69	0	201	1138	51	98	1169	203
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:	98	128	135	62	69	0	201	1138	51	98	1169	203
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.00	1.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.08	0.04	0.04	0.00	0.13	0.24	0.03	0.06	0.24	0.13
Crit Moves:			****		****		****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Avocado Avenue (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.524
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 1	0 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	112	73	110	253	109	139	89	1199	71	100	1055	104
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:	112	73	110	253	109	139	93	1259	75	105	1108	109
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	33	0	69	30	13	1	0	14	13
Initial Fut:	112	73	110	286	109	208	123	1272	76	105	1122	122
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:	112	73	110	286	109	0	123	1272	76	105	1122	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	73	110	286	109	0	123	1272	76	105	1122	122
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:	112	73	110	286	109	0	123	1272	76	105	1122	122
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.45	0.55	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	2317	883	1600	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.05	0.07	0.12	0.12	0.00	0.08	0.26	0.05	0.07	0.23	0.08
Crit Moves:	****				****			****		****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 MacArthur Boulevard (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	121	1226	22	792	1718	851	76	347	46	51	360	651
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	1287	23	832	1804	894	76	347	46	51	360	651
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	2	10	1	1	53	68	40	4	0	6	3	0
Initial Fut:	129	1297	24	833	1857	962	116	351	46	57	363	651
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:	129	1297	24	833	1857	0	116	351	46	57	363	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1297	24	833	1857	0	116	351	46	57	363	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:	129	1297	24	833	1857	0	116	351	46	57	363	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	2.65	0.35	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	4244	556	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.27	0.02	0.26	0.39	0.00	0.02	0.08	0.08	0.04	0.11	0.00
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 MacArthur Boulevard (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.782
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	35	1391	13	666	1547	366	647	313	117	31	292	399
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:	37	1461	14	699	1624	384	647	313	117	31	292	399
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	2	57	6	1	35	41	93	4	0	3	4	0
Initial Fut:	39	1518	20	700	1659	425	740	317	117	34	296	399
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:	39	1518	20	700	1659	0	740	317	117	34	296	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	1518	20	700	1659	0	740	317	117	34	296	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:	39	1518	20	700	1659	0	740	317	117	34	296	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	2.19	0.81	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	3506	1294	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.32	0.01	0.22	0.35	0.00	0.15	0.09	0.09	0.02	0.09	0.00
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing + Growth Year 2017, - Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 MacArthur Boulevard (NS) at San Miguel Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.582
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	123	1123	147	3	809	637	192	79	38	190	261	6
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:	129	1179	154	3	849	669	192	79	38	190	261	6
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	2	2	0	1	1	57	8	4	10	0	13	0
Initial Fut:	131	1181	154	4	850	726	200	83	48	190	274	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	131	1181	154	4	850	726	200	83	48	190	274	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	1181	154	4	850	726	200	83	48	190	274	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	131	1181	154	4	850	726	200	83	48	190	274	6
OvlAdjVol:						659						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.27	0.73	2.00	1.96	0.04
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2027	1173	3200	3131	69
Capacity Analysis Module:												
Vol/Sat:	0.04	0.25	0.10	0.00	0.18	0.45	0.04	0.04	0.04	0.06	0.09	0.09
OvlAdjV/S:						0.41						
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing + Growth (Year 2011) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 MacArthur Boulevard (NS) at San Miguel Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.501
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	91	771	212	11	1107	451	668	331	126	225	173	35
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:	96	810	223	12	1162	474	668	331	126	225	173	35
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	7	2	0	1	1	32	63	25	12	0	22	0
Initial Fut:	103	812	223	13	1163	506	731	356	138	225	195	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	103	812	223	13	1163	506	731	356	138	225	195	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	812	223	13	1163	506	731	356	138	225	195	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	103	812	223	13	1163	506	731	356	138	225	195	35
OvlAdjVol:						259						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.44	0.56	2.00	1.70	0.30
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2306	894	3200	2713	487
Capacity Analysis Module:												
Vol/Sat:	0.03	0.17	0.14	0.00	0.24	0.32	0.15	0.15	0.15	0.07	0.07	0.07
OvlAdjV/S:						0.16						
Crit Moves:	****				****			****				****

Balboa Marina West
Existing + Growth (Year 2017) - Approved Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 MacArthur Boulevard (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.711
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	793	0	247	575	1000	0	0	1144	862
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	833	0	259	604	1050	0	0	1201	905
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	10	0	0	1	18	0	0	41	2
Initial Fut:	0	0	0	843	0	259	605	1068	0	0	1242	907
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	843	0	0	605	1068	0	0	1242	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	843	0	0	605	1068	0	0	1242	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	843	0	0	605	1068	0	0	1242	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	0.26	0.00	0.00	0.19	0.22	0.00	0.00	0.26	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 MacArthur Boulevard (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.674
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2	0 0	0 1	2	0 3	0 0	0	0 3	0 1
Volume Module:												
Base Vol:	0	0	0	981	0	323	298	1277	0	0	1136	789
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	1030	0	339	313	1341	0	0	1193	828
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	3	0	0	1	42	0	0	23	6
Initial Fut:	0	0	0	1033	0	339	314	1383	0	0	1216	834
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	1033	0	0	314	1383	0	0	1216	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	1033	0	0	314	1383	0	0	1216	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	1033	0	0	314	1383	0	0	1216	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	0.10	0.29	0.00	0.00	0.25	0.00
Crit Moves:				****			****				****	

Existing + Growth (Year 2017) + Approved Projects + Project

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.931
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	0 0	2	0 1	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	455	0	240	0	2286	136	0	808	374
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	473	0	250	0	2377	141	0	840	389
Added Vol:	0	0	0	1	0	0	0	1	0	0	0	0
PasserByVol:	0	0	0	26	0	35	0	31	4	0	46	6
Initial Fut:	0	0	0	500	0	285	0	2409	145	0	886	395
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	500	0	285	0	2409	0	0	886	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	500	0	285	0	2409	0	0	886	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	500	0	285	0	2409	0	0	886	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	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	0	3200	1600	0	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.18	0.00	0.75	0.00	0.00	0.18	0.00
Crit Moves:						****		****		****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.701
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	0 0	2	0 1	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	548	0	404	0	1208	89	0	1919	598
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	570	0	420	0	1256	93	0	1996	622
Added Vol:	0	0	0	5	0	0	0	5	0	0	2	2
PasserByVol:	0	0	0	41	0	19	0	90	7	0	51	11
Initial Fut:	0	0	0	616	0	439	0	1351	100	0	2049	635
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	616	0	439	0	1351	0	0	2049	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	616	0	439	0	1351	0	0	2049	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	616	0	439	0	1351	0	0	2049	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	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	0	3200	1600	0	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.27	0.00	0.42	0.00	0.00	0.43	0.00
Crit Moves:						****	****				****	

Balboa Marina West
Existing + Growth (Year 2017, + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.834
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0	1 0	0 1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	2	2	3	65	0	342	283	2262	11	13	1233	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	2	2	3	65	0	342	294	2352	11	14	1282	60
Added Vol:	0	0	0	0	0	0	0	3	0	0	1	0
PasserByVol:	0	0	0	1	0	1	0	128	0	0	96	0
Initial Fut:	2	2	3	66	0	343	294	2483	11	14	1379	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	66	0	343	294	2483	11	14	1379	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	66	0	343	294	2483	11	14	1379	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	66	0	343	294	2483	11	14	1379	60
OvlAdjVol:						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:	0.28	0.29	0.43	1.00	0.00	1.00	1.00	1.99	0.01	1.00	3.00	1.00
Final Sat.:	457	457	686	1600	0	1600	1600	3185	15	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.21	0.18	0.78	0.78	0.01	0.29	0.04
OvlAdjV/S:						0.03						
Crit Moves:		****			****				****		****	

Balboa Marina West
Existing + Growth Year 2017 + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.838
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	9	12	12	73	4	441	247	1552	13	37	2412	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	9	12	12	73	4	441	257	1614	14	38	2508	57
Added Vol:	0	0	0	0	0	0	0	15	0	0	7	0
PasserByVol:	0	0	0	2	0	0	1	144	0	0	155	1
Initial Fut:	9	12	12	75	4	441	258	1773	14	38	2670	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	12	12	75	4	441	258	1773	14	38	2670	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	12	12	75	4	441	258	1773	14	38	2670	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	12	12	75	4	441	258	1773	14	38	2670	58
OvlAdjVol:						183						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.37	0.36	0.95	0.05	1.00	1.00	1.98	0.02	1.00	3.00	1.00
Final Sat.:	436	582	582	1519	81	1600	1600	3176	24	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.02	0.05	0.05	0.28	0.16	0.56	0.56	0.02	0.56	0.04
OvlAdjV/S:						0.11						
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.825
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 1	0 0	1!	0 0	1 0	1	1 0	0 0	2	1 0
Volume Module:												
Base Vol:	0	0	0	42	0	15	25	2298	0	0	1302	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	42	0	15	26	2390	0	0	1354	36
Added Vol:	0	0	0	0	0	0	0	3	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	133	0	0	96	0
Initial Fut:	0	0	0	42	0	15	26	2526	0	0	1451	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:	0	0	0	42	0	15	26	2526	0	0	1451	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	42	0	15	26	2526	0	0	1451	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:	0	0	0	42	0	15	26	2526	0	0	1451	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:	0.00	0.00	1.00	0.74	0.00	0.26	1.00	2.00	0.00	0.00	2.93	0.07
Final Sat.:	0	0	1600	1179	0	421	1600	3200	0	0	4683	117
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.04	0.02	0.79	0.00	0.00	0.31	0.31
Crit Moves:						****		****				

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 0	0	0 1!	0 0	1	0 1	1 0	0	0 2	1 0
Volume Module:												
Base Vol:	2	1	0	37	2	25	63	1575	5	0	2466	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	2	1	0	37	2	25	66	1638	5	0	2565	42
Added Vol:	0	0	0	0	0	0	0	15	0	0	7	0
PasserByVol:	0	0	0	0	0	0	0	146	0	0	157	0
Initial Fut:	2	1	0	37	2	25	66	1799	5	0	2729	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	1	0	37	2	25	66	1799	5	0	2729	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	1	0	37	2	25	66	1799	5	0	2729	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	1	0	37	2	25	66	1799	5	0	2729	42
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.67	0.33	0.00	0.58	0.03	0.39	1.00	1.99	0.01	0.00	2.95	0.05
Final Sat.:	1067	533	0	925	50	625	1600	3191	9	0	4728	72
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.04	0.04	0.04	0.56	0.56	0.00	0.58	0.58
Crit Moves:	****				****		****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Irvine Avenue (NS) at 19th Street/Dover Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.536
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	40	780	12	132	738	18	64	155	28	12	101	240
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	819	13	139	775	19	64	155	28	12	101	240
Added Vol:	0	0	0	1	1	0	0	0	0	0	0	0
PasserByVol:	1	1	0	2	1	0	0	0	0	0	1	2
Initial Fut:	43	820	13	142	777	19	64	155	28	12	102	242
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	820	13	142	777	19	64	155	28	12	102	242
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	820	13	142	777	19	64	155	28	12	102	242
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	820	13	142	777	19	64	155	28	12	102	242
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.85	0.15	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1355	245	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.01	0.09	0.24	0.01	0.04	0.11	0.11	0.01	0.06	0.15
Crit Moves:		****			****			****				****

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Irvine Avenue (NS) at 19th Street/Dover Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.633
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	97	658	41	159	1185	69	48	109	63	30	182	234
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:	102	691	43	167	1244	72	48	109	63	30	182	234
Added Vol:	0	1	0	3	3	0	0	0	0	0	0	1
PasserByVol:	1	1	0	3	2	0	0	0	0	0	1	2
Initial Fut:	103	693	43	173	1249	72	48	109	63	30	183	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	103	693	43	173	1249	72	48	109	63	30	183	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	693	43	173	1249	72	48	109	63	30	183	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	103	693	43	173	1249	72	48	109	63	30	183	237
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.63	0.37	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1014	586	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.03	0.11	0.39	0.05	0.03	0.11	0.11	0.02	0.11	0.15
Crit Moves:	****				****		****					****

Balboa Marina West
Existing + Growth (Year 2017, + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Irvine Avenue (NS) at 17th Street/Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.466
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	274	506	37	178	438	132	230	478	180	39	389	62
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:	288	531	39	187	460	139	230	478	180	39	389	62
Added Vol:	0	0	0	1	0	0	0	1	0	0	0	0
PasserByVol:	1	1	0	1	0	3	1	4	1	0	6	0
Initial Fut:	289	532	39	189	460	142	231	483	181	39	395	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	289	532	39	189	460	142	231	483	181	39	395	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	289	532	39	189	460	142	231	483	181	39	395	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	289	532	39	189	460	142	231	483	181	39	395	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	1.45	0.55	1.00	1.73	0.27
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	2328	872	1600	2766	434
Capacity Analysis Module:												
Vol/Sat:	0.09	0.17	0.02	0.06	0.14	0.09	0.07	0.21	0.21	0.02	0.14	0.14
Crit Moves:	****				****			****		****		

Balboa Marina West
Existing + Growth (Year 2017, + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Irvine Avenue (NS) at 17th Street/Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.732
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	312	459	46	170	584	523	248	472	218	81	554	87
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:	328	482	48	179	613	549	248	472	218	81	554	87
Added Vol:	0	0	0	3	0	0	0	5	0	0	2	1
PasserByVol:	0	0	0	2	0	4	7	19	0	0	10	1
Initial Fut:	328	482	48	184	613	553	255	496	218	81	566	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	328	482	48	184	613	553	255	496	218	81	566	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	328	482	48	184	613	553	255	496	218	81	566	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	328	482	48	184	613	553	255	496	218	81	566	89
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	1.39	0.61	1.00	1.73	0.27
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	2223	977	1600	2765	435
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.03	0.06	0.19	0.35	0.08	0.22	0.22	0.05	0.20	0.20
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Dover Drive (NS) at Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.432
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	0	0 0	1 0	1	2 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	362	411	0	0	472	111	67	0	509	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	362	411	0	0	472	111	67	0	509	0	0	0
Added Vol:	1	0	0	0	1	0	0	0	2	0	0	0
PasserByVol:	1	4	0	0	2	0	0	0	2	0	0	0
Initial Fut:	364	415	0	0	475	111	67	0	513	0	0	0
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:	364	415	0	0	475	111	67	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	364	415	0	0	475	111	67	0	0	0	0	0
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:	364	415	0	0	475	111	67	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	1600	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.13	0.00	0.00	0.30	0.07	0.02	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

Balboa Marina West
Existing - Growth (Year 2017 - Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Dover Drive (NS) at Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.449
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	0	0 0	1 0	1	2 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	550	543	0	0	369	103	121	0	503	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	550	543	0	0	369	103	121	0	503	0	0	0
Added Vol:	4	2	0	0	5	0	0	0	8	0	0	0
PasserByVol:	3	5	0	0	5	0	0	0	8	0	0	0
Initial Fut:	557	550	0	0	379	103	121	0	519	0	0	0
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:	557	550	0	0	379	103	121	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	557	550	0	0	379	103	121	0	0	0	0	0
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:	557	550	0	0	379	103	121	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	1600	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.00	0.00	0.24	0.06	0.04	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Dover Drive (NS) at 16th Street (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.501
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	87	718	43	40	907	50	29	21	209	44	10	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	87	718	43	40	907	50	29	21	209	44	10	59
Added Vol:	0	1	0	0	3	0	0	0	1	0	0	0
PasserByVol:	1	2	1	1	2	0	0	0	2	1	2	4
Initial Fut:	88	721	44	41	912	50	29	21	212	45	12	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	88	721	44	41	912	50	29	21	212	45	12	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	721	44	41	912	50	29	21	212	45	12	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	88	721	44	41	912	50	29	21	212	45	12	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.58	0.42	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	928	672	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.03	0.03	0.28	0.03	0.02	0.03	0.13	0.03	0.01	0.04
Crit Moves:	****				****				****	****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Dover Drive (NS) at 16th Street (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.507
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	136	1017	45	79	816	23	34	23	153	52	14	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	1017	45	79	816	23	34	23	153	52	14	50
Added Vol:	1	6	0	0	13	0	0	0	3	0	0	0
PasserByVol:	1	14	2	4	10	0	0	1	2	0	1	4
Initial Fut:	138	1037	47	83	839	23	34	24	158	52	15	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	138	1037	47	83	839	23	34	24	158	52	15	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	1037	47	83	839	23	34	24	158	52	15	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	138	1037	47	83	839	23	34	24	158	52	15	54
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.59	0.41	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	938	662	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.32	0.03	0.05	0.26	0.01	0.02	0.04	0.10	0.03	0.01	0.03
Crit Moves:		****		****					****	****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.661
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0 1	1	0	3 0 1	0	1	2 0 2	1	0	1 0 3	0	1
Volume Module:												
Base Vol:	24	45	42	904	44	182	144	1825	21	17	1205	684
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:	24	45	42	904	44	182	151	1916	22	18	1265	718
Added Vol:	0	0	0	4	0	0	0	3	0	0	1	1
PasserByVol:	0	0	0	19	0	9	9	120	0	0	86	9
Initial Fut:	24	45	42	927	44	191	160	2039	22	18	1352	728
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:	24	45	42	927	44	191	160	2039	22	18	1352	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	45	42	927	44	191	160	2039	22	18	1352	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:	24	45	42	927	44	191	160	2039	22	18	1352	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	1655	1545	4800	1600	1600	3200	4749	51	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.03	0.19	0.03	0.12	0.05	0.43	0.43	0.01	0.28	0.00
Crit Moves:		****		****				****		****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.742
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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
Lanes:	1 0	1	1 0	3 0	1	0 1	2 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	16	32	50	840	49	136	119	1477	22	48	2054	1170
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:	16	32	50	840	49	136	125	1551	23	50	2157	1229
Added Vol:	0	0	0	18	0	0	0	15	0	0	7	8
PasserByVol:	0	0	0	13	0	16	27	123	0	0	150	26
Initial Fut:	16	32	50	871	49	152	152	1689	23	50	2314	1263
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:	16	32	50	871	49	152	152	1689	23	50	2314	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	32	50	871	49	152	152	1689	23	50	2314	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:	16	32	50	871	49	152	152	1689	23	50	2314	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	4735	65	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.03	0.18	0.03	0.10	0.05	0.36	0.36	0.03	0.48	0.00
Crit Moves:			****	****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.710
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	383	13	25	30	5	36	30	2421	300	37	1476	15
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:	383	13	25	30	5	36	32	2542	315	39	1550	16
Added Vol:	1	0	0	0	0	0	2	1	0	3	0	0
PasserByVol:	1	0	1	44	0	18	35	95	0	0	64	0
Initial Fut:	385	13	26	74	5	54	69	2638	315	42	1614	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	385	13	26	74	5	54	69	2638	315	42	1614	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	385	13	26	74	5	54	69	2638	315	42	1614	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	385	13	26	74	5	54	69	2638	315	42	1614	16
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.73	0.09	0.18	1.00	0.08	0.92	1.00	3.00	1.00	1.00	3.96	0.04
Final Sat.:	4358	147	294	1600	136	1464	1600	4800	1600	1600	6338	62
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.05	0.04	0.04	0.04	0.55	0.20	0.03	0.25	0.25
Crit Moves:		****		****				****		****		

Balboa Marina West
Existing + Growth (Year 2014) + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.703
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	410	8	29	23	16	38	50	1895	473	57	2863	23
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:	410	8	29	23	16	38	53	1990	497	60	3006	24
Added Vol:	5	0	0	0	0	0	11	6	0	13	0	0
PasserByVol:	3	0	0	71	0	29	26	83	2	0	127	0
Initial Fut:	418	8	29	94	16	67	90	2079	499	73	3133	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:	418	8	29	94	16	67	90	2079	499	73	3133	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	418	8	29	94	16	67	90	2079	499	73	3133	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:	418	8	29	94	16	67	90	2079	499	73	3133	24
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.76	0.05	0.19	1.00	0.19	0.81	1.00	3.00	1.00	1.00	3.97	0.03
Final Sat.:	4410	84	306	1600	308	1292	1600	4800	1600	1600	6351	49
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.06	0.05	0.05	0.06	0.43	0.31	0.05	0.49	0.49
Crit Moves:		****			****			****			****	

Balboa Marina West
Existing + Growth (Year 2017 - Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Jamboree Road (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	3 0	1	2 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	26	1110	140	744	1604	78	299	38	58	123	8	17
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:	27	1166	147	781	1684	82	299	38	58	123	8	17
Added Vol:	0	0	0	0	1	0	0	0	0	1	0	0
PasserByVol:	0	80	5	46	141	0	0	0	0	10	0	44
Initial Fut:	27	1246	152	827	1826	82	299	38	58	134	8	61
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:	27	1246	0	827	1826	0	299	38	58	134	8	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	1246	0	827	1826	0	299	38	58	134	8	61
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:	27	1246	0	827	1826	0	299	38	58	134	8	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	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:	0.02	0.26	0.00	0.26	0.38	0.00	0.09	0.02	0.04	0.04	0.01	0.04
Crit Moves:		****			****			****			****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Jamboree Road (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.603
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	3 0	1	2 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	55	1289	131	514	1525	164	89	36	13	178	46	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:	58	1353	138	540	1601	172	89	36	13	178	46	29
Added Vol:	0	2	1	0	5	0	0	0	0	3	0	0
PasserByVol:	1	104	10	52	116	0	1	4	0	8	0	109
Initial Fut:	59	1459	149	592	1722	172	90	40	13	189	46	138
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:	59	1459	0	592	1722	0	90	40	13	189	46	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	1459	0	592	1722	0	90	40	13	189	46	138
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:	59	1459	0	592	1722	0	90	40	13	189	46	138
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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:	0.04	0.30	0.00	0.18	0.36	0.00	0.03	0.03	0.01	0.06	0.03	0.09
Crit Moves:		****		****			****					****

Balboa Marina West
Existing + Growth (Year 2017) - Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Jamboree Road (NS) at Santa Barbara Drive (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.535
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: 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	
Lanes:	1	0 3	0	1	2	0 3	0	1	1	0 1	0	1	1	1	0 0	1
Volume Module:																
Base Vol:	10	1115	289		543	1067	29		33	5	16		39	6	99	
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:	11	1171	303		570	1120	30		33	5	16		39	6	99	
Added Vol:	0	1	0		0	2	0		0	0	0		0	0	0	
PasserByVol:	0	55	4		5	108	1		6	0	0		26	0	21	
Initial Fut:	11	1227	307		575	1230	31		39	5	16		65	6	120	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	11	1227	307		575	1230	31		39	5	16		65	6	120	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	11	1227	307		575	1230	31		39	5	16		65	6	120	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	11	1227	307		575	1230	31		39	5	16		65	6	120	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	3.00	1.00		2.00	3.00	1.00		1.00	1.00	1.00		1.83	0.17	1.00	
Final Sat.:	1600	4800	1600		3200	4800	1600		1600	1600	1600		2930	270	1600	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.26	0.19		0.18	0.26	0.02		0.02	0.00	0.01		0.02	0.02	0.08	
Crit Moves:		****			****				****						****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects - Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Jamboree Road (NS) at Santa Barbara Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 3	0	1	2 0 3	0	1	1 0 1	0	1	1 1 0	0	1
Volume Module:												
Base Vol:	17 1176		128	157 1297		74	45	17	16	243	5	458
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:	18 1235		134	165 1362		78	45	17	16	243	5	458
Added Vol:	0 4		0	0 8		0	0	0	0	0	0	0
PasserByVol:	0 98		14	16 77		6	2	1	0	12	1	13
Initial Fut:	18 1337		148	181 1447		84	47	18	16	255	6	471
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Volume:	18 1337		148	181 1447		84	47	18	16	255	6	471
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
Reduced Vol:	18 1337		148	181 1447		84	47	18	16	255	6	471
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
FinalVolume:	18 1337		148	181 1447		84	47	18	16	255	6	471
Saturation Flow Module:												
Sat/Lane:	1600 1600		1600	1600 1600		1600	1600 1600		1600	1600 1600		1600
Adjustment:	1.00 1.00		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	1.95 0.05		1.00
Final Sat.:	1600 4800		1600	3200 4800		1600	1600 1600		1600	3126 74		1600
Capacity Analysis Module:												
Vol/Sat:	0.01 0.28		0.09	0.06 0.30		0.05	0.03 0.01		0.01	0.08 0.08		0.29
Crit Moves:	****			****			****					****

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Jamboree Road (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.608
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	3 0	3	1 0	2 0	4	0 1
Volume Module:												
Base Vol:	17	340	88	192	291	594	788	1557	19	76	921	102
Growth Adj:	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	17	340	88	202	306	624	827	1635	20	80	967	107
Added Vol:	0	0	0	0	0	2	1	0	0	0	1	0
PasserByVol:	0	1	1	8	1	120	53	84	1	1	49	2
Initial Fut:	17	341	89	210	307	746	881	1719	21	81	1017	109
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:	17	341	89	210	307	0	881	1719	21	81	1017	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	341	89	210	307	0	881	1719	21	81	1017	109
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:	17	341	89	210	307	0	881	1719	21	81	1017	109
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.59	0.41	1.00	2.00	1.00	3.00	3.95	0.05	2.00	4.00	1.00
Final Sat.:	1600	2538	662	1600	3200	1600	4800	6323	77	3200	6400	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.13	0.13	0.13	0.10	0.00	0.18	0.27	0.27	0.03	0.16	0.07
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Jamboree Road (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	1	1 0	1 0	2	0 1	3 0	3	1 0	2 0	4	0 1
Volume Module:												
Base Vol:	41	290	79	179	417	856	723	1589	60	132	1729	205
Growth Adj:	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	41	290	79	188	438	899	759	1668	63	139	1815	215
Added Vol:	0	0	0	0	0	8	4	2	0	0	5	0
PasserByVol:	1	1	4	9	3	79	97	62	0	5	120	12
Initial Fut:	42	291	83	197	441	986	860	1732	63	144	1940	227
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:	42	291	83	197	441	0	860	1732	63	144	1940	227
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	291	83	197	441	0	860	1732	63	144	1940	227
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:	42	291	83	197	441	0	860	1732	63	144	1940	227
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.56	0.44	1.00	2.00	1.00	3.00	3.86	0.14	2.00	4.00	1.00
Final Sat.:	1600	2490	710	1600	3200	1600	4800	6175	225	3200	6400	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.12	0.12	0.14	0.00	0.18	0.28	0.28	0.04	0.30	0.14
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Santa Cruz Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.323
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 1	0	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	48	4	13	10	7	64	49	512	292	115	265	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	48	4	13	10	7	64	49	512	292	115	265	7
Added Vol:	0	0	0	0	0	0	0	0	0	0	1	0
PasserByVol:	31	0	3	0	1	0	0	78	5	2	10	0
Initial Fut:	79	4	16	10	8	64	49	590	297	117	276	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:	79	4	16	10	8	64	49	590	297	117	276	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	4	16	10	8	64	49	590	297	117	276	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:	79	4	16	10	8	64	49	590	297	117	276	7
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	0.20	0.80	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.93	0.07
Final Sat.:	3200	320	1280	1600	1600	1600	1600	3200	1600	1600	4681	119
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.01	0.01	0.01	0.04	0.03	0.18	0.19	0.07	0.06	0.06
Crit Moves:	****					****			****	****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Santa Cruz Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.358
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 1	0	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	506	14	135	9	5	24	72	486	178	45	444	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	506	14	135	9	5	24	72	486	178	45	444	20
Added Vol:	0	0	0	0	0	0	0	1	0	0	3	0
PasserByVol:	12	0	2	1	0	0	0	30	22	6	73	0
Initial Fut:	518	14	137	10	5	24	72	517	200	51	520	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	518	14	137	10	5	24	72	517	200	51	520	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	518	14	137	10	5	24	72	517	200	51	520	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	518	14	137	10	5	24	72	517	200	51	520	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.09	0.91	1.00	1.00	1.00	1.00	2.16	0.84	1.00	2.89	0.11
Final Sat.:	3200	148	1452	1600	1600	1600	1600	3461	1339	1600	4622	178
Capacity Analysis Module:												
Vol/Sat:	0.16	0.09	0.09	0.01	0.00	0.02	0.05	0.15	0.15	0.03	0.11	0.11
Crit Moves:	****					****		****		****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Santa Rosa Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.379
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	32	16	75	81	12	39	27	265	207	447	457	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	16	75	81	12	39	27	265	207	447	457	101
Added Vol:	0	0	0	0	0	0	0	0	0	0	1	0
PasserByVol:	19	0	27	0	0	0	1	10	77	5	5	0
Initial Fut:	51	16	102	81	12	39	28	275	284	452	463	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	16	102	81	12	39	28	275	284	452	463	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	16	102	81	12	39	28	275	284	452	463	101
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	16	102	81	12	39	28	275	284	452	463	101
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.46	0.54
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	3200	1600	3200	3940	860
Capacity Analysis Module:												
Vol/Sat:	0.03	0.01	0.06	0.05	0.01	0.02	0.02	0.09	0.18	0.14	0.12	0.12
OvlAdjV/S:			0.00									
Crit Moves:		****		****					****	****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Santa Rosa Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.500
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: 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:			Ovl						Include						Include						Include			
Min. Green:	0		0		0		0		0		0		0		0		0		0		0		0	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	1	0		2	0	2	1	0	
Volume Module:																								
Base Vol:	221		25		443		73		11		59		67		550		133		374		280		79	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	221		25		443		73		11		59		67		550		133		374		280		79	
Added Vol:	0		0		0		0		0		0		0		1		0		0		3		0	
PasserByVol:	78		0		30		0		0		0		0		11		30		27		11		0	
Initial Fut:	299		25		473		73		11		59		67		562		163		401		294		79	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	299		25		473		73		11		59		67		562		163		401		294		79	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	299		25		473		73		11		59		67		562		163		401		294		79	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
FinalVolume:	299		25		473		73		11		59		67		562		163		401		294		79	
OvlAdjVol:					273																			
Saturation Flow Module:																								
Sat/Lane:	1600		1600		1600		1600		1600		1600		1600		1600		1600		1600		1600		1600	
Adjustment:	1.00		1.00		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		1.00		1.00		1.00		1.00		2.33		0.67		2.00		2.36		0.64	
Final Sat.:	1600		1600		1600		1600		1600		1600		1600		3721		1079		3200		3783		1017	
Capacity Analysis Module:																								
Vol/Sat:	0.19		0.02		0.30		0.05		0.01		0.04		0.04		0.15		0.15		0.13		0.08		0.08	
OvlAdjV/S:					0.17																			
Crit Moves:	****										****				****				****					

Balboa Marina West
Existing - Growth (Year 2017) - Approved Projects - Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Newport Center Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.396
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2	0 0	0 1	2	0 3	0 0	0	0 3	0 1
Volume Module:												
Base Vol:	0	0	0	19	0	69	315	1718	0	0	1051	170
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:	0	0	0	19	0	69	331	1804	0	0	1104	179
Added Vol:	0	0	0	0	0	0	0	0	0	0	1	0
PasserByVol:	0	0	0	6	0	20	15	61	0	0	21	3
Initial Fut:	0	0	0	25	0	89	346	1865	0	0	1126	182
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	25	0	0	346	1865	0	0	1126	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	25	0	0	346	1865	0	0	1126	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	25	0	0	346	1865	0	0	1126	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	0.01	0.00	0.00	0.11	0.39	0.00	0.00	0.23	0.00
Crit Moves:				****				****				

Balboa Marina West
Existing + Growth (Year 2017, - Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Newport Center Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.490
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	164	0	635	314	1268	0	0	1416	128
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:	0	0	0	164	0	635	330	1331	0	0	1487	134
Added Vol:	0	0	0	0	0	0	0	2	0	0	5	0
PasserByVol:	0	0	0	7	0	44	21	38	0	0	76	11
Initial Fut:	0	0	0	171	0	679	351	1371	0	0	1568	145
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	171	0	0	351	1371	0	0	1568	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	171	0	0	351	1371	0	0	1568	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	171	0	0	351	1371	0	0	1568	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	0.05	0.00	0.00	0.11	0.29	0.00	0.00	0.33	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing + Growth (Year 2...) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Avocado Avenue (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.497
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 1	1 1	0	0 1	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	98	128	135	57	69	50	140	1071	49	93	1101	165
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:	98	128	135	57	69	50	147	1125	51	98	1156	173
Added Vol:	0	0	0	0	0	0	0	0	0	0	1	0
PasserByVol:	0	0	0	5	0	10	54	13	0	0	13	30
Initial Fut:	98	128	135	62	69	60	201	1138	51	98	1170	203
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:	98	128	135	62	69	0	201	1138	51	98	1170	203
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	128	135	62	69	0	201	1138	51	98	1170	203
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:	98	128	135	62	69	0	201	1138	51	98	1170	203
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.00	1.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.08	0.04	0.04	0.00	0.13	0.24	0.03	0.06	0.24	0.13
Crit Moves:			****		****		****				****	

Balboa Marina West
Existing + Growth (Year 2017, + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Avocado Avenue (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.524
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 1	0 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	112	73	110	253	109	139	89	1199	71	100	1055	104
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:	112	73	110	253	109	139	93	1259	75	105	1108	109
Added Vol:	0	0	0	0	0	0	0	2	0	0	5	0
PasserByVol:	0	0	0	33	0	69	30	13	1	0	14	13
Initial Fut:	112	73	110	286	109	208	123	1274	76	105	1127	122
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:	112	73	110	286	109	0	123	1274	76	105	1127	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	73	110	286	109	0	123	1274	76	105	1127	122
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:	112	73	110	286	109	0	123	1274	76	105	1127	122
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.45	0.55	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	2317	883	1600	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.05	0.07	0.12	0.12	0.00	0.08	0.27	0.05	0.07	0.23	0.08
Crit Moves:	****				****			****		****		

Balboa Marina West
Existing + Growth (Year 2014) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 MacArthur Boulevard (NS) at San Joaquin Hills Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.668
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	121	1226	22	792	1718	851	76	347	46	51	360	651
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	1287	23	832	1804	894	76	347	46	51	360	651
Added Vol:	0	0	0	0	1	0	0	0	0	0	1	0
PasserByVol:	2	10	1	1	53	68	40	4	0	6	3	0
Initial Fut:	129	1297	24	833	1858	962	116	351	46	57	364	651
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:	129	1297	24	833	1858	0	116	351	46	57	364	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1297	24	833	1858	0	116	351	46	57	364	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:	129	1297	24	833	1858	0	116	351	46	57	364	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	2.65	0.35	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	4244	556	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.27	0.02	0.26	0.39	0.00	0.02	0.08	0.08	0.04	0.11	0.00
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) - Approved Projects - Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 MacArthur Boulevard (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.783
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	35	1391	13	666	1547	366	647	313	117	31	292	399
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:	37	1461	14	699	1624	384	647	313	117	31	292	399
Added Vol:	0	1	0	0	3	0	0	1	0	0	3	0
PasserByVol:	2	57	6	1	35	41	93	4	0	3	4	0
Initial Fut:	39	1519	20	700	1662	425	740	318	117	34	299	399
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:	39	1519	20	700	1662	0	740	318	117	34	299	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	1519	20	700	1662	0	740	318	117	34	299	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:	39	1519	20	700	1662	0	740	318	117	34	299	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	2.19	0.81	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	3509	1291	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.32	0.01	0.22	0.35	0.00	0.15	0.09	0.09	0.02	0.09	0.00
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 MacArthur Boulevard (NS) at San Miguel Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.582
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	100	Level Of Service:	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			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	123	1123	147	3	809	637	192	79	38	190	261	6
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:	129	1179	154	3	849	669	192	79	38	190	261	6
Added Vol:	0	0	0	0	1	0	0	0	0	0	0	0
PasserByVol:	2	2	0	1	1	57	8	4	10	0	13	0
Initial Fut:	131	1181	154	4	851	726	200	83	48	190	274	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	131	1181	154	4	851	726	200	83	48	190	274	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	1181	154	4	851	726	200	83	48	190	274	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	131	1181	154	4	851	726	200	83	48	190	274	6
OvlAdjVol:						659						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.27	0.73	2.00	1.96	0.04
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2027	1173	3200	3131	69
Capacity Analysis Module:												
Vol/Sat:	0.04	0.25	0.10	0.00	0.18	0.45	0.04	0.04	0.04	0.06	0.09	0.09
OvlAdjV/S:						0.41						
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 MacArthur Boulevard (NS) at San Miguel Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.501
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	91	771	212	11	1107	451	668	331	126	225	173	35
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:	96	810	223	12	1162	474	668	331	126	225	173	35
Added Vol:	0	1	0	0	3	0	0	0	0	0	0	0
PasserByVol:	7	2	0	1	1	32	63	25	12	0	22	0
Initial Fut:	103	813	223	13	1166	506	731	356	138	225	195	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	103	813	223	13	1166	506	731	356	138	225	195	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	813	223	13	1166	506	731	356	138	225	195	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	103	813	223	13	1166	506	731	356	138	225	195	35
OvlAdjVol:						259						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.44	0.56	2.00	1.70	0.30
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2306	894	3200	2713	487
Capacity Analysis Module:												
Vol/Sat:	0.03	0.17	0.14	0.00	0.24	0.32	0.15	0.15	0.15	0.07	0.07	0.07
OvlAdjV/S:						0.16						
Crit Moves:	****				****			****				****

Balboa Marina West
Existing + Growth (Year 2,17) + Approved Projects + Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 MacArthur Boulevard (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.711
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	793	0	247	575	1000	0	0	1144	862
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	833	0	259	604	1050	0	0	1201	905
Added Vol:	0	0	0	0	0	1	0	0	0	0	1	0
PasserByVol:	0	0	0	10	0	0	1	18	0	0	41	2
Initial Fut:	0	0	0	843	0	260	605	1068	0	0	1243	907
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	843	0	0	605	1068	0	0	1243	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	843	0	0	605	1068	0	0	1243	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	843	0	0	605	1068	0	0	1243	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	0.26	0.00	0.00	0.19	0.22	0.00	0.00	0.26	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 MacArthur Boulevard (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.675
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	981	0	323	298	1277	0	0	1136	789
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	1030	0	339	313	1341	0	0	1193	828
Added Vol:	0	0	0	0	0	3	1	1	0	0	3	0
PasserByVol:	0	0	0	3	0	0	1	42	0	0	23	6
Initial Fut:	0	0	0	1033	0	342	315	1384	0	0	1219	834
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	1033	0	0	315	1384	0	0	1219	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	1033	0	0	315	1384	0	0	1219	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	1033	0	0	315	1384	0	0	1219	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	0.10	0.29	0.00	0.00	0.25	0.00
Crit Moves:				****			****				****	

Existing + Growth (Year 2017) + Approved Projects
+ Cumulative Projects

Balboa Marina West
Existing + Growth (Year 2017) - Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.962
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	2 0	0 0	1	0 0	2 0	1	0 0	3 0	1
Volume Module:												
Base Vol:	0	0	0	455	0	240	0	2286	136	0	808	374
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	473	0	250	0	2377	141	0	840	389
Added Vol:	0	0	0	14	0	0	0	100	0	0	124	12
PasserByVol:	0	0	0	26	0	35	0	31	4	0	46	6
Initial Fut:	0	0	0	513	0	285	0	2508	145	0	1010	407
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	513	0	285	0	2508	0	0	1010	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	513	0	285	0	2508	0	0	1010	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	513	0	285	0	2508	0	0	1010	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	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	0	3200	1600	0	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.18	0.00	0.78	0.00	0.00	0.21	0.00
Crit Moves:						****		****		****		

Balboa Marina West
Existing + Growth Year 2017 + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.744
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	2	0	0	0	1	0	0	2	0	1	0	0	3	0	1
Volume Module:												
Base Vol:	0	0	0	548	0	404	0	1208	89	0	1919	598
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	570	0	420	0	1256	93	0	1996	622
Added Vol:	0	0	0	49	0	0	0	157	0	0	152	17
PasserByVol:	0	0	0	41	0	19	0	90	7	0	51	11
Initial Fut:	0	0	0	660	0	439	0	1503	100	0	2199	650
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	660	0	439	0	1503	0	0	2199	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	660	0	439	0	1503	0	0	2199	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	660	0	439	0	1503	0	0	2199	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	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	0	3200	1600	0	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.27	0.00	0.47	0.00	0.00	0.46	0.00
Crit Moves:						****		****			****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.862
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	2	2	3	65	0	342	283	2262	11	13	1233	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	2	2	3	65	0	342	294	2352	11	14	1282	60
Added Vol:	0	0	0	0	0	13	33	94	0	0	172	0
PasserByVol:	0	0	0	1	0	1	0	128	0	0	96	0
Initial Fut:	2	2	3	66	0	356	327	2574	11	14	1550	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	66	0	356	327	2574	11	14	1550	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	66	0	356	327	2574	11	14	1550	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	66	0	356	327	2574	11	14	1550	60
OvlAdjVol:						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:	0.28	0.29	0.43	1.00	0.00	1.00	1.00	1.99	0.01	1.00	3.00	1.00
Final Sat.:	457	457	686	1600	0	1600	1600	3186	14	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.22	0.20	0.81	0.81	0.01	0.32	0.04
OvlAdjV/S:						0.02						
Crit Moves:		****			****				****		****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.895
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0	1 0	0 1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	9	12	12	73	4	441	247	1552	13	37	2412	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	9	12	12	73	4	441	257	1614	14	38	2508	57
Added Vol:	0	0	0	0	0	43	28	192	0	0	154	0
PasserByVol:	0	0	0	2	0	0	1	144	0	0	155	1
Initial Fut:	9	12	12	75	4	484	286	1950	14	38	2817	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	12	12	75	4	484	286	1950	14	38	2817	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	12	12	75	4	484	286	1950	14	38	2817	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	12	12	75	4	484	286	1950	14	38	2817	58
OvlAdjVol:						198						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.37	0.36	0.95	0.05	1.00	1.00	1.99	0.01	1.00	3.00	1.00
Final Sat.:	436	582	582	1519	81	1600	1600	3178	22	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.02	0.05	0.05	0.30	0.18	0.61	0.61	0.02	0.59	0.04
OvlAdjV/S:						0.12						
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.853
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 1	0 0	1!	0 0	1 0	1	1 0	0 0	2	1 0
Volume Module:												
Base Vol:	0	0	0	42	0	15	25	2298	0	0	1302	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	42	0	15	26	2390	0	0	1354	36
Added Vol:	0	0	0	0	0	0	0	94	0	0	172	0
PasserByVol:	0	0	0	0	0	0	0	133	0	0	96	0
Initial Fut:	0	0	0	42	0	15	26	2617	0	0	1622	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:	0	0	0	42	0	15	26	2617	0	0	1622	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	42	0	15	26	2617	0	0	1622	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:	0	0	0	42	0	15	26	2617	0	0	1622	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:	0.00	0.00	1.00	0.74	0.00	0.26	1.00	2.00	0.00	0.00	2.93	0.07
Final Sat.:	0	0	1600	1179	0	421	1600	3200	0	0	4695	105
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.04	0.02	0.82	0.00	0.00	0.35	0.35
Crit Moves:						****		****				

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.690
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	0	0 0	1! 0	0	1	0 1	1 0	0 0	2	1 0
Volume Module:												
Base Vol:	2	1	0	37	2	25	63	1575	5	0	2466	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	2	1	0	37	2	25	66	1638	5	0	2565	42
Added Vol:	0	0	0	0	0	0	0	192	0	0	154	0
PasserByVol:	0	0	0	0	0	0	0	146	0	0	157	0
Initial Fut:	2	1	0	37	2	25	66	1976	5	0	2876	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	1	0	37	2	25	66	1976	5	0	2876	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	1	0	37	2	25	66	1976	5	0	2876	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	1	0	37	2	25	66	1976	5	0	2876	42
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.67	0.33	0.00	0.58	0.03	0.39	1.00	1.99	0.01	0.00	2.96	0.04
Final Sat.:	1067	533	0	925	50	625	1600	3192	8	0	4732	68
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.04	0.04	0.04	0.62	0.62	0.00	0.61	0.61
Crit Moves:	****				****		****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Irvine Avenue (NS) at 19th Street/Dover Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.539
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0	0	1 0	1 0	1 0	1
Volume Module:												
Base Vol:	40	780	12	132	738	18	64	155	28	12	101	240
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	819	13	139	775	19	64	155	28	12	101	240
Added Vol:	0	2	0	3	3	0	0	0	0	0	0	2
PasserByVol:	1	1	0	2	1	0	0	0	0	0	1	2
Initial Fut:	43	822	13	144	779	19	64	155	28	12	102	244
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	822	13	144	779	19	64	155	28	12	102	244
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	822	13	144	779	19	64	155	28	12	102	244
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	822	13	144	779	19	64	155	28	12	102	244
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.85	0.15	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1355	245	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.01	0.09	0.24	0.01	0.04	0.11	0.11	0.01	0.06	0.15
Crit Moves:		****			****			****				****

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Irvine Avenue (NS) at 19th Street/Dover Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.635
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	97	658	41	159	1185	69	48	109	63	30	182	234
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:	102	691	43	167	1244	72	48	109	63	30	182	234
Added Vol:	0	4	0	3	3	0	0	0	0	0	0	4
PasserByVol:	1	1	0	3	2	0	0	0	0	0	1	2
Initial Fut:	103	696	43	173	1249	72	48	109	63	30	183	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	103	696	43	173	1249	72	48	109	63	30	183	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	696	43	173	1249	72	48	109	63	30	183	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	103	696	43	173	1249	72	48	109	63	30	183	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.63	0.37	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1014	586	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.03	0.11	0.39	0.05	0.03	0.11	0.11	0.02	0.11	0.15
Crit Moves:	****				****		****					****

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Irvine Avenue (NS) at 17th Street/Westcliff Drive (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.492
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	274	506	37	178	438	132	230	478	180	39	389	62
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:	288	531	39	187	460	139	230	478	180	39	389	62
Added Vol:	0	0	0	3	0	0	0	86	0	0	76	2
PasserByVol:	1	1	0	1	0	3	1	4	1	0	6	0
Initial Fut:	289	532	39	191	460	142	231	568	181	39	471	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	289	532	39	191	460	142	231	568	181	39	471	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	289	532	39	191	460	142	231	568	181	39	471	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	289	532	39	191	460	142	231	568	181	39	471	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	2.00	1.00	2.00	2.00	1.00	2.00	1.52	0.48	1.00	1.76	0.24
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	2427	773	1600	2817	383
Capacity Analysis Module:												
Vol/Sat:	0.09	0.17	0.02	0.06	0.14	0.09	0.07	0.23	0.23	0.02	0.17	0.17
Crit Moves:	****				****			****			****	

Balboa Marina West
Existing - Growth (Year 2017) - Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Irvine Avenue (NS) at 17th Street/Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	312	459	46	170	584	523	248	472	218	81	554	87
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:	328	482	48	179	613	549	248	472	218	81	554	87
Added Vol:	0	0	0	3	0	0	0	110	0	0	124	4
PasserByVol:	0	0	0	2	0	4	7	19	0	0	10	1
Initial Fut:	328	482	48	184	613	553	255	601	218	81	688	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	328	482	48	184	613	553	255	601	218	81	688	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	328	482	48	184	613	553	255	601	218	81	688	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	328	482	48	184	613	553	255	601	218	81	688	92
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	1.47	0.53	1.00	1.76	0.24
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	2348	852	1600	2823	377
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.03	0.06	0.19	0.35	0.08	0.26	0.26	0.05	0.24	0.24
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Dover Drive (NS) at Westcliff Drive (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.452
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	0	0	0 1	0 1	2 0	0	0 1	0	0 0	0 0 0
Volume Module:												
Base Vol:	362	411	0	0	472	111	67	0	509	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	362	411	0	0	472	111	67	0	509	0	0	0
Added Vol:	53	4	0	0	7	0	0	0	24	0	0	0
PasserByVol:	1	4	0	0	2	0	0	0	2	0	0	0
Initial Fut:	416	419	0	0	481	111	67	0	535	0	0	0
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:	416	419	0	0	481	111	67	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	416	419	0	0	481	111	67	0	0	0	0	0
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:	416	419	0	0	481	111	67	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	1600	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.00	0.00	0.30	0.07	0.02	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Dover Drive (NS) at Westcliff Drive (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.462
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Permitted				Protected				Protected			
Rights:	Include				Include				Ignore				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	2	0 2	0	0	0	0 1	0	1	2	0 0	0	1	0	0 0	0	0
Volume Module:																
Base Vol:	550	543	0	0	369	103	121	0	503	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	550	543	0	0	369	103	121	0	503	0	0	0				
Added Vol:	41	9	0	0	7	0	0	0	57	0	0	0				
PasserByVol:	3	5	0	0	5	0	0	0	8	0	0	0				
Initial Fut:	594	557	0	0	381	103	121	0	568	0	0	0				
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:	594	557	0	0	381	103	121	0	0	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	594	557	0	0	381	103	121	0	0	0	0	0				
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:	594	557	0	0	381	103	121	0	0	0	0	0				
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600				
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Lanes:	2.00	2.00	0.00	0.00	1.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00				
Final Sat.:	3200	3200	0	0	1600	1600	3200	0	1600	0	0	0				
Capacity Analysis Module:																
Vol/Sat:	0.19	0.17	0.00	0.00	0.24	0.06	0.04	0.00	0.00	0.00	0.00	0.00				
Crit Moves:	****				****		****									

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Dover Drive (NS) at 16th Street (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.512
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 2	0	1	1	0 2	0	1	0	1 0	0	1	1	0 1	0	1
Volume Module:																
Base Vol:	87	718	43		40	907	50		29	21	209		44	10	59	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	87	718	43		40	907	50		29	21	209		44	10	59	
Added Vol:	2	57	0		0	31	0		0	0	3		0	0	0	
PasserByVol:	1	2	1		1	2	0		0	0	2		1	2	4	
Initial Fut:	90	777	44		41	940	50		29	21	214		45	12	63	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	90	777	44		41	940	50		29	21	214		45	12	63	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	90	777	44		41	940	50		29	21	214		45	12	63	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	90	777	44		41	940	50		29	21	214		45	12	63	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		0.58	0.42	1.00		1.00	1.00	1.00	
Final Sat.:	1600	3200	1600		1600	3200	1600		928	672	1600		1600	1600	1600	
Capacity Analysis Module:																
Vol/Sat:	0.06	0.24	0.03		0.03	0.29	0.03		0.02	0.03	0.13		0.03	0.01	0.04	
Crit Moves:	****					****					****	****				

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Dover Drive (NS) at 16th Street (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.521
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	0 1	0	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	136	1017	45	79	816	23	34	23	153	52	14	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	1017	45	79	816	23	34	23	153	52	14	50
Added Vol:	4	50	0	0	64	0	0	0	3	0	0	0
PasserByVol:	1	14	2	4	10	0	0	1	2	0	1	4
Initial Fut:	141	1081	47	83	890	23	34	24	158	52	15	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	141	1081	47	83	890	23	34	24	158	52	15	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	1081	47	83	890	23	34	24	158	52	15	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	1081	47	83	890	23	34	24	158	52	15	54
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.59	0.41	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	938	662	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.34	0.03	0.05	0.28	0.01	0.02	0.04	0.10	0.03	0.01	0.03
Crit Moves:		****		****					****	****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.687
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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	
Lanes:	1	0	1	1 0	3	0	1	0 1	2	0	2	1 0	1	0	3	0 1
Volume Module:																
Base Vol:	24	45	42		904	44	182		144	1825	21		17	1205	684	
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:	24	45	42		904	44	182		151	1916	22		18	1265	718	
Added Vol:	0	0	0		38	0	0		0	94	0		0	172	61	
PasserByVol:	0	0	0		19	0	9		9	120	0		0	86	9	
Initial Fut:	24	45	42		961	44	191		160	2130	22		18	1523	788	
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:	24	45	42		961	44	191		160	2130	22		18	1523	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	24	45	42		961	44	191		160	2130	22		18	1523	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:	24	45	42		961	44	191		160	2130	22		18	1523	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	1655	1545		4800	1600	1600		3200	4751	49		1600	4800	1600	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.03	0.03		0.20	0.03	0.12		0.05	0.45	0.45		0.01	0.32	0.00	
Crit Moves:		****			****					****			****			

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.784
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	1	1 0	3 0	1	0 1	2 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	16	32	50	840	49	136	119	1477	22	48	2054	1170
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:	16	32	50	840	49	136	125	1551	23	50	2157	1229
Added Vol:	0	0	0	70	0	0	0	192	0	0	154	59
PasserByVol:	0	0	0	13	0	16	27	123	0	0	150	26
Initial Fut:	16	32	50	923	49	152	152	1866	23	50	2461	1314
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:	16	32	50	923	49	152	152	1866	23	50	2461	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	32	50	923	49	152	152	1866	23	50	2461	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:	16	32	50	923	49	152	152	1866	23	50	2461	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	4741	59	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.03	0.19	0.03	0.10	0.05	0.39	0.39	0.03	0.51	0.00
Crit Moves:			****	****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.743
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	383	13	25	30	5	36	30	2421	300	37	1476	15
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:	383	13	25	30	5	36	32	2542	315	39	1550	16
Added Vol:	0	7	0	22	4	26	39	93	0	0	207	19
PasserByVol:	1	0	1	44	0	18	35	95	0	0	64	0
Initial Fut:	384	20	26	96	9	80	106	2730	315	39	1821	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	384	20	26	96	9	80	106	2730	315	39	1821	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	384	20	26	96	9	80	106	2730	315	39	1821	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	384	20	26	96	9	80	106	2730	315	39	1821	35
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.68	0.14	0.18	1.00	0.10	0.90	1.00	3.00	1.00	1.00	3.93	0.07
Final Sat.:	4287	223	290	1600	162	1438	1600	4800	1600	1600	6280	120
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.06	0.06	0.06	0.07	0.57	0.20	0.02	0.29	0.29
Crit Moves:		****		****				****		****		

Balboa Marina West
Existing + Growth (Year 2017, + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.782
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	410	8	29	23	16	38	50	1895	473	57	2863	23
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:	410	8	29	23	16	38	53	1990	497	60	3006	24
Added Vol:	0	7	0	27	9	50	41	221	0	0	163	28
PasserByVol:	3	0	0	71	0	29	26	83	2	0	127	0
Initial Fut:	413	15	29	121	25	117	120	2294	499	60	3296	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	413	15	29	121	25	117	120	2294	499	60	3296	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	413	15	29	121	25	117	120	2294	499	60	3296	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	413	15	29	121	25	117	120	2294	499	60	3296	52
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.71	0.10	0.19	1.00	0.18	0.82	1.00	3.00	1.00	1.00	3.94	0.06
Final Sat.:	4338	158	305	1600	282	1318	1600	4800	1600	1600	6300	100
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.10	0.08	0.09	0.09	0.07	0.48	0.31	0.04	0.52	0.52
Crit Moves:		****			****			****			****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Jamboree Road (NS) at San Joaquin Hills Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.684
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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
Lanes:	1 0	3 0	1	2 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	26	1110	140	744	1604	78	299	38	58	123	8	17
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:	27	1166	147	781	1684	82	299	38	58	123	8	17
Added Vol:	0	141	3	0	64	0	0	0	0	4	0	0
PasserByVol:	0	80	5	46	141	0	0	0	0	10	0	44
Initial Fut:	27	1387	155	827	1889	82	299	38	58	137	8	61
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:	27	1387	0	827	1889	0	299	38	58	137	8	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	1387	0	827	1889	0	299	38	58	137	8	61
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:	27	1387	0	827	1889	0	299	38	58	137	8	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	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:	0.02	0.29	0.00	0.26	0.39	0.00	0.09	0.02	0.04	0.04	0.01	0.04
Crit Moves:		****		****			****			****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Jamboree Road (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.625
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	3 0	1	2 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	55	1289	131	514	1525	164	89	36	13	178	46	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:	58	1353	138	540	1601	172	89	36	13	178	46	29
Added Vol:	0	106	5	0	143	0	0	0	0	4	0	0
PasserByVol:	1	104	10	52	116	0	1	4	0	8	0	109
Initial Fut:	59	1563	153	592	1860	172	90	40	13	190	46	138
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:	59	1563	0	592	1860	0	90	40	13	190	46	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	1563	0	592	1860	0	90	40	13	190	46	138
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:	59	1563	0	592	1860	0	90	40	13	190	46	138
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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:	0.04	0.33	0.00	0.18	0.39	0.00	0.03	0.03	0.01	0.06	0.03	0.09
Crit Moves:		****			****			****				****

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Jamboree Road (NS) at Santa Barbara Drive (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.564
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: 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
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1 0	1	1 1	0 0	1
Volume Module:												
Base Vol:	10	1115	289	543	1067	29	33	5	16	39	6	99
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:	11	1171	303	570	1120	30	33	5	16	39	6	99
Added Vol:	0	143	0	0	68	0	0	0	0	0	0	0
PasserByVol:	0	55	4	5	108	1	6	0	0	26	0	21
Initial Fut:	11	1369	307	575	1296	31	39	5	16	65	6	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	1369	307	575	1296	31	39	5	16	65	6	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	1369	307	575	1296	31	39	5	16	65	6	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	1369	307	575	1296	31	39	5	16	65	6	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	1.00	1.00	1.83	0.17	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	1600	1600	1600	2930	270	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.29	0.19	0.18	0.27	0.02	0.02	0.00	0.01	0.02	0.02	0.08
Crit Moves:		****			****			****				****

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Jamboree Road (NS) at Santa Barbara Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 3	0	1	2 0 3	0	1	1 0 1	0	1	1 1 0	0	1
Volume Module:												
Base Vol:	17 1176		128	157 1297		74	45	17	16	243	5	458
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:	18 1235		134	165 1362		78	45	17	16	243	5	458
Added Vol:	0 111		0	0 147		0	0	0	0	0	0	0
PasserByVol:	0 98		14	16 77		6	2	1	0	12	1	13
Initial Fut:	18 1444		148	181 1586		84	47	18	16	255	6	471
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18 1444		148	181 1586		84	47	18	16	255	6	471
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
Reduced Vol:	18 1444		148	181 1586		84	47	18	16	255	6	471
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18 1444		148	181 1586		84	47	18	16	255	6	471
Saturation Flow Module:												
Sat/Lane:	1600 1600		1600	1600 1600		1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00 1.00		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	1.95	0.05	1.00
Final Sat.:	1600 4800		1600	3200 4800		1600	1600	1600	1600	3126	74	1600
Capacity Analysis Module:												
Vol/Sat:	0.01 0.30		0.09	0.06 0.33		0.05	0.03	0.01	0.01	0.08	0.08	0.29
Crit Moves:	****			****			****					****

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Jamboree Road (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.667
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	3 0	3	1 0	2 0	4	0 1
Volume Module:												
Base Vol:	17	340	88	192	291	594	788	1557	19	76	921	102
Growth Adj:	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	17	340	88	202	306	624	827	1635	20	80	967	107
Added Vol:	0	0	0	38	17	14	14	101	0	0	213	129
PasserByVol:	0	1	1	8	1	120	53	84	1	1	49	2
Initial Fut:	17	341	89	248	324	758	894	1820	21	81	1229	238
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:	17	341	89	248	324	0	894	1820	21	81	1229	238
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	341	89	248	324	0	894	1820	21	81	1229	238
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:	17	341	89	248	324	0	894	1820	21	81	1229	238
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.59	0.41	1.00	2.00	1.00	3.00	3.95	0.05	2.00	4.00	1.00
Final Sat.:	1600	2538	662	1600	3200	1600	4800	6327	73	3200	6400	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.13	0.13	0.15	0.10	0.00	0.19	0.29	0.29	0.03	0.19	0.15
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Jamboree Road (NS) at East Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.836
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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
Lanes:	1 0	1	1 0	1 0	2	0 1	3 0	3	1 0	2 0	4	0 1
Volume Module:												
Base Vol:	41	290	79	179	417	856	723	1589	60	132	1729	205
Growth Adj:	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	41	290	79	188	438	899	759	1668	63	139	1815	215
Added Vol:	0	16	0	128	0	19	18	230	0	0	172	77
PasserByVol:	1	1	4	9	3	79	97	62	0	5	120	12
Initial Fut:	42	307	83	325	441	997	874	1960	63	144	2107	304
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:	42	307	83	325	441	0	874	1960	63	144	2107	304
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	307	83	325	441	0	874	1960	63	144	2107	304
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:	42	307	83	325	441	0	874	1960	63	144	2107	304
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.57	0.43	1.00	2.00	1.00	3.00	3.88	0.12	2.00	4.00	1.00
Final Sat.:	1600	2519	681	1600	3200	1600	4800	6201	199	3200	6400	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.12	0.20	0.14	0.00	0.18	0.32	0.32	0.04	0.33	0.19
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Santa Cruz Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.323
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 1	0	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	48	4	13	10	7	64	49	512	292	115	265	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	48	4	13	10	7	64	49	512	292	115	265	7
Added Vol:	0	0	0	0	0	0	0	3	0	0	4	0
PasserByVol:	31	0	3	0	1	0	0	78	5	2	10	0
Initial Fut:	79	4	16	10	8	64	49	593	297	117	279	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:	79	4	16	10	8	64	49	593	297	117	279	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	4	16	10	8	64	49	593	297	117	279	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:	79	4	16	10	8	64	49	593	297	117	279	7
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	0.20	0.80	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.93	0.07
Final Sat.:	3200	320	1280	1600	1600	1600	1600	3200	1600	1600	4683	117
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.01	0.01	0.01	0.04	0.03	0.19	0.19	0.07	0.06	0.06
Crit Moves:	****					****		****		****		

Balboa Marina West
Existing + Growth (Year 2017, + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Santa Cruz Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.359
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 1	0	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	506	14	135	9	5	24	72	486	178	45	444	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	506	14	135	9	5	24	72	486	178	45	444	20
Added Vol:	0	0	0	0	0	0	0	5	0	0	4	0
PasserByVol:	12	0	2	1	0	0	0	30	22	6	73	0
Initial Fut:	518	14	137	10	5	24	72	521	200	51	521	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	518	14	137	10	5	24	72	521	200	51	521	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	518	14	137	10	5	24	72	521	200	51	521	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	518	14	137	10	5	24	72	521	200	51	521	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.09	0.91	1.00	1.00	1.00	1.00	2.17	0.83	1.00	2.89	0.11
Final Sat.:	3200	148	1452	1600	1600	1600	1600	3469	1331	1600	4623	177
Capacity Analysis Module:												
Vol/Sat:	0.16	0.09	0.09	0.01	0.00	0.02	0.05	0.15	0.15	0.03	0.11	0.11
Crit Moves:	****					****		****			****	

Balboa Marina West
Existing + Growth (Year 2017, + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Santa Rosa Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.382
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	100	Level Of Service:	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:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	32	16	75	81	12	39	27	265	207	447	457	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	16	75	81	12	39	27	265	207	447	457	101
Added Vol:	0	0	3	0	0	0	0	3	0	9	4	0
PasserByVol:	19	0	27	0	0	0	1	10	77	5	5	0
Initial Fut:	51	16	105	81	12	39	28	278	284	461	466	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	16	105	81	12	39	28	278	284	461	466	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	16	105	81	12	39	28	278	284	461	466	101
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	16	105	81	12	39	28	278	284	461	466	101
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.47	0.53
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	3200	1600	3200	3945	855
Capacity Analysis Module:												
Vol/Sat:	0.03	0.01	0.07	0.05	0.01	0.02	0.02	0.09	0.18	0.14	0.12	0.12
OvlAdjV/S:			0.00									
Crit Moves:		****		****					****	****		

Balboa Marina West
Existing + Growth (Year 2017) - Approved Projects - Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Santa Rosa Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.503
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 2	1	0	2 0 2	1	0
Volume Module:												
Base Vol:	221	25	443	73	11	59	67	550	133	374	280	79
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	221	25	443	73	11	59	67	550	133	374	280	79
Added Vol:	0	0	9	0	0	0	0	5	0	6	4	0
PasserByVol:	78	0	30	0	0	0	0	11	30	27	11	0
Initial Fut:	299	25	482	73	11	59	67	566	163	407	295	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	299	25	482	73	11	59	67	566	163	407	295	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	299	25	482	73	11	59	67	566	163	407	295	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	299	25	482	73	11	59	67	566	163	407	295	79
OvlAdjVol:			279									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.00	1.00	1.00	1.00	2.33	0.67	2.00	2.37	0.63
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	3727	1073	3200	3786	1014
Capacity Analysis Module:												
Vol/Sat:	0.19	0.02	0.30	0.05	0.01	0.04	0.04	0.15	0.15	0.13	0.08	0.08
OvlAdjV/S:			0.17									
Crit Moves:	****					****		****		****		

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Newport Center Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.422
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	2	0 0	0 1	2	0 3	0 0	0	0 3	0 1
Volume Module:												
Base Vol:	0	0	0	19	0	69	315	1718	0	0	1051	170
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:	0	0	0	19	0	69	331	1804	0	0	1104	179
Added Vol:	0	0	0	0	0	0	1	137	0	0	342	0
PasserByVol:	0	0	0	6	0	20	15	61	0	0	21	3
Initial Fut:	0	0	0	25	0	89	347	2002	0	0	1467	182
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	25	0	0	347	2002	0	0	1467	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	25	0	0	347	2002	0	0	1467	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	25	0	0	347	2002	0	0	1467	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	0.01	0.00	0.00	0.11	0.42	0.00	0.00	0.31	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Newport Center Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.540
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2	0 0	0 1	2	0 3	0 0	0	0 3	0 1
Volume Module:												
Base Vol:	0	0	0	164	0	635	314	1268	0	0	1416	128
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:	0	0	0	164	0	635	330	1331	0	0	1487	134
Added Vol:	0	0	0	0	0	1	0	358	0	0	248	0
PasserByVol:	0	0	0	7	0	44	21	38	0	0	76	11
Initial Fut:	0	0	0	171	0	680	351	1727	0	0	1811	145
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	171	0	0	351	1727	0	0	1811	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	171	0	0	351	1727	0	0	1811	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	171	0	0	351	1727	0	0	1811	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	0.05	0.00	0.00	0.11	0.36	0.00	0.00	0.38	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing + Growth (Year 2017 - Approved Projects - Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Avocado Avenue (NS) at East Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.568
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: A

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Ignore						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	1	0	1	0	1		1	1	0	0	1		1	0	3	0	1		1	0	3	0	1	
Volume Module:																								
Base Vol:	98	128	135				57	69	50				140	1071	49				93	1101	165			
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:	98	128	135				57	69	50				147	1125	51				98	1156	173			
Added Vol:	0	0	0				0	0	0				0	137	0				0	342	0			
PasserByVol:	0	0	0				5	0	10				54	13	0				0	13	30			
Initial Fut:	98	128	135				62	69	60				201	1275	51				98	1511	203			
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:	98	128	135				62	69	0				201	1275	51				98	1511	203			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	98	128	135				62	69	0				201	1275	51				98	1511	203			
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:	98	128	135				62	69	0				201	1275	51				98	1511	203			
Saturation Flow Module:																								
Sat/Lane:	1600	1600	1600				1600	1600	1600				1600	1600	1600				1600	1600	1600			
Adjustment:	1.00	1.00	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				1.00	1.00	1.00				1.00	3.00	1.00				1.00	3.00	1.00			
Final Sat.:	1600	1600	1600				1600	1600	1600				1600	4800	1600				1600	4800	1600			
Capacity Analysis Module:																								
Vol/Sat:	0.06	0.08	0.08				0.04	0.04	0.00				0.13	0.27	0.03				0.06	0.31	0.13			
Crit Moves:			****					****					****							****				

Balboa Marina West
Existing + Growth (Year 2017 + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Avocado Avenue (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.599
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1	1 0	0 1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	112	73	110	253	109	139	89	1199	71	100	1055	104
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:	112	73	110	253	109	139	93	1259	75	105	1108	109
Added Vol:	0	0	0	0	0	0	0	358	0	0	248	0
PasserByVol:	0	0	0	33	0	69	30	13	1	0	14	13
Initial Fut:	112	73	110	286	109	208	123	1630	76	105	1370	122
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:	112	73	110	286	109	0	123	1630	76	105	1370	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	73	110	286	109	0	123	1630	76	105	1370	122
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:	112	73	110	286	109	0	123	1630	76	105	1370	122
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.45	0.55	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	2317	883	1600	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.05	0.07	0.12	0.12	0.00	0.08	0.34	0.05	0.07	0.29	0.08
Crit Moves:	****				****			****		****		

Balboa Marina West
Existing - Growth (Year 2017) - Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 MacArthur Boulevard (NS) at San Joaquin Hills Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.691
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	121	1226	22	792	1718	851	76	347	46	51	360	651
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	1287	23	832	1804	894	76	347	46	51	360	651
Added Vol:	0	90	0	0	48	0	0	6	0	0	13	0
PasserByVol:	2	10	1	1	53	68	40	4	0	6	3	0
Initial Fut:	129	1387	24	833	1905	962	116	357	46	57	376	651
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:	129	1387	24	833	1905	0	116	357	46	57	376	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1387	24	833	1905	0	116	357	46	57	376	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:	129	1387	24	833	1905	0	116	357	46	57	376	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	2.66	0.34	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	4252	548	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.02	0.26	0.40	0.00	0.02	0.08	0.08	0.04	0.12	0.00
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 MacArthur Boulevard (NS) at San Joaquin Hills Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.800
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	35	1391	13	666	1547	366	647	313	117	31	292	399
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:	37	1461	14	699	1624	384	647	313	117	31	292	399
Added Vol:	0	74	0	0	91	0	0	14	0	0	10	0
PasserByVol:	2	57	6	1	35	41	93	4	0	3	4	0
Initial Fut:	39	1592	20	700	1750	425	740	331	117	34	306	399
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:	39	1592	20	700	1750	0	740	331	117	34	306	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	1592	20	700	1750	0	740	331	117	34	306	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:	39	1592	20	700	1750	0	740	331	117	34	306	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	2.22	0.78	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	3546	1254	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.33	0.01	0.22	0.36	0.00	0.15	0.09	0.09	0.02	0.10	0.00
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing - Growth (Year 2017, - Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 MacArthur Boulevard (NS) at San Miguel Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	123	1123	147	3	809	637	192	79	38	190	261	6
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:	129	1179	154	3	849	669	192	79	38	190	261	6
Added Vol:	37	90	0	0	48	0	0	0	11	0	0	0
PasserByVol:	2	2	0	1	1	57	8	4	10	0	13	0
Initial Fut:	168	1271	154	4	898	726	200	83	59	190	274	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	168	1271	154	4	898	726	200	83	59	190	274	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	168	1271	154	4	898	726	200	83	59	190	274	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	168	1271	154	4	898	726	200	83	59	190	274	6
OvlAdjVol:						655						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.17	0.83	2.00	1.96	0.04
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	1870	1330	3200	3131	69
Capacity Analysis Module:												
Vol/Sat:	0.05	0.26	0.10	0.00	0.19	0.45	0.04	0.04	0.04	0.06	0.09	0.09
OvlAdjV/S:						0.41						
Crit Moves:	****					****			****		****	

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 MacArthur Boulevard (NS) at San Miguel Drive (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.538
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: 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			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	91	771	212	11	1107	451	668	331	126	225	173	35
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:	96	810	223	12	1162	474	668	331	126	225	173	35
Added Vol:	22	74	0	0	91	0	0	0	37	0	0	0
PasserByVol:	7	2	0	1	1	32	63	25	12	0	22	0
Initial Fut:	125	886	223	13	1254	506	731	356	175	225	195	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	886	223	13	1254	506	731	356	175	225	195	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	886	223	13	1254	506	731	356	175	225	195	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	886	223	13	1254	506	731	356	175	225	195	35
OvlAdjVol:						240						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	3.00	1.34	0.66	2.00	1.70	0.30
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2145	1055	3200	2713	487
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.14	0.00	0.26	0.32	0.15	0.17	0.17	0.07	0.07	0.07
OvlAdjV/S:						0.15						
Crit Moves:	****				****			****				****

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 MacArthur Boulevard (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.799
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	2	0 0	1	2	0 3	0 0	0	0 3	0 1
Volume Module:												
Base Vol:	0	0	0	793	0	247	575	1000	0	0	1144	862
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	833	0	259	604	1050	0	0	1201	905
Added Vol:	0	0	0	53	0	6	5	132	0	0	336	122
PasserByVol:	0	0	0	10	0	0	1	18	0	0	41	2
Initial Fut:	0	0	0	896	0	265	610	1200	0	0	1578	1029
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	896	0	0	610	1200	0	0	1578	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	896	0	0	610	1200	0	0	1578	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	896	0	0	610	1200	0	0	1578	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	0.19	0.25	0.00	0.00	0.33	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing + Growth (Year 2017) - Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 MacArthur Boulevard (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.764
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	981	0	323	298	1277	0	0	1136	789
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	1030	0	339	313	1341	0	0	1193	828
Added Vol:	0	0	0	121	0	7	7	351	0	0	241	89
PasserByVol:	0	0	0	3	0	0	1	42	0	0	23	6
Initial Fut:	0	0	0	1154	0	346	321	1734	0	0	1457	923
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	1154	0	0	321	1734	0	0	1457	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	1154	0	0	321	1734	0	0	1457	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	1154	0	0	321	1734	0	0	1457	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	0.36	0.00	0.00	0.10	0.36	0.00	0.00	0.30	0.00
Crit Moves:				****			****				****	

Existing + Growth (Year 2017) + Approved Projects
+ Cumulative Projects + Project

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.962
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	2 0	0 0	1	0 0	2 0	1	0 0	3 0	1
Volume Module:												
Base Vol:	0	0	0	455	0	240	0	2286	136	0	808	374
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	473	0	250	0	2377	141	0	840	389
Added Vol:	0	0	0	15	0	0	0	101	0	0	124	12
PasserByVol:	0	0	0	26	0	35	0	31	4	0	46	6
Initial Fut:	0	0	0	514	0	285	0	2509	145	0	1010	407
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	514	0	285	0	2509	0	0	1010	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	514	0	285	0	2509	0	0	1010	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	514	0	285	0	2509	0	0	1010	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	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	0	3200	1600	0	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.18	0.00	0.78	0.00	0.00	0.21	0.00
Crit Moves:						****		****		****		

Balboa Marina West
Existing+Growth (Year 2017) +Approved Projects-Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.746
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	2 0	0 0	1	0 0	2 0	1	0 0	3 0	1
Volume Module:												
Base Vol:	0	0	0	548	0	404	0	1208	89	0	1919	598
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	570	0	420	0	1256	93	0	1996	622
Added Vol:	0	0	0	54	0	0	0	162	0	0	154	19
PasserByVol:	0	0	0	41	0	19	0	90	7	0	51	11
Initial Fut:	0	0	0	665	0	439	0	1508	100	0	2201	652
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	665	0	439	0	1508	0	0	2201	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	665	0	439	0	1508	0	0	2201	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	665	0	439	0	1508	0	0	2201	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	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3200	0	1600	0	3200	1600	0	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.27	0.00	0.47	0.00	0.00	0.46	0.00
Crit Moves:						****		****			****	

Balboa Marina West
Existing+Growth (Year 2017,+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.863
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	2	2	3	65	0	342	283	2262	11	13	1233	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	2	2	3	65	0	342	294	2352	11	14	1282	60
Added Vol:	0	0	0	0	0	13	33	97	0	0	174	0
PasserByVol:	0	0	0	1	0	1	0	128	0	0	96	0
Initial Fut:	2	2	3	66	0	356	327	2577	11	14	1552	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	66	0	356	327	2577	11	14	1552	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	66	0	356	327	2577	11	14	1552	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	66	0	356	327	2577	11	14	1552	60
OvlAdjVol:						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:	0.28	0.29	0.43	1.00	0.00	1.00	1.00	1.99	0.01	1.00	3.00	1.00
Final Sat.:	457	457	686	1600	0	1600	1600	3186	14	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.22	0.20	0.81	0.81	0.01	0.32	0.04
OvlAdjV/S:						0.02						
Crit Moves:		****			****				****		****	

Balboa Marina West
Existing+Growth (Year 2017, -Approved Projects-Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.897
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	9	12	12	73	4	441	247	1552	13	37	2412	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	9	12	12	73	4	441	257	1614	14	38	2508	57
Added Vol:	0	0	0	0	0	43	28	207	0	0	161	0
PasserByVol:	0	0	0	2	0	0	1	144	0	0	155	1
Initial Fut:	9	12	12	75	4	484	286	1965	14	38	2824	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	12	12	75	4	484	286	1965	14	38	2824	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	12	12	75	4	484	286	1965	14	38	2824	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	12	12	75	4	484	286	1965	14	38	2824	58
OvlAdjVol:						198						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.37	0.36	0.95	0.05	1.00	1.00	1.99	0.01	1.00	3.00	1.00
Final Sat.:	436	582	582	1519	81	1600	1600	3178	22	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.02	0.05	0.05	0.30	0.18	0.62	0.62	0.02	0.59	0.04
OvlAdjV/S:						0.12						
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.854
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	1	0 0	1! 0	0	1 0	1 1	0	0 0	2 1	0
Volume Module:												
Base Vol:	0	0	0	42	0	15	25	2298	0	0	1302	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	42	0	15	26	2390	0	0	1354	36
Added Vol:	0	0	0	0	0	0	0	97	0	0	174	0
PasserByVol:	0	0	0	0	0	0	0	133	0	0	96	0
Initial Fut:	0	0	0	42	0	15	26	2620	0	0	1624	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:	0	0	0	42	0	15	26	2620	0	0	1624	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	42	0	15	26	2620	0	0	1624	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:	0	0	0	42	0	15	26	2620	0	0	1624	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:	0.00	0.00	1.00	0.74	0.00	0.26	1.00	2.00	0.00	0.00	2.93	0.07
Final Sat.:	0	0	1600	1179	0	421	1600	3200	0	0	4695	105
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.04	0.02	0.82	0.00	0.00	0.35	0.35
Crit Moves:						****		****				

Balboa Marina West
Existing+Growth (Year 2017) +Approved Projects+Cumulative Projects-Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.691
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 0	0	0 1!	0 0	1	0 1	1 0	0	0 2	1 0
Volume Module:												
Base Vol:	2	1	0	37	2	25	63	1575	5	0	2466	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	2	1	0	37	2	25	66	1638	5	0	2565	42
Added Vol:	0	0	0	0	0	0	0	207	0	0	161	0
PasserByVol:	0	0	0	0	0	0	0	146	0	0	157	0
Initial Fut:	2	1	0	37	2	25	66	1991	5	0	2883	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	1	0	37	2	25	66	1991	5	0	2883	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	1	0	37	2	25	66	1991	5	0	2883	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	1	0	37	2	25	66	1991	5	0	2883	42
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.67	0.33	0.00	0.58	0.03	0.39	1.00	1.99	0.01	0.00	2.96	0.04
Final Sat.:	1067	533	0	925	50	625	1600	3192	8	0	4732	68
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.04	0.04	0.04	0.62	0.62	0.00	0.61	0.61
Crit Moves:	****				****		****				****	

Balboa Marina West
Existing+Growth (Year 2017)-Approved Projects-Cumulative Projects-Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Irvine Avenue (NS) at 19th Street/Dover Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.540
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	40	780	12	132	738	18	64	155	28	12	101	240
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	819	13	139	775	19	64	155	28	12	101	240
Added Vol:	0	2	0	4	4	0	0	0	0	0	0	2
PasserByVol:	1	1	0	2	1	0	0	0	0	0	1	2
Initial Fut:	43	822	13	145	780	19	64	155	28	12	102	244
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	822	13	145	780	19	64	155	28	12	102	244
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	822	13	145	780	19	64	155	28	12	102	244
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	822	13	145	780	19	64	155	28	12	102	244
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.85	0.15	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1355	245	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.01	0.09	0.24	0.01	0.04	0.11	0.11	0.01	0.06	0.15
Crit Moves:		****		****			****					****

Balboa Marina West
Existing+Growth (Year 2017) -Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Irvine Avenue (NS) at 19th Street/Dover Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.637
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Protected			Protected			Permitted						Permitted					
Rights:	Include			Include			Include						Include					
Min. Green:	0	0	0	0	0	0	0	0	0				0	0	0			
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 0	1 0				1	0 1	0 1			
Volume Module:																		
Base Vol:	97	658	41	159	1185	69	48	109	63				30	182	234			
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:	102	691	43	167	1244	72	48	109	63				30	182	234			
Added Vol:	0	6	0	6	6	0	0	0	0				0	0	6			
PasserByVol:	1	1	0	3	2	0	0	0	0				0	1	2			
Initial Fut:	103	698	43	176	1252	72	48	109	63				30	183	242			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	103	698	43	176	1252	72	48	109	63				30	183	242			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
Reduced Vol:	103	698	43	176	1252	72	48	109	63				30	183	242			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	103	698	43	176	1252	72	48	109	63				30	183	242			
Saturation Flow Module:																		
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600				1600	1600	1600			
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.63	0.37				1.00	1.00	1.00			
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1014	586				1600	1600	1600			
Capacity Analysis Module:																		
Vol/Sat:	0.06	0.22	0.03	0.11	0.39	0.05	0.03	0.11	0.11				0.02	0.11	0.15			
Crit Moves:	****				****		****								****			

Balboa Marina West
Existing+Growth (Year 2017,+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Irvine Avenue (NS) at 17th Street/Westcliff Drive (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.493
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	274	506	37	178	438	132	230	478	180	39	389	62
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:	288	531	39	187	460	139	230	478	180	39	389	62
Added Vol:	0	0	0	4	0	0	0	87	0	0	77	2
PasserByVol:	1	1	0	1	0	3	1	4	1	0	6	0
Initial Fut:	289	532	39	192	460	142	231	569	181	39	472	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	289	532	39	192	460	142	231	569	181	39	472	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	289	532	39	192	460	142	231	569	181	39	472	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	289	532	39	192	460	142	231	569	181	39	472	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	2.00	1.00	2.00	2.00	1.00	2.00	1.52	0.48	1.00	1.76	0.24
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	2428	772	1600	2818	382
Capacity Analysis Module:												
Vol/Sat:	0.09	0.17	0.02	0.06	0.14	0.09	0.07	0.23	0.23	0.02	0.17	0.17
Crit Moves:	****				****			****		****		

Balboa Marina West
Existing+Growth (Year 2017) +Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Irvine Avenue (NS) at 17th Street/Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.773
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	312	459	46	170	584	523	248	472	218	81	554	87
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:	328	482	48	179	613	549	248	472	218	81	554	87
Added Vol:	0	0	0	6	0	0	0	115	0	0	126	6
PasserByVol:	0	0	0	2	0	4	7	19	0	0	10	1
Initial Fut:	328	482	48	187	613	553	255	606	218	81	690	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	328	482	48	187	613	553	255	606	218	81	690	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	328	482	48	187	613	553	255	606	218	81	690	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	328	482	48	187	613	553	255	606	218	81	690	94
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	1.47	0.53	1.00	1.76	0.24
Final Sat.:	3200	3200	1600	3200	3200	1600	3200	2353	847	1600	2816	384
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.03	0.06	0.19	0.35	0.08	0.26	0.26	0.05	0.25	0.24
Crit Moves:	****					****	****				****	

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Dover Drive (NS) at Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.453
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	0	0 0	1 0	1	2 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	362	411	0	0	472	111	67	0	509	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	362	411	0	0	472	111	67	0	509	0	0	0
Added Vol:	54	4	0	0	8	0	0	0	26	0	0	0
PasserByVol:	1	4	0	0	2	0	0	0	2	0	0	0
Initial Fut:	417	419	0	0	482	111	67	0	537	0	0	0
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:	417	419	0	0	482	111	67	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	417	419	0	0	482	111	67	0	0	0	0	0
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:	417	419	0	0	482	111	67	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	1600	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.00	0.00	0.30	0.07	0.02	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

Balboa Marina West
Existing-Growth (Year 2017) -Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Dover Drive (NS) at Westcliff Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.466
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	2 0	0	0 0	1 0	1	2 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	550	543	0	0	369	103	121	0	503	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	550	543	0	0	369	103	121	0	503	0	0	0
Added Vol:	45	11	0	0	12	0	0	0	65	0	0	0
PasserByVol:	3	5	0	0	5	0	0	0	8	0	0	0
Initial Fut:	598	559	0	0	386	103	121	0	576	0	0	0
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:	598	559	0	0	386	103	121	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	598	559	0	0	386	103	121	0	0	0	0	0
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:	598	559	0	0	386	103	121	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	1600	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.19	0.17	0.00	0.00	0.24	0.06	0.04	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects-Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Dover Drive (NS) at 16th Street (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.513
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	87	718	43	40	907	50	29	21	209	44	10	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	87	718	43	40	907	50	29	21	209	44	10	59
Added Vol:	2	58	0	0	34	0	0	0	4	0	0	0
PasserByVol:	1	2	1	1	2	0	0	0	2	1	2	4
Initial Fut:	90	778	44	41	943	50	29	21	215	45	12	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	778	44	41	943	50	29	21	215	45	12	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	778	44	41	943	50	29	21	215	45	12	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	778	44	41	943	50	29	21	215	45	12	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.58	0.42	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	928	672	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.03	0.03	0.29	0.03	0.02	0.03	0.13	0.03	0.01	0.04
Crit Moves:	****				****				****	****		

Balboa Marina West
Existing+Growth (Year 2017) +Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Dover Drive (NS) at 16th Street (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	136	1017	45	79	816	23	34	23	153	52	14	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	1017	45	79	816	23	34	23	153	52	14	50
Added Vol:	6	56	0	0	76	0	0	0	6	0	0	0
PasserByVol:	1	14	2	4	10	0	0	1	2	0	1	4
Initial Fut:	143	1087	47	83	902	23	34	24	161	52	15	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	1087	47	83	902	23	34	24	161	52	15	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	1087	47	83	902	23	34	24	161	52	15	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	1087	47	83	902	23	34	24	161	52	15	54
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.59	0.41	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	938	662	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.34	0.03	0.05	0.28	0.01	0.02	0.04	0.10	0.03	0.01	0.03
Crit Moves:		****		****					****	****		

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.688
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	1 1	0	3 0	1 0	1	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	24	45	42	904	44	182	144	1825	21	17	1205	684
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:	24	45	42	904	44	182	151	1916	22	18	1265	718
Added Vol:	0	0	0	41	0	0	0	97	0	0	174	62
PasserByVol:	0	0	0	19	0	9	9	120	0	0	86	9
Initial Fut:	24	45	42	964	44	191	160	2133	22	18	1525	789
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:	24	45	42	964	44	191	160	2133	22	18	1525	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	45	42	964	44	191	160	2133	22	18	1525	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:	24	45	42	964	44	191	160	2133	22	18	1525	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	1655	1545	4800	1600	1600	3200	4751	49	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.03	0.20	0.03	0.12	0.05	0.45	0.45	0.01	0.32	0.00
Crit Moves:		****		****				****		****		

Balboa Marina West
Existing-Growth (Year 2017, -Approved Projects+Cumulative Projects-Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.789
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0 1	1 0		3 0 1	0 1		2 0 2	1 0		1 0 3	0 1	
Volume Module:												
Base Vol:	16	32	50	840	49	136	119	1477	22	48	2054	1170
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:	16	32	50	840	49	136	125	1551	23	50	2157	1229
Added Vol:	0	0	0	88	0	0	0	207	0	0	161	67
PasserByVol:	0	0	0	13	0	16	27	123	0	0	150	26
Initial Fut:	16	32	50	941	49	152	152	1881	23	50	2468	1322
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:	16	32	50	941	49	152	152	1881	23	50	2468	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	32	50	941	49	152	152	1881	23	50	2468	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:	16	32	50	941	49	152	152	1881	23	50	2468	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	4742	58	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.03	0.20	0.03	0.10	0.05	0.40	0.40	0.03	0.51	0.00
Crit Moves:			****	****			****				****	

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.745
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	383	13	25	30	5	36	30	2421	300	37	1476	15
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:	383	13	25	30	5	36	32	2542	315	39	1550	16
Added Vol:	1	7	0	22	4	26	41	94	0	3	207	19
PasserByVol:	1	0	1	44	0	18	35	95	0	0	64	0
Initial Fut:	385	20	26	96	9	80	108	2731	315	42	1821	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	385	20	26	96	9	80	108	2731	315	42	1821	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	385	20	26	96	9	80	108	2731	315	42	1821	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	385	20	26	96	9	80	108	2731	315	42	1821	35
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.68	0.14	0.18	1.00	0.10	0.90	1.00	3.00	1.00	1.00	3.93	0.07
Final Sat.:	4288	223	290	1600	162	1438	1600	4800	1600	1600	6280	120
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.06	0.06	0.06	0.07	0.57	0.20	0.03	0.29	0.29
Crit Moves:			****	****				****		****		

Balboa Marina West
Existing+Growth (Year 2017) +Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.790
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	410	8	29	23	16	38	50	1895	473	57	2863	23
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:	410	8	29	23	16	38	53	1990	497	60	3006	24
Added Vol:	5	7	0	27	9	50	52	227	0	13	163	28
PasserByVol:	3	0	0	71	0	29	26	83	2	0	127	0
Initial Fut:	418	15	29	121	25	117	131	2300	499	73	3296	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	418	15	29	121	25	117	131	2300	499	73	3296	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	418	15	29	121	25	117	131	2300	499	73	3296	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	418	15	29	121	25	117	131	2300	499	73	3296	52
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.71	0.10	0.19	1.00	0.18	0.82	1.00	3.00	1.00	1.00	3.94	0.06
Final Sat.:	4343	156	301	1600	282	1318	1600	4800	1600	1600	6300	100
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.10	0.08	0.09	0.09	0.08	0.48	0.31	0.05	0.52	0.52
Crit Moves:			****		****		****				****	

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Jamboree Road (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.684
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0 3 0 1			2 0 3 0 1			1 1 1 0 1			1 1 1 0 1		
Volume Module:												
Base Vol:	26	1110	140	744	1604	78	299	38	58	123	8	17
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:	27	1166	147	781	1684	82	299	38	58	123	8	17
Added Vol:	0	141	3	0	65	0	0	0	0	4	0	0
PasserByVol:	0	80	5	46	141	0	0	0	0	10	0	44
Initial Fut:	27	1387	155	827	1890	82	299	38	58	137	8	61
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:	27	1387	0	827	1890	0	299	38	58	137	8	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	1387	0	827	1890	0	299	38	58	137	8	61
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:	27	1387	0	827	1890	0	299	38	58	137	8	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	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:	0.02	0.29	0.00	0.26	0.39	0.00	0.09	0.02	0.04	0.04	0.01	0.04
Crit Moves:		****			****			****			****	

Balboa Marina West
Existing+Growth (Year 2017) +Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Jamboree Road (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.625
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	3 0	1	2 0	3 0	1	1 1	1 0	1	1 1	1 0	1
Volume Module:												
Base Vol:	55	1289	131	514	1525	164	89	36	13	178	46	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:	58	1353	138	540	1601	172	89	36	13	178	46	29
Added Vol:	0	108	6	0	148	0	0	0	0	7	0	0
PasserByVol:	1	104	10	52	116	0	1	4	0	8	0	109
Initial Fut:	59	1565	154	592	1865	172	90	40	13	193	46	138
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:	59	1565	0	592	1865	0	90	40	13	193	46	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	1565	0	592	1865	0	90	40	13	193	46	138
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:	59	1565	0	592	1865	0	90	40	13	193	46	138
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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:	0.04	0.33	0.00	0.18	0.39	0.00	0.03	0.03	0.01	0.06	0.03	0.09
Crit Moves:		****		****			****					****

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Jamboree Road (NS) at Santa Barbara Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.564
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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
Lanes:	1 0 3	0	1	2 0 3	0	1	1 0 1	0	1	1 1 0	0	1
Volume Module:												
Base Vol:	10 1115		289	543 1067		29	33	5	16	39	6	99
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:	11 1171		303	570 1120		30	33	5	16	39	6	99
Added Vol:	0 144		0	0 69		0	0	0	0	0	0	0
PasserByVol:	0 55		4	5 108		1	6	0	0	26	0	21
Initial Fut:	11 1370		307	575 1297		31	39	5	16	65	6	120
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11 1370		307	575 1297		31	39	5	16	65	6	120
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
Reduced Vol:	11 1370		307	575 1297		31	39	5	16	65	6	120
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11 1370		307	575 1297		31	39	5	16	65	6	120
Saturation Flow Module:												
Sat/Lane:	1600 1600		1600	1600 1600		1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00 3.00		1.00	2.00 3.00		1.00	1.00	1.00	1.00	1.83	0.17	1.00
Final Sat.:	1600 4800		1600	3200 4800		1600	1600	1600	1600	2930	270	1600
Capacity Analysis Module:												
Vol/Sat:	0.01 0.29		0.19	0.18 0.27		0.02	0.02	0.00	0.01	0.02	0.02	0.08
Crit Moves:	****			****			****					****

Balboa Marina West
Existing-Growth (Year 2017) +Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Jamboree Road (NS) at Santa Barbara Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.682
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	1	2 0	3 0	1	1 0	1 0	1	1 1	0 0	1
Volume Module:												
Base Vol:	17	1176	128	157	1297	74	45	17	16	243	5	458
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:	18	1235	134	165	1362	78	45	17	16	243	5	458
Added Vol:	0	114	0	0	154	0	0	0	0	0	0	0
PasserByVol:	0	98	14	16	77	6	2	1	0	12	1	13
Initial Fut:	18	1447	148	181	1593	84	47	18	16	255	6	471
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	1447	148	181	1593	84	47	18	16	255	6	471
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	1447	148	181	1593	84	47	18	16	255	6	471
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	1447	148	181	1593	84	47	18	16	255	6	471
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.95	0.05	1.00
Final Sat.:	1600	4800	1600	3200	4800	1600	1600	1600	1600	3126	74	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.30	0.09	0.06	0.33	0.05	0.03	0.01	0.01	0.08	0.08	0.29
Crit Moves:		****			****			****				****

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Jamboree Road (NS) at East Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.668
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 1	1	0	1	0 2	0	1	3	0 3	1	0	2	0 4	0	1
Volume Module:																
Base Vol:	17	340	88		192	291	594		788	1557	19		76	921	102	
Growth Adj:	1.00	1.00	1.00		1.05	1.05	1.05		1.05	1.05	1.05		1.05	1.05	1.05	
Initial Bse:	17	340	88		202	306	624		827	1635	20		80	967	107	
Added Vol:	0	0	0		38	17	15		15	101	0		0	214	129	
PasserByVol:	0	1	1		8	1	120		53	84	1		1	49	2	
Initial Fut:	17	341	89		248	324	759		895	1820	21		81	1230	238	
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:	17	341	89		248	324	0		895	1820	21		81	1230	238	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	17	341	89		248	324	0		895	1820	21		81	1230	238	
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:	17	341	89		248	324	0		895	1820	21		81	1230	238	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.59	0.41		1.00	2.00	1.00		3.00	3.95	0.05		2.00	4.00	1.00	
Final Sat.:	1600	2538	662		1600	3200	1600		4800	6327	73		3200	6400	1600	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.13	0.13		0.15	0.10	0.00		0.19	0.29	0.29		0.03	0.19	0.15	
Crit Moves:		****				****				****				****		

Balboa Marina West
Existing+Growth (Year 2017) +Approved Projects+Cumulative Projects-Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Jamboree Road (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.838
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	1 0	1	1 0	1 0	2	0 1	3 0	3	1 0	2 0	4	0 1
Volume Module:												
Base Vol:	41	290	79	179	417	856	723	1589	60	132	1729	205
Growth Adj:	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	41	290	79	188	438	899	759	1668	63	139	1815	215
Added Vol:	0	16	0	128	0	26	22	233	0	0	177	77
PasserByVol:	1	1	4	9	3	79	97	62	0	5	120	12
Initial Fut:	42	307	83	325	441	1004	878	1963	63	144	2112	304
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:	42	307	83	325	441	0	878	1963	63	144	2112	304
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	307	83	325	441	0	878	1963	63	144	2112	304
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:	42	307	83	325	441	0	878	1963	63	144	2112	304
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.57	0.43	1.00	2.00	1.00	3.00	3.88	0.12	2.00	4.00	1.00
Final Sat.:	1600	2519	681	1600	3200	1600	4800	6201	199	3200	6400	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.12	0.20	0.14	0.00	0.18	0.32	0.32	0.04	0.33	0.19
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Santa Cruz Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.323
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	48	4	13	10	7	64	49	512	292	115	265	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	48	4	13	10	7	64	49	512	292	115	265	7
Added Vol:	0	0	0	0	0	0	0	3	0	0	4	0
PasserByVol:	31	0	3	0	1	0	0	78	5	2	10	0
Initial Fut:	79	4	16	10	8	64	49	593	297	117	279	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:	79	4	16	10	8	64	49	593	297	117	279	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	4	16	10	8	64	49	593	297	117	279	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:	79	4	16	10	8	64	49	593	297	117	279	7
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	0.20	0.80	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.93	0.07
Final Sat.:	3200	320	1280	1600	1600	1600	1600	3200	1600	1600	4683	117
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.01	0.01	0.01	0.04	0.03	0.19	0.19	0.07	0.06	0.06
Crit Moves:	****					****		****		****		

Balboa Marina West
Existing+Growth (Year 2017) +Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Santa Cruz Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.359
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	506	14	135	9	5	24	72	486	178	45	444	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	506	14	135	9	5	24	72	486	178	45	444	20
Added Vol:	0	0	0	0	0	0	0	6	0	0	7	0
PasserByVol:	12	0	2	1	0	0	0	30	22	6	73	0
Initial Fut:	518	14	137	10	5	24	72	522	200	51	524	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	518	14	137	10	5	24	72	522	200	51	524	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	518	14	137	10	5	24	72	522	200	51	524	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	518	14	137	10	5	24	72	522	200	51	524	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.09	0.91	1.00	1.00	1.00	1.00	2.17	0.83	1.00	2.89	0.11
Final Sat.:	3200	148	1452	1600	1600	1600	1600	3470	1330	1600	4624	176
Capacity Analysis Module:												
Vol/Sat:	0.16	0.09	0.09	0.01	0.00	0.02	0.05	0.15	0.15	0.03	0.11	0.11
Crit Moves:	****					****		****		****		

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects-Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Santa Rosa Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.382
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: 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:		Ovl						Include						Include						Include				
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	2	1	0		2	0	2	1	0	
Volume Module:																								
Base Vol:	32	16	75				81	12	39				27	265	207				447	457	101			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	32	16	75				81	12	39				27	265	207				447	457	101			
Added Vol:	0	0	3				0	0	0				0	3	0				9	4	0			
PasserByVol:	19	0	27				0	0	0				1	10	77				5	5	0			
Initial Fut:	51	16	105				81	12	39				28	278	284				461	466	101			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	51	16	105				81	12	39				28	278	284				461	466	101			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	51	16	105				81	12	39				28	278	284				461	466	101			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	51	16	105				81	12	39				28	278	284				461	466	101			
OvlAdjVol:			0																					
Saturation Flow Module:																								
Sat/Lane:	1600	1600	1600				1600	1600	1600				1600	1600	1600				1600	1600	1600			
Adjustment:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Lanes:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	2.00	1.00				2.00	2.47	0.53			
Final Sat.:	1600	1600	1600				1600	1600	1600				1600	3200	1600				3200	3945	855			
Capacity Analysis Module:																								
Vol/Sat:	0.03	0.01	0.07				0.05	0.01	0.02				0.02	0.09	0.18				0.14	0.12	0.12			
OvlAdjV/S:			0.00																					
Crit Moves:		****						****								****	****							

Balboa Marina West
Existing+Growth (Year 2017, -Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Santa Rosa Drive (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.503
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	100	Level Of Service:	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:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	221	25	443	73	11	59	67	550	133	374	280	79
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	221	25	443	73	11	59	67	550	133	374	280	79
Added Vol:	0	0	9	0	0	0	0	6	0	6	7	0
PasserByVol:	78	0	30	0	0	0	0	11	30	27	11	0
Initial Fut:	299	25	482	73	11	59	67	567	163	407	298	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	299	25	482	73	11	59	67	567	163	407	298	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	299	25	482	73	11	59	67	567	163	407	298	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	299	25	482	73	11	59	67	567	163	407	298	79
OvlAdjVol:			279									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.00	1.00	1.00	1.00	2.33	0.67	2.00	2.37	0.63
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	3728	1072	3200	3794	1006
Capacity Analysis Module:												
Vol/Sat:	0.19	0.02	0.30	0.05	0.01	0.04	0.04	0.15	0.15	0.13	0.08	0.08
OvlAdjV/S:			0.17									
Crit Moves:	****					****		****			****	

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Newport Center Drive (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.422
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	19	0	69	315	1718	0	0	1051	170
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:	0	0	0	19	0	69	331	1804	0	0	1104	179
Added Vol:	0	0	0	0	0	0	1	138	0	0	343	0
PasserByVol:	0	0	0	6	0	20	15	61	0	0	21	3
Initial Fut:	0	0	0	25	0	89	347	2003	0	0	1468	182
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	25	0	0	347	2003	0	0	1468	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	25	0	0	347	2003	0	0	1468	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	25	0	0	347	2003	0	0	1468	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	0.01	0.00	0.00	0.11	0.42	0.00	0.00	0.31	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing+Growth (Year 2017, +Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Newport Center Drive (NS) at East Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.541
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: 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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	164	0	635	314	1268	0	0	1416	128
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:	0	0	0	164	0	635	330	1331	0	0	1487	134
Added Vol:	0	0	0	0	0	1	0	360	0	0	253	0
PasserByVol:	0	0	0	7	0	44	21	38	0	0	76	11
Initial Fut:	0	0	0	171	0	680	351	1729	0	0	1816	145
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	171	0	0	351	1729	0	0	1816	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	171	0	0	351	1729	0	0	1816	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	171	0	0	351	1729	0	0	1816	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	0.05	0.00	0.00	0.11	0.36	0.00	0.00	0.38	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Avocado Avenue (NS) at East Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.568
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 1	1	1 0	0 1	1 0	3	0 1	1 0	3	0 1
Volume Module:												
Base Vol:	98	128	135	57	69	50	140	1071	49	93	1101	165
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:	98	128	135	57	69	50	147	1125	51	98	1156	173
Added Vol:	0	0	0	0	0	0	0	138	0	0	343	0
PasserByVol:	0	0	0	5	0	10	54	13	0	0	13	30
Initial Fut:	98	128	135	62	69	60	201	1276	51	98	1512	203
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:	98	128	135	62	69	0	201	1276	51	98	1512	203
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	128	135	62	69	0	201	1276	51	98	1512	203
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:	98	128	135	62	69	0	201	1276	51	98	1512	203
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.00	1.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	1600	1600	1600	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.08	0.04	0.04	0.00	0.13	0.27	0.03	0.06	0.32	0.13
Crit Moves:			****		****		****				****	

Balboa Marina West
Existing+Growth (Year 2017) +Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #16 Avocado Avenue (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.599
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 1	0 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	112	73	110	253	109	139	89	1199	71	100	1055	104
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:	112	73	110	253	109	139	93	1259	75	105	1108	109
Added Vol:	0	0	0	0	0	0	0	360	0	0	253	0
PasserByVol:	0	0	0	33	0	69	30	13	1	0	14	13
Initial Fut:	112	73	110	286	109	208	123	1632	76	105	1375	122
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:	112	73	110	286	109	0	123	1632	76	105	1375	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	73	110	286	109	0	123	1632	76	105	1375	122
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:	112	73	110	286	109	0	123	1632	76	105	1375	122
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	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	1.45	0.55	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1600	1600	1600	2317	883	1600	1600	4800	1600	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.05	0.07	0.12	0.12	0.00	0.08	0.34	0.05	0.07	0.29	0.08
Crit Moves:	****				****			****			****	

Balboa Marina West
Existing-Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 MacArthur Boulevard (NS) at San Joaquin Hills Road (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.691
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	121	1226	22	792	1718	851	76	347	46	51	360	651
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	1287	23	832	1804	894	76	347	46	51	360	651
Added Vol:	0	90	0	0	48	0	0	6	0	0	13	0
PasserByVol:	2	10	1	1	53	68	40	4	0	6	3	0
Initial Fut:	129	1387	24	833	1905	962	116	357	46	57	376	651
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:	129	1387	24	833	1905	0	116	357	46	57	376	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1387	24	833	1905	0	116	357	46	57	376	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:	129	1387	24	833	1905	0	116	357	46	57	376	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	2.66	0.34	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	4252	548	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.02	0.26	0.40	0.00	0.02	0.08	0.08	0.04	0.12	0.00
Crit Moves:		****		****			****				****	

Balboa Marina West
Existing-Growth (Year 2017; +Approved Projects-Cumulative Projects-Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 MacArthur Boulevard (NS) at San Joaquin Hills Road (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.801
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	35	1391	13	666	1547	366	647	313	117	31	292	399
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:	37	1461	14	699	1624	384	647	313	117	31	292	399
Added Vol:	0	75	0	0	94	0	0	15	0	0	12	0
PasserByVol:	2	57	6	1	35	41	93	4	0	3	4	0
Initial Fut:	39	1593	20	700	1753	425	740	332	117	34	308	399
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:	39	1593	20	700	1753	0	740	332	117	34	308	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	1593	20	700	1753	0	740	332	117	34	308	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:	39	1593	20	700	1753	0	740	332	117	34	308	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	2.22	0.78	1.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	3549	1251	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.33	0.01	0.22	0.37	0.00	0.15	0.09	0.09	0.02	0.10	0.00
Crit Moves:		****			****			****			****	

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 MacArthur Boulevard (NS) at San Miguel Drive (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	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			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	123	1123	147	3	809	637	192	79	38	190	261	6
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:	129	1179	154	3	849	669	192	79	38	190	261	6
Added Vol:	37	90	0	0	48	0	0	0	11	0	0	0
PasserByVol:	2	2	0	1	1	57	8	4	10	0	13	0
Initial Fut:	168	1271	154	4	898	726	200	83	59	190	274	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	168	1271	154	4	898	726	200	83	59	190	274	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	168	1271	154	4	898	726	200	83	59	190	274	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	168	1271	154	4	898	726	200	83	59	190	274	6
OvlAdjVol:						655						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	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	1.17	0.83	2.00	1.96	0.04
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	1870	1330	3200	3131	69
Capacity Analysis Module:												
Vol/Sat:	0.05	0.26	0.10	0.00	0.19	0.45	0.04	0.04	0.04	0.06	0.09	0.09
OvlAdjV/S:						0.41						
Crit Moves:	****					****			****		****	

Balboa Marina West
Existing-Growth (Year 2017) +Approved Projects-Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 MacArthur Boulevard (NS) at San Miguel Drive (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.539
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: 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			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3 0	1	2 0	3 0	1	3 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	91	771	212	11	1107	451	668	331	126	225	173	35
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:	96	810	223	12	1162	474	668	331	126	225	173	35
Added Vol:	22	75	0	0	94	0	0	0	37	0	0	0
PasserByVol:	7	2	0	1	1	32	63	25	12	0	22	0
Initial Fut:	125	887	223	13	1257	506	731	356	175	225	195	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	887	223	13	1257	506	731	356	175	225	195	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	887	223	13	1257	506	731	356	175	225	195	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	887	223	13	1257	506	731	356	175	225	195	35
OvlAdjVol:						240						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	3.00	1.34	0.66	2.00	1.70	0.30
Final Sat.:	3200	4800	1600	3200	4800	1600	4800	2145	1055	3200	2713	487
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.14	0.00	0.26	0.32	0.15	0.17	0.17	0.07	0.07	0.07
OvlAdjV/S:						0.15						
Crit Moves:	****				****			****				****

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 MacArthur Boulevard (NS) at East Coast Highway (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.799
Loss Time (sec): 0 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	2 0	3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	793	0	247	575	1000	0	0	1144	862
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	833	0	259	604	1050	0	0	1201	905
Added Vol:	0	0	0	53	0	6	5	133	0	0	337	122
PasserByVol:	0	0	0	10	0	0	1	18	0	0	41	2
Initial Fut:	0	0	0	896	0	265	610	1201	0	0	1579	1029
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	896	0	0	610	1201	0	0	1579	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	896	0	0	610	1201	0	0	1579	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	896	0	0	610	1201	0	0	1579	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	0.19	0.25	0.00	0.00	0.33	0.00
Crit Moves:				****			****				****	

Balboa Marina West
Existing+Growth (Year 2017, +Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 MacArthur Boulevard (NS) at East Coast Highway (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.765
Loss Time (sec):	0 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	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			Permitted		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2	0 0	0 1	2	0 3	0 0	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	981	0	323	298	1277	0	0	1136	789
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	1030	0	339	313	1341	0	0	1193	828
Added Vol:	0	0	0	121	0	10	8	352	0	0	244	89
PasserByVol:	0	0	0	3	0	0	1	42	0	0	23	6
Initial Fut:	0	0	0	1154	0	349	322	1735	0	0	1460	923
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	1154	0	0	322	1735	0	0	1460	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	1154	0	0	322	1735	0	0	1460	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	1154	0	0	322	1735	0	0	1460	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	0.36	0.00	0.00	0.10	0.36	0.00	0.00	0.30	0.00
Crit Moves:				****			****				****	

APPENDIX D

Approved Project Data

Traffic Phasing Data
Projects Less Than 100% Complete

Project Number	Project Name	Percent
148	FASHION ISLAND EXPANSION	40 %
154	TEMPLE BAT YAHM EXPANSION	65 %
555	CIOSA - IRVINE PROJECT	91 %
910	NEWPORT DUNES	0 %
945	HOAG HOSPITAL PHASE III	0 %
949	ST. MARK PRESBYTERIAN CHU	77 %
955	2300 NEWPORT BLVD	0 %
957	NEWPORT EXECUTIVE COURT	0 %
958	HOAG HEALTH CENTER	75 %
959	NORTH NEWPORT CENTER	0 %
960	SANTA BARBARA CONDO (MARR	0 %
961	NEWPORT BEACH CITY HALL &	0 %
962	328 OLD NEWPORT MEDICAL O	0 %
963	COASTLINE COMMUNITY COLLE	0 %
964	BAYVIEW MEDICAL OFFICE -	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 %

Traffic Phasing Ordinance
Approved Projects 80% Volume Summary
Intersection Report

Int. Number: 5045 — Int. Name: 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	85	187		54		80	5	46	141					10		44
PM	114	169	5	117	1	104	10	52	116		1	4		8		109

Int. Number: 5055 — Int. Name: 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	2	128	137	51		1	1	8	1	120	53	84	1	1	49	2
PM	6	91	160	137	1	1	4	9	3	79	97	62		5	120	12

Int. Number: 5060 — Int. Name: SANTA CRUZ DR / SAN JOAQUIN HILLS RD BIG CANYON DR W

	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	34	1	83	13	31		3		1			78	5	2	10	
PM	14	1	53	78	12		2	1				30	22	6	73	

Int. Number: 5065 — Int. Name: SANTA ROSA DR / SAN JOAQUIN HILLS RD BIG CANYON DR 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	47		88	11	19		27				1	10	77	5	5	
PM	108		41	38	78		30					11	30	27	11	

Traffic Phasing Ordinance
Approved Projects 80% Volume Summary
Intersection Report

Int. Number: 5310 — Int. Name: 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	59	113	6	47		55	4	5	108	1	6			26		21
PM	112	99	3	25		98	14	16	77	6	2	1		12	1	13

Int. Number: 5440 — Int. Name: 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	2	62	130	64	1		1	44		18	35	95			64	
PM	3	100	111	127	3			71		29	26	83	2		127	

Int. Number: 2620 — Int. Name: NEWPORT BLVD / COAST HWY W

	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM		61	35	51				26		35		31	4		46	6
PM		61	98	62				41		19		90	7		51	11

Int. Number: 2630 — Int. Name: RIVERSIDE AVE / COAST HWY W

	1 Hr Peak Totals				1 Hr Peak											
	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM		2	128	96				1		1		128			96	
PM		2	145	156				2			1	144			155	1

Traffic Phasing Ordinance
Approved Projects 80% Volume Summary
Intersection Report

Int. Number: 2635 — Int. Name: COAST HWY W / TUSTIN 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			133	96								133			96	
PM			146	157								146			157	

Int. Number: 3385 — Int. Name: IRVINE AVE / 19TH ST DOVER 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	1	2		4	1	1		2	1						1	2
PM	2	5		3	1	1		3	2						1	2

Int. Number: 3260 — Int. Name: 16TH ST / DOVER 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	3	4	2	7	1	2	1	1	2				2	1	2	4
PM	17	14	2	4	1	14	2	4	10			1	2		1	4

Int. Number: 3275 — Int. Name: IRVINE AVE / 17TH ST WESTCLIFF 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	1	4	6	6	1	1		1		3	1	4	1		6	
PM		6	26	11				2		4	7	19			10	1

Traffic Phasing Ordinance
Approved Projects 80% Volume Summary
Intersection Report

Int. Number: 3290 — Int. Name: DOVER DR / WESTCLIFF 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	5	2	2		1	4			2				2			
PM	8	5	8		3	5			5				8			

Int. Number: 3060 — Int. Name: 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		28	129	95				19		9	9	120			86	9
PM		29	150	176				13		16	27	123			150	26

Traffic Phasing Ordinance
Approved Projects 80% Volume Summary
Intersection Report

Int. Number: 5070 — Int. Name: 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	13	121	44	10	2	10	1	1	53	68	40	4		6	3	
PM	65	78	97	7	2	57	6	1	35	41	93	4		3	4	

Int. Number: 7135 — Int. Name: 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	3	58	22	13	2	2		1	1	57	8	4	10		13	
PM	9	34	99	22	7	2		1	1	32	63	25	12		22	

Int. Number: 5330 — Int. Name: NEWPORT CENTER DR / 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		26	76	24				6		20	15	61			21	3
PM		51	60	87				7		44	21	38			76	11

Int. Number: 5335 — Int. Name: 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		11	19	43				10	1		1	18			41	2
PM		3	43	29				3			1	42			23	6

Traffic Phasing Ordinance
Approved Projects 80% Volume Summary
Intersection Report

Int. Number	Int. Name
6085	COAST HWY E / AVOCADO 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		15	67	44				5		10	54	13			13	30
PM		102	44	27				33		69	30	13	1		14	13

APPENDIX E

Regional Traffic Annual Growth Rate

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%
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%

Street segments not listed are assumed to have 0% regional growth.

APPENDIX F

TPO One-Percent Analysis
Calculation Worksheets

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 1: NEWPORT BOULEVARD & WEST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	0	0	0	0	0	0
Southbound	695	28	61	784	8	1
Eastbound	2422	97	35	2554	26	1
Westbound	1182	47	52	1281	13	0

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 1: NEWPORT BOULEVARD & WEST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	0	0	0	0	0	0
Southbound	952	38	60	1050	11	5
Eastbound	1297	52	97	1446	14	5
Westbound	2517	101	62	2680	27	4

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

PROJECT: BALBOA MARINA WEST **DATE:** 3/31/2014

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 2: RIVERSIDE AVENUE & WEST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	7	0	0	7	0	0
Southbound	407	0	2	409	4	0
Eastbound	2556	102	128	2786	28	3
Westbound	1304	52	96	1452	15	1

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 2: RIVERSIDE AVENUE & WEST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	33	0	0	33	0	0
Southbound	518	0	2	520	5	0
Eastbound	1812	72	145	2029	20	15
Westbound	2504	100	156	2760	28	7

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

PROJECT: BALBOA MARINA WEST **DATE:** 3/31/2014

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 3: TUSTIN AVENUE & WEST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	0	0	0	0	0	0
Southbound	57	0	0	57	1	0
Eastbound	2323	93	133	2549	25	3
Westbound	1337	53	96	1486	15	1

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 3: TUSTIN AVENUE & WEST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	3	0	0	3	0	0
Southbound	64	0	0	64	1	0
Eastbound	1643	66	146	1855	19	15
Westbound	2506	100	157	2763	28	7

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 4: IRVINE AVENUE & 19TH STREET/DOVER DRIVE

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	832	42	2	876	9	0
Southbound	888	44	3	935	9	2
Eastbound	247	0	0	247	2	0
Westbound	353	0	3	356	4	0

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 4: IRVINE AVENUE & 19TH STREET/DOVER DRIVE

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	796	40	2	838	8	1
Southbound	1413	71	5	1489	15	6
Eastbound	220	0	0	220	2	0
Westbound	446	0	3	449	4	1

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 5: IRVINE AVENUE & 17TH STREET/WESTCLIFF DRIVE

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	817	41	2	860	9	0
Southbound	748	37	4	789	8	1
Eastbound	888	0	6	894	9	1
Westbound	490	0	6	496	5	0

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 5: IRVINE AVENUE & 17TH STREET/WESTCLIFF DRIVE

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	817	41	0	858	9	0
Southbound	1277	64	6	1347	13	3
Eastbound	938	0	26	964	10	5
Westbound	722	0	11	733	7	3

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 6: DOVER DRIVE & WESTCLIFF DRIVE

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	773	0	5	778	8	1
Southbound	583	0	2	585	6	1
Eastbound	576	0	2	578	6	2
Westbound	0	0	0	0	0	0

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 6: DOVER DRIVE & WESTCLIFF DRIVE

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	1093	0	8	1101	11	6
Southbound	472	0	5	477	5	5
Eastbound	624	0	8	632	6	8
Westbound	0	0	0	0	0	0

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

PROJECT: BALBOA MARINA WEST **DATE:** 3/31/2014

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 7: DOVER DRIVE & 16TH STREET

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	848	0	4	852	9	1
Southbound	997	0	3	1000	10	3
Eastbound	259	0	2	261	3	1
Westbound	113	0	7	120	1	0

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 7: DOVER DRIVE & 16TH STREET

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	1198	0	17	1215	12	7
Southbound	918	0	14	932	9	13
Eastbound	210	0	3	213	2	3
Westbound	116	0	5	121	1	0

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 8: DOVER DRIVE & WEST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	111	0	0	111	1	0
Southbound	1130	0	28	1158	12	4
Eastbound	1990	100	129	2219	22	3
Westbound	1906	95	95	2096	21	2

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 8: DOVER DRIVE & WEST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	98	0	0	98	1	0
Southbound	1025	0	29	1054	11	18
Eastbound	1618	81	150	1849	18	15
Westbound	3272	164	176	3612	36	15

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 9: BAYSIDE DRIVE & EAST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	421	0	2	423	4	1
Southbound	71	0	62	133	1	0
Eastbound	2751	138	130	3019	30	3
Westbound	1528	76	64	1668	17	3

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 9: BAYSIDE DRIVE & EAST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	447	0	3	450	5	5
Southbound	77	0	100	177	2	0
Eastbound	2418	121	111	2650	27	17
Westbound	2943	147	127	3217	32	13

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 10: JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	1276	64	85	1425	14	0
Southbound	2426	121	187	2734	27	1
Eastbound	395	0	0	395	4	0
Westbound	148	0	54	202	2	1

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 10: JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	1475	74	115	1664	17	3
Southbound	2203	110	168	2481	25	5
Eastbound	138	0	5	143	1	0
Westbound	253	0	117	370	4	3

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

PROJECT: BALBOA MARINA WEST **DATE:** 3/31/2014

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 11: JAMBOREE ROAD & SANTA BARBARA DRIVE

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	1414	71	59	1544	15	1
Southbound	1639	82	114	1835	18	2
Eastbound	54	0	6	60	1	0
Westbound	144	0	47	191	2	0

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 11: JAMBOREE ROAD & SANTA BARBARA DRIVE

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	1321	66	112	1499	15	4
Southbound	1528	76	99	1703	17	8
Eastbound	78	0	3	81	1	0
Westbound	706	0	26	732	7	0

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

PROJECT: BALBOA MARINA WEST **DATE:** 3/31/2014

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 12: JAMBOREE ROAD & EAST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	445	0	2	447	4	0
Southbound	1077	54	129	1260	13	2
Eastbound	2364	118	138	2620	26	1
Westbound	1099	55	52	1206	12	1

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 12: JAMBOREE ROAD & EAST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	410	0	6	416	4	0
Southbound	1452	73	91	1616	16	8
Eastbound	2372	119	159	2650	27	6
Westbound	2066	103	137	2306	23	5

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 13: SANTA CRUZ DRIVE & SAN JOAQUIN HILLS ROAD

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	65	0	34	99	1	0
Southbound	81	0	1	82	1	0
Eastbound	853	0	83	936	9	0
Westbound	387	0	12	399	4	1

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 13: SANTA CRUZ DRIVE & SAN JOAQUIN HILLS ROAD

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	655	0	14	669	7	0
Southbound	38	0	1	39	0	0
Eastbound	736	0	52	788	8	1
Westbound	509	0	79	588	6	3

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 14: SANTA ROSA DRIVE & SAN JOAQUIN HILLS ROAD

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	123	0	46	169	2	0
Southbound	132	0	0	132	1	0
Eastbound	499	0	88	587	6	0
Westbound	1005	0	10	1015	10	1

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 14: SANTA ROSA DRIVE & SAN JOAQUIN HILLS ROAD

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	689	0	108	797	8	0
Southbound	143	0	0	143	1	0
Eastbound	750	0	41	791	8	1
Westbound	733	0	38	771	8	3

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 15: NEWPORT CENTER DRIVE & EAST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	0	0	0	0	0	0
Southbound	88	0	26	114	1	0
Eastbound	2033	102	76	2211	22	0
Westbound	1221	61	24	1306	13	1

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 15: NEWPORT CENTER DRIVE & EAST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	0	0	0	0	0	0
Southbound	799	0	51	850	9	0
Eastbound	1582	79	59	1720	17	2
Westbound	1544	77	87	1708	17	5

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 15: AVOCADO AVENUE & EAST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	361	0	0	361	4	0
Southbound	176	0	15	191	2	0
Eastbound	1260	63	67	1390	14	0
Westbound	1359	68	43	1470	15	1

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 16: AVOCADO AVENUE & EAST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	295	0	0	295	3	0
Southbound	501	0	102	603	6	0
Eastbound	1359	68	44	1471	15	2
Westbound	1259	63	27	1349	13	5

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 17: MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	1369	68	13	1450	15	0
Southbound	3361	168	122	3651	37	1
Eastbound	469	0	44	513	5	0
Westbound	1062	0	9	1071	11	1

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 17: MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	1439	72	65	1576	16	1
Southbound	2579	129	77	2785	28	3
Eastbound	1077	0	97	1174	12	1
Westbound	722	0	7	729	7	3

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.
Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 18: MACARTHUR BOULEVARD & SAN MIGUEL DRIVE

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	1393	70	4	1467	15	0
Southbound	1449	72	59	1580	16	1
Eastbound	309	0	22	331	3	0
Westbound	457	0	13	470	5	0

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 18: MACARTHUR BOULEVARD & SAN MIGUEL DRIVE

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	1074	54	9	1137	11	1
Southbound	1569	78	34	1681	17	3
Eastbound	1125	0	100	1225	12	0
Westbound	433	0	22	455	5	0

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 19: MACARTHUR BOULEVARD & EAST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 AM Traffic Count Worksheets

AM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	0	0	0	0	0	0
Southbound	1040	52	11	1103	11	1
Eastbound	1575	79	19	1673	17	0
Westbound	2006	100	43	2149	21	1

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

1% TRAFFIC VOLUME ANALYSIS

INTERSECTION 19: MACARTHUR BOULEVARD & EAST COAST HIGHWAY

Existing Traffic Volumes Based on Year 2012-2013 PM Traffic Count Worksheets

PM PEAK HOUR						
APPROACH DIRECTION	EXISTING PEAK HOUR VOLUME	PEAK HOUR REGIONAL GROWTH VOLUME	APPROVED PROJECTS PEAK HOUR VOLUME	PROJECTED PEAK HOUR VOLUME	1% OF PROJECTED PEAK HOUR VOLUME	PROJECT PEAK HOUR VOLUME
Northbound	0	0	0	0	0	0
Southbound	1304	65	3	1372	14	3
Eastbound	1575	79	43	1697	17	2
Westbound	1925	96	29	2050	21	3

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes.

Intersection Capacity Utilization (ICU) Analysis is required.

APPENDIX G

Cumulative Project Data

Table G-1

Cumulative Project Trip Generation[1]

Project	Peak Hour						Daily
	Morning			Evening			
	Inbound	Outbound	Total	Inbound	Outbound	Total	
Koll-Conexant	-348	338	-10	316	-221	94	2,764
Back Bay Landing							
- Net New Commercial	69	37	106	66	87	153	2,436
- Net New Residential	3	18	21	17	8	25	2,721
Banning Ranch	251	655	906	866	564	1,430	14,989
Old City Hall Complex Redevelopment/Lido House Hotel	40	29	69	40	38	78	1,062
Newport Coast - TAZ 1	75	243	318	238	159	397	3,926
Newport Coast - TAZ 2	91	326	417	326	183	509	5,107
Newport Coast - TAZ 3	51	178	229	178	102	280	2,792
Newport Coast - TAZ 4	56	186	242	184	113	297	2,953
Total	288	2,010	2,298	2,231	1,033	3,264	38,750

[1] Negative trips were not assigned to traffic analysis.

Cumulative Project List - November 2013

Projects of significant size to have a potential cumulative impact

Note: Highlighted projects do not result in an increase in traffic generation; however, may have other cumulative impacts to consider (i.e. construction, noise, air quality).

Newport Beach Country Club	1600 E. Coast Hwy	• 5 res. d.u • 27 hotel units with a 2,048 g.s.f. concierge and guest center • 3,523 g.s.f. tennis club with a 6,718 g.s.f. spa • 51,213 g.s.f. golf club with accessory facilities • 7 tennis courts and a swimming pool.
Koll	4343 Von Karman Ave	**New**: • 260 residential d.u. • 3,400 g.s.f. commercial
Back Bay Landing	300 E. Coast Hwy	**New**: • 49 residential d.u • 40,459 g.s.f. commercial • 17,075 g.s.f. office • 140 spaces dry stack storage **Existing**: • RV/Boat Storage and Kayak Launch
Old City Hall Complex Redevelopment / Lido House Hotel	3300 Newport Blvd and 475 32nd Street	**New:** • 130 hotel rooms with spa/fitness center, restaurant, bar, lounge areas, pool, retail, and meeting space
Newport Coast		See David Keely in Public Works for update!

Z:\Users\PBW\Shared\TPO Studies\10-30-2013Cumulative Project List.docx

Last Update: 1/21/2014

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**

Note: Do not assign negative trips to the circulation system

Table 2

Project Trip Generation[1]

Land Use	Quantity	Units[2]	Peak Hour						Daily
			Morning			Evening			
			Inbound	Outbound	Total	Inbound	Outbound	Total	
Trip Generation Rates									
Specialty Retail[3]		TSF	0.61	0.39	1.00	1.19	1.52	2.71	44.32
Quality Restaurant[4]		TSF	0.66	0.15	0.81	5.02	2.47	7.49	89.95
High Turnover (Sit-Down) Restaurant		TSF	5.99	5.53	11.52	6.58	4.57	11.15	127.15
Office		TSF	1.36	0.19	1.55	0.25	1.24	1.49	11.01
Enclosed Dry Stack Storage[5]		Spaces	0.031	0.017	0.048	0.004	0.044	0.048	0.334
Residential Condominium		DU	0.07	0.37	0.44	0.35	0.17	0.52	5.81
Displaced Existing Trips Generated									
RV/Boat Storage and Kayak Launch[6]	-	-	2	1	3	3	5	8	39
Proposed Trips Generated									
Specialty Retail	32.859	TSF	20	13	33	39	50	89	1,456
Quality Restaurant	4.100	TSF	3	1	4	21	10	31	369
- Pass-By (43% Evening Peak Hour)[7]			0	0	0	-9	-4	-13	-13
High Turnover (Sit-Down) Restaurant	3.500	TSF	21	19	40	23	16	39	445
- Pass-By (43% Evening Peak Hour)			0	0	0	-10	-7	-17	-17
Office	17.075	TSF	23	3	26	4	21	25	188
Enclosed Dry Stack Storage	140	Spaces	4	2	6	1	6	7	47
Residential Condominium	49	DU	3	18	21	17	8	25	285
Subtotal			74	56	130	86	100	186	2,760
Net New Trips									
Commercial			69	37	106	66	87	153	2,436
Residential			3	18	21	17	8	25	285
Total			72	55	127	83	95	178	2,721

[1] Source: Institute of Transportation Engineers, Trip Generation, 8th Edition, 2008, Land Use Categories 230, 710, 814, 820, 931, and 932.

[2] TSF = Thousand Square Feet; DU = Dwelling Units

[3] Institute of Transportation Engineers, Trip Generation, does not provide morning peak hour trip generation rates for the Specialty Retail land use. Therefore, the trip generation rates for Shopping Center (Land Use Category 820) were used to estimate the morning peak hour trips.

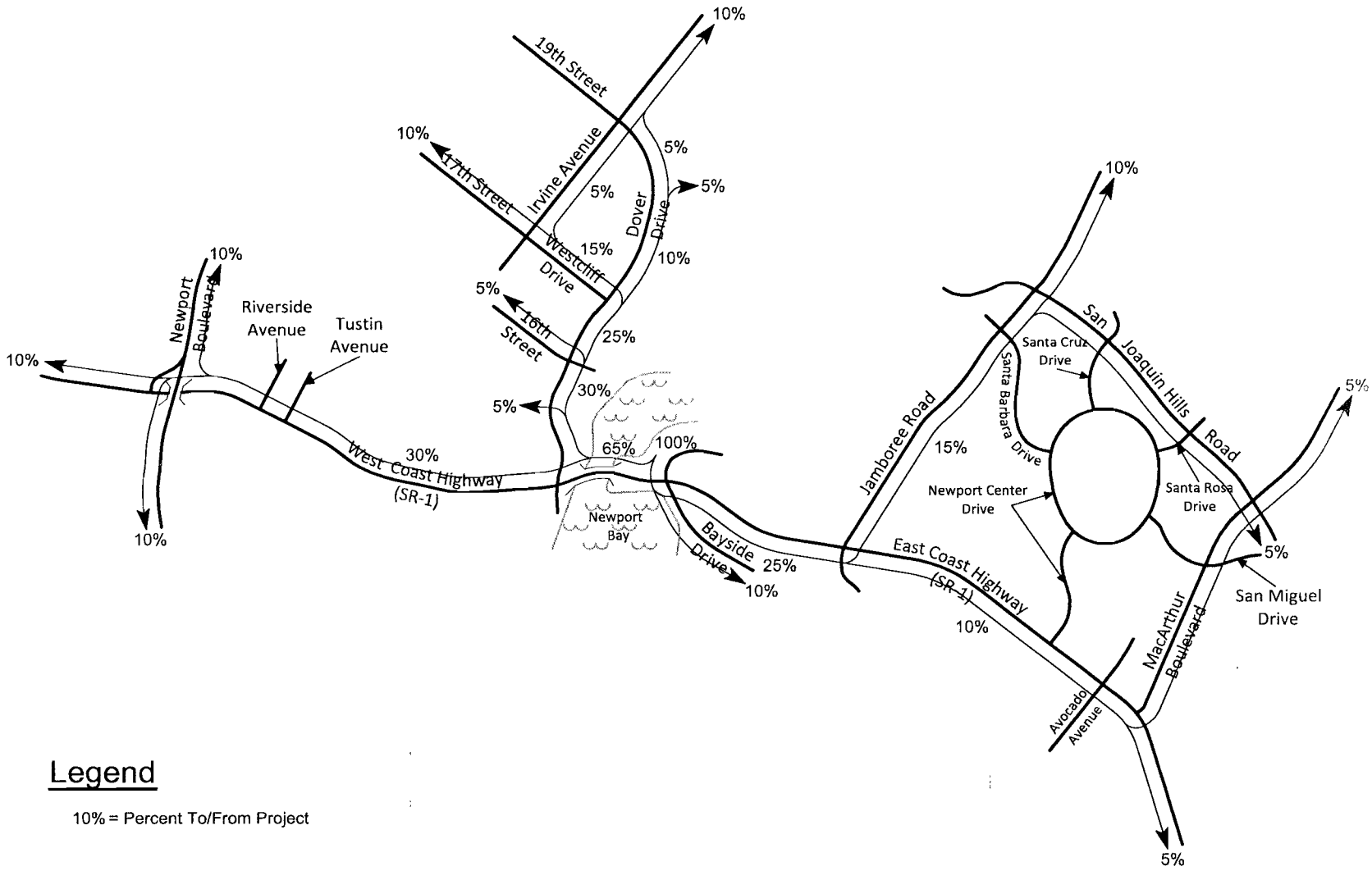
[4] Institute of Transportation Engineers, Trip Generation, does not provide inbound/outbound splits for the peak hour of adjacent street traffic (one hour between 7:00 AM - 9:00 AM) for the Quality Restaurant land use. Therefore, the inbound/outbound splits for the AM peak hour of generator were used.

[5] Source: Linscott, Law, and Greenspan, Dry Stack Boat Storage: Appendix D - Trip Generation Study Data, 2007.

[6] Based on trip generation count data for the existing site (see Appendix D). The "other uses" shown in Table D-1 (see Appendix D) include trips from the existing marina, Pearson's Port, and some parking from the adjacent residential uses, which will remain after the proposed project is constructed.

[7] Source: Institute of Transportation Engineers, Trip Generation Handbook, 2nd Edition, 2004.

Figure 9
Project Trip Distribution - Commercial



Legend

10% = Percent To/From Project

N

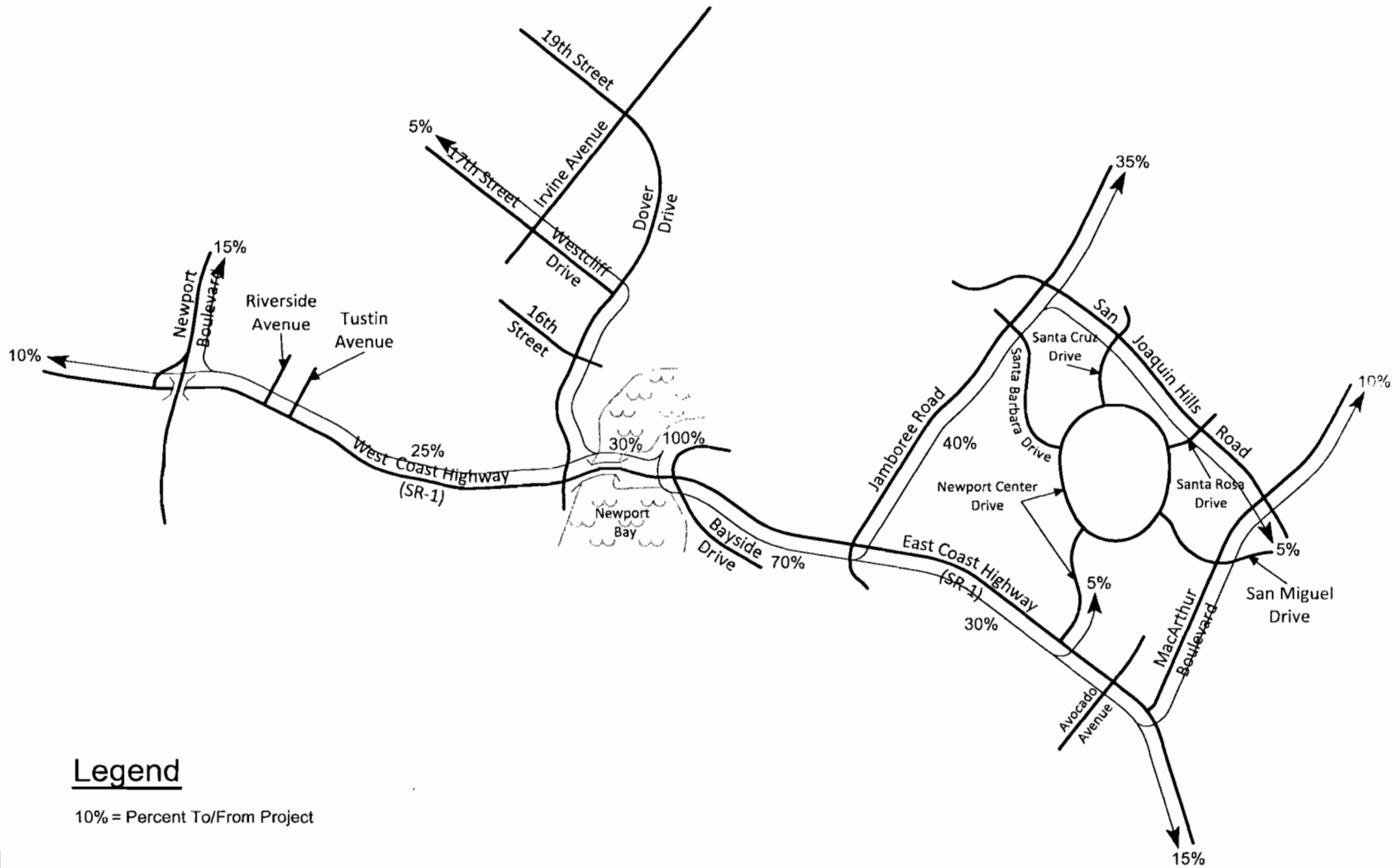
NTS

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

5188/9

Figure 10
Project Trip Distribution - Residential



Legend

10% = Percent To/From Project

N

NTS

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

5188/10

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

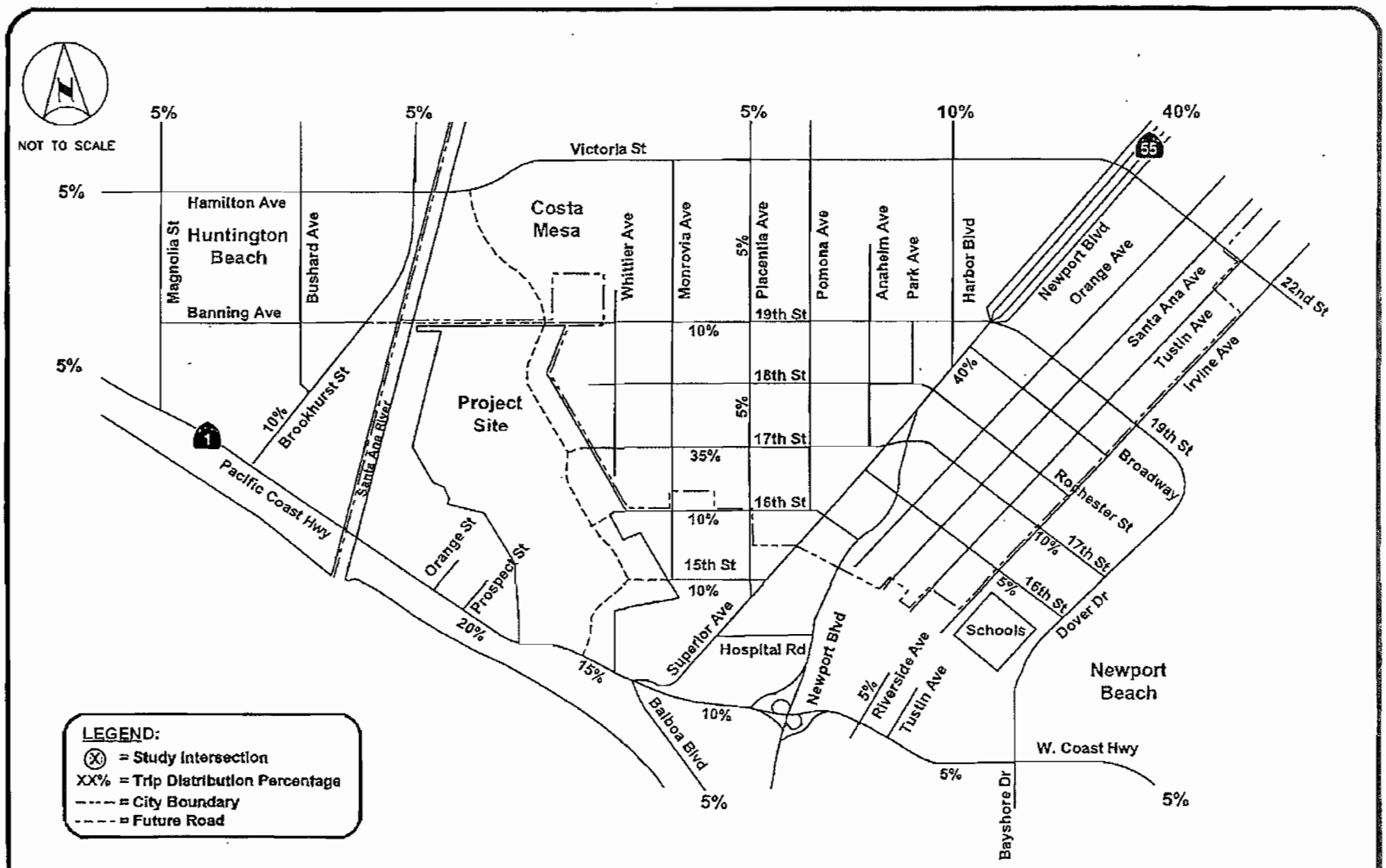
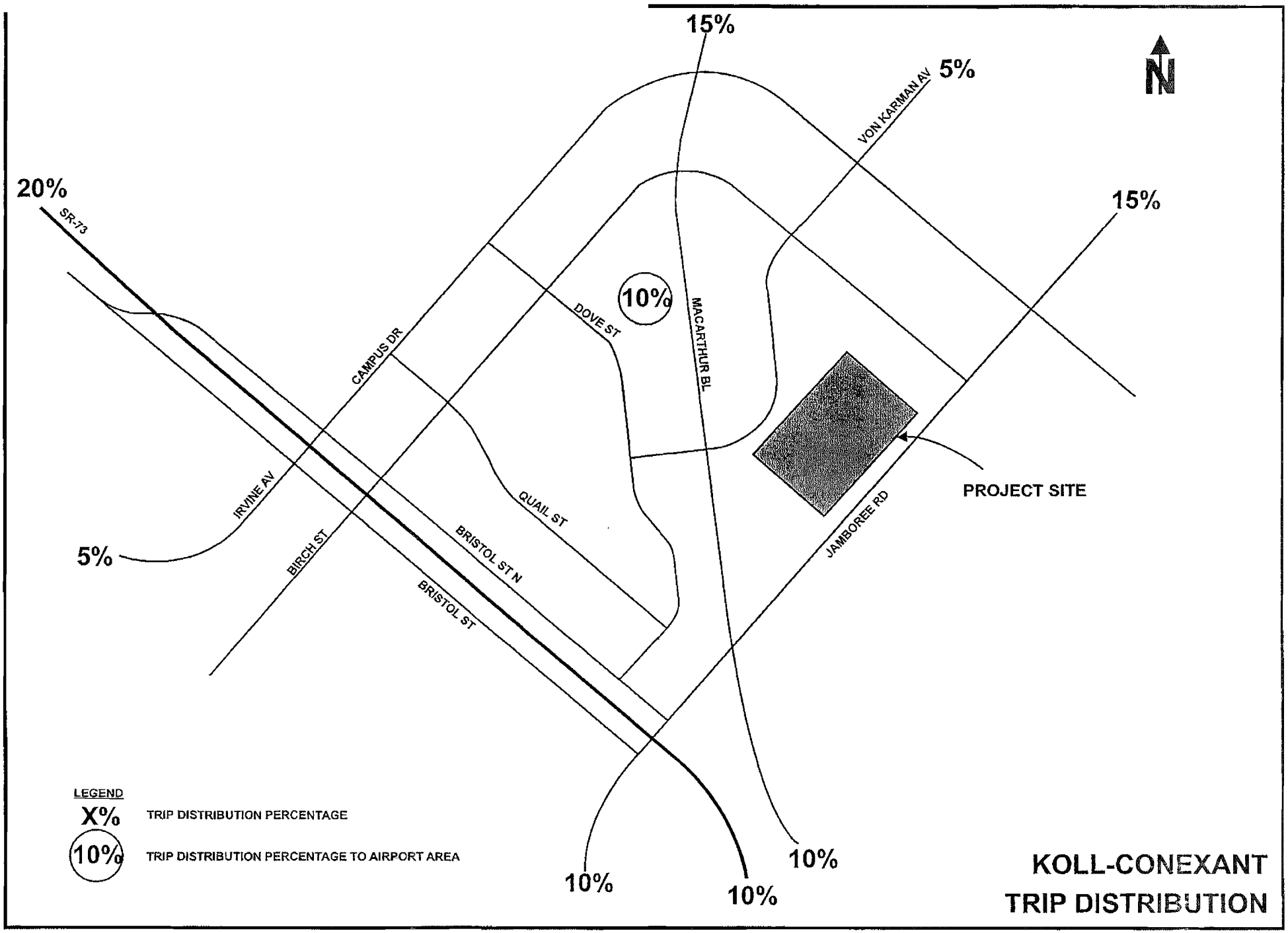


FIGURE 9
PROJECT TRIP DISTRIBUTION

FILENAME: Jun 30, 2011 - 5:28pm K:\ORA_TPTO\ZSAC\Projects\Banning Ranch\CAD\8th Submittal.dwg

Kimley-Horn and Associates, Inc.


15%
5%
VON KARMAN AV
N
20%
SR-73
15%
10%
DOVE ST
MACARTHUR BL
CAMPUS DR
PROJECT SITE
IRVINE AV
QUAIL ST
JAMBOREE RD
5%
BIRCH ST
BRISTOL ST N
BRISTOL ST
10%
10%
10%
LEGEND
X%
TRIP DISTRIBUTION PERCENTAGE
10%
TRIP DISTRIBUTION PERCENTAGE TO AIRPORT AREA
KOLL-CONEXANT
TRIP DISTRIBUTION

PROPOSED PROJECT

The proposed project site is located at the northeast corner of the Newport Boulevard/32nd Street intersection. The proposed project involves the development of a 130-room Lido House Hotel. Primary vehicular access to the project site is provided at Newport Boulevard via the Finley Avenue intersection. Gated service access is planned to be provided at 32nd Street.

The project site is currently developed with administrative office buildings of the former Newport Beach City Hall Complex (now vacated) and the existing Newport Beach Fire Department Fire Station No. 2 (Fire Station No. 2). The former Newport Beach City Hall Complex would be redeveloped and the Fire Station No. 2 would remain in operation with the proposed project. The existing fire station access from Finley Avenue would be relocated to Via Oporto.

The proposed project is planned to open in 2017; therefore, in accordance with the City of Newport Beach Traffic Phasing Ordinance (TPO), traffic conditions are measured during forecast year 2018 conditions.

Exhibit 6 shows the proposed project site plan.

Project Trip Generation

To calculate trips forecast to be generated by the proposed project, *Institute of Transportation Engineers (ITE)* trip generation rates were utilized. Table 3 summarizes the *ITE* trip generation rates used to calculate the number of trips forecast to be generated by the proposed project.

Table 3
Proposed Project Trip Generation Rates

Land Use (ITE Code)	Units	AM Peak Hour Rates			PM Peak Hour Rates			Daily Trip Rate
		In	Out	Total	In	Out	Total	
Hotel (310)	Room	0.31	0.22	0.53	0.31	0.29	0.60	8.17

Source: *ITE Trip Generation Manual, 9th Edition, 2012.*

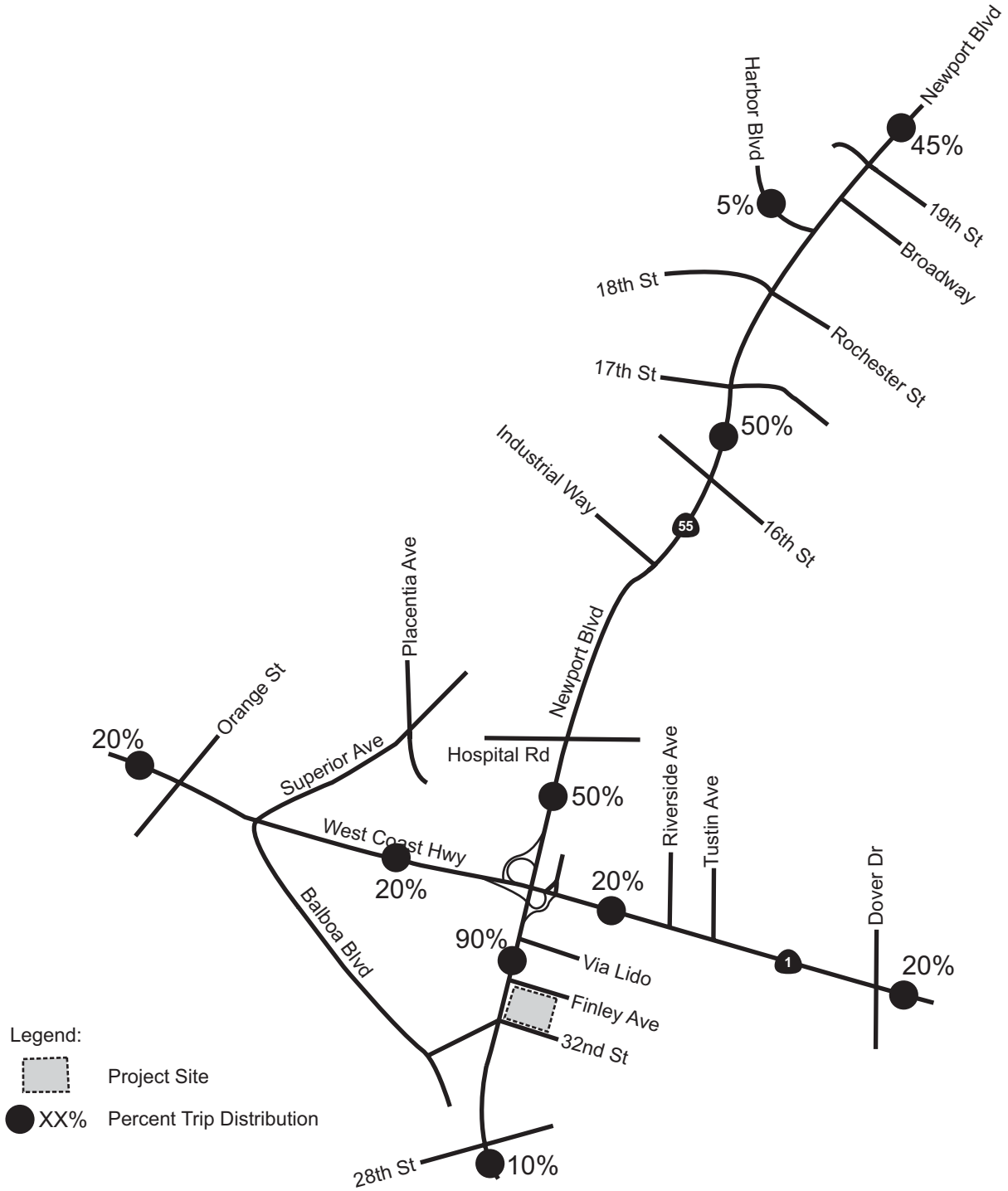
Table 4 summarizes the trips forecast to be generated by the proposed project utilizing the *ITE* trip generation rates shown in Table 3.

Table 4
Proposed Project Trip Generation

Land Use	AM Peak Hour Trips			PM Peak Hour Trips			Daily Trips
	In	Out	Total	In	Out	Total	
130-room Hotel	40	29	69	40	38	78	1,062

As shown in Table 4, the proposed project is forecast to generate approximately 1,062 daily trips, which includes approximately 69 a.m. peak hour trips and approximately 78 p.m. peak hour trips.

DRAFT- OLD CITY HALL/LIDO HOUSE HOTEL



Not to Scale

RBF A Baker Company

Forecast Percent Trip Distribution of Proposed Project

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Exhibit 7

NEWPORT COAST

TABLE 12-1

TRIP GENERATION RATES[1]

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

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TABLE 12-2

PROJECT TRIP GENERATION

TAZ	PLANNING AREA	LAND USE	QUANTITY	UNITS[1]	PEAK HOUR AM IN	PEAK HOUR AM OUT	PEAK HOUR PM IN	PEAK HOUR PM OUT	DAILY
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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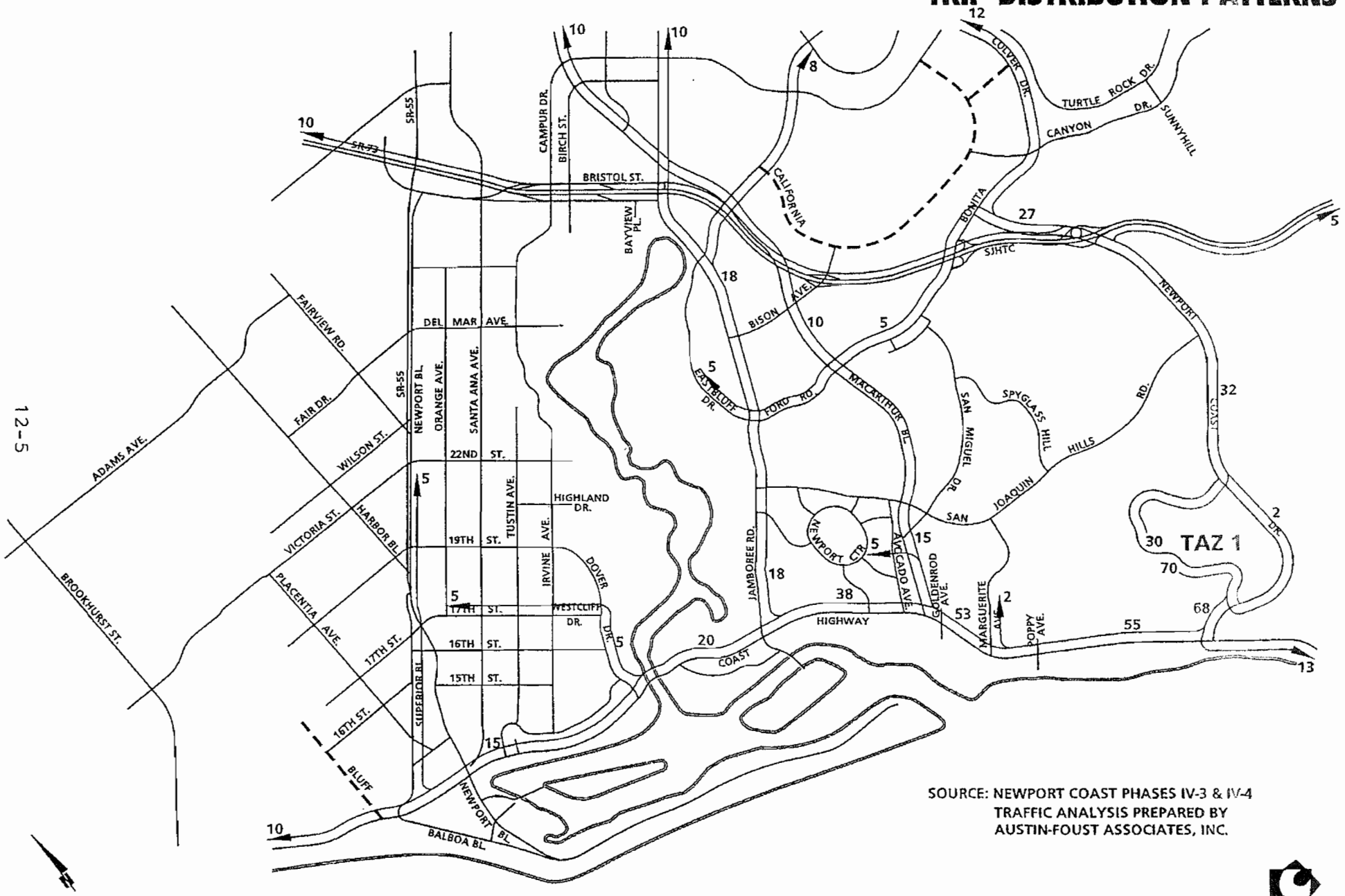
- 70% OF DU'S ARE BUILT. ONLY 30% IS CUMULATIVE PROJECT THE

- ASSUME STATE PARK IS EXISTING.

NEWPORT COAST TRAFFIC ANALYSIS ZONE 1
TRIP DISTRIBUTION PATTERNS



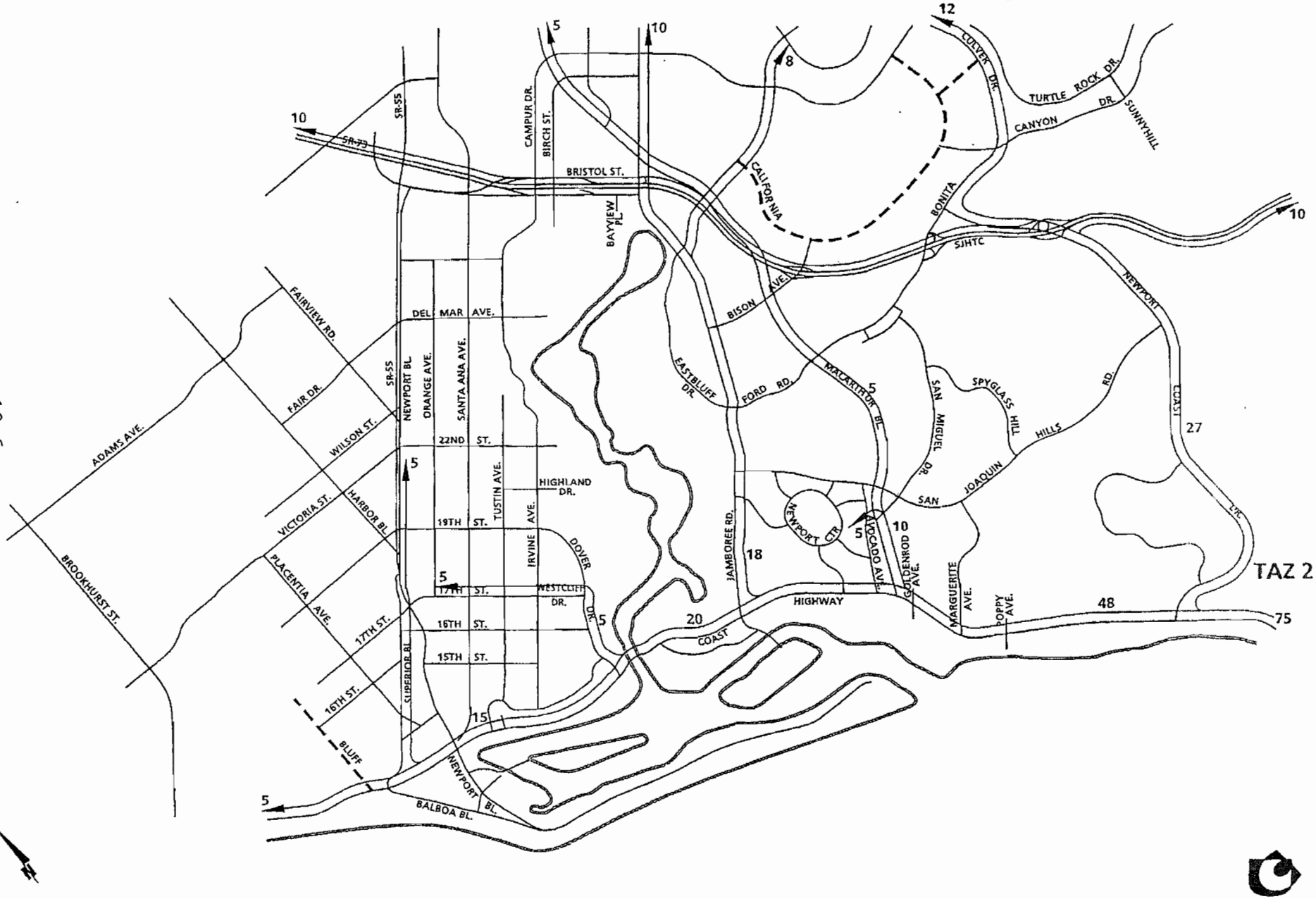
SOURCE: NEWPORT COAST PHASES IV-3 & IV-4
TRAFFIC ANALYSIS PREPARED BY
AUSTIN-FOUST ASSOCIATES, INC.

12-5

URBAN CROSSROADS

EXHIBI 12-B

NEWPORT COAST TRAFFIC ANALYSIS ZONE 2
TRIP DISTRIBUTION PATTERNS



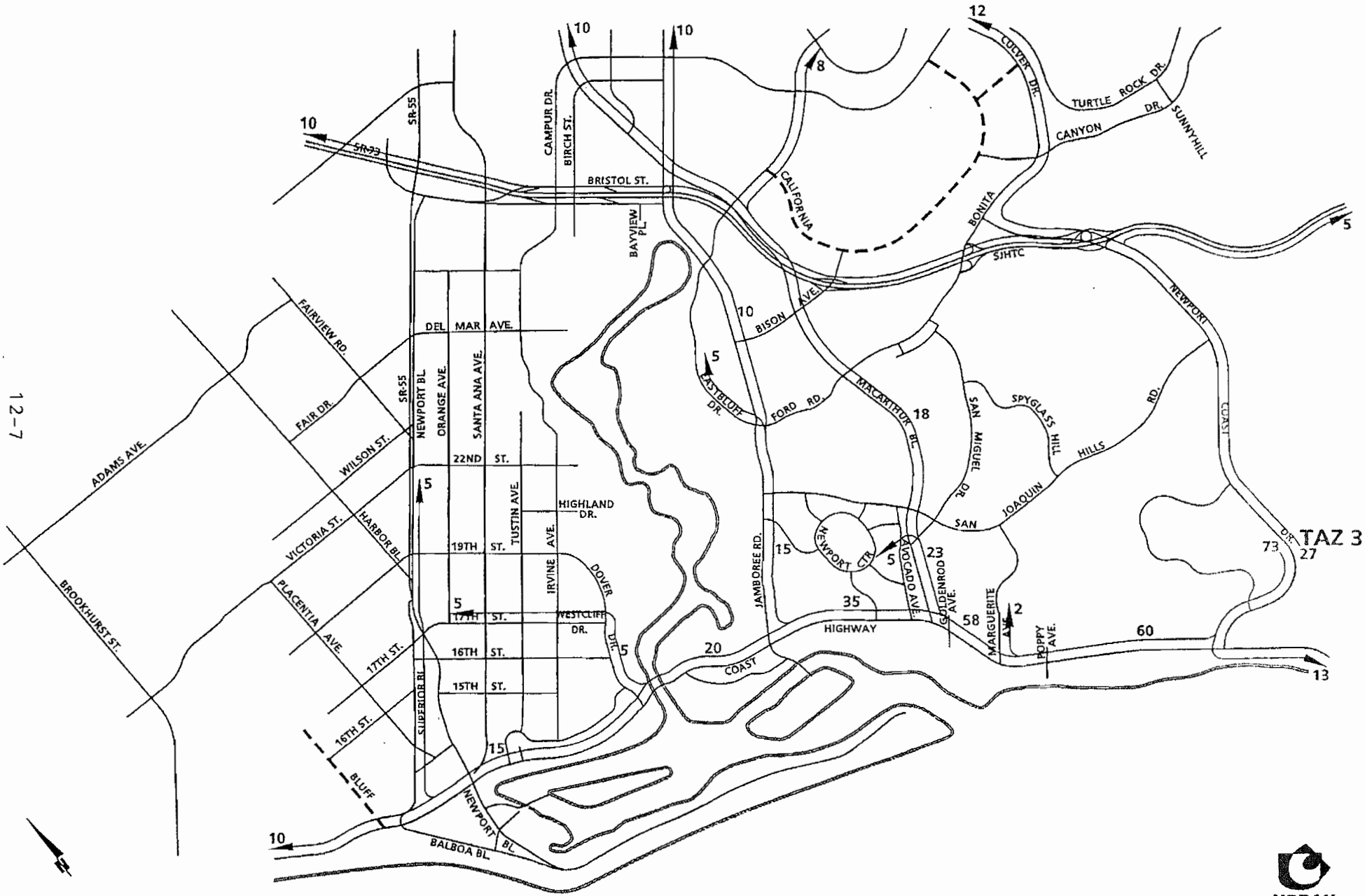
12-6

NEWPORT BEACH CUMULATIVE TRAFFIC ANALYSIS, Newport Beach, California - 00636:17

URBAN CROSSROADS

EXHIBIT

NEWPORT COAST TRAFFIC ANALYSIS ZONE 3
TRIP DISTRIBUTION PATTERNS

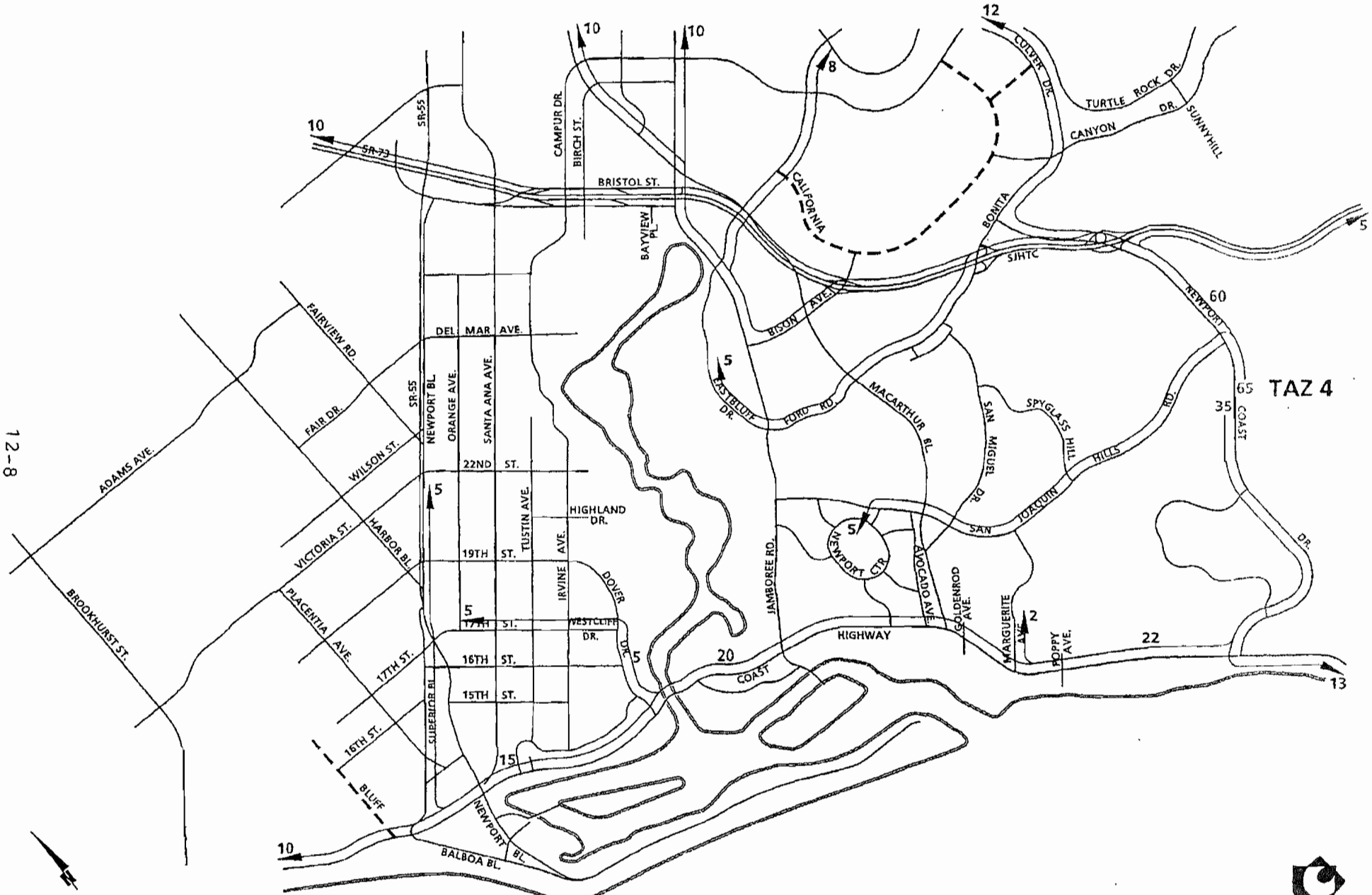


NEWPORT BEACH CUMULATIVE TRAFFIC ANALYSIS, Newport Beach, California - 00636:11

URBAN CROSSROADS

EXHIBIT 12-C

NEWPORT COAST TRAFFIC ANALYSIS ZONE 4
TRIP DISTRIBUTION PATTERNS



12-8

NEWPORT BEACH CUMULATIVE TRAFFIC ANALYSIS, Newport Beach, California - 00636:12

URBAN CROSSROADS

APPENDIX H

Explanation and Calculation of Intersection Delay

EXPLANATION AND CALCULATION OF INTERSECTION LEVEL OF SERVICE USING DELAY METHODOLOGY

The levels of service at the unsignalized and signalized intersections are calculated using the delay methodology in the Highway Capacity Manual. This methodology views an intersection as consisting of several lane groups. A lane group is a set of lanes serving a movement. If there are two northbound left turn lanes, then the lane group serving the northbound left turn movement has two lanes. Similarly, there may be three lanes in the lane group serving the northbound through movement, one lane in the lane group serving the northbound right turn movement, and so forth. It is also possible for one lane to serve two lane groups. A shared lane might result in there being 1.5 lanes in the northbound left turn lane group and 2.5 lanes in the northbound through lane group.

For each lane group, there is a capacity. That capacity is calculated by multiplying the number of lanes in the lane group times a theoretical maximum lane capacity per lane time's 12 adjustment factors.

Each of the 12 adjustment factors has a value of approximately 1.00. A value less than 1.00 is generally assigned when a less than desirable condition occurs.

The 12 adjustment factors are as follows:

1. Peak hour factor (to account for peaking within the peak hour)
2. Lane utilization factor (to account for not all lanes loading equally)
3. Lane width
4. Percent of heavy trucks
5. Approach grade
6. Parking
7. Bus stops at intersections
8. Area type (CBD or other)
9. Right turns
10. Left turns

11. Pedestrian activity

12. Signal progression

The maximum theoretical lane capacity and the 12 adjustment factors for it are all unknowns for which approximate estimates have been recommended in the Highway Capacity Manual. For the most part, the recommended values are not based on statistical analysis but rather on educated estimates. However, it is possible to use the delay method and get reasonable results as will be discussed below.

Once the lane group volume is known and the lane group capacity is known, a volume to capacity ratio can be calculated for the lane group.

With a volume to capacity ratio calculated, average delay per vehicle in a lane group can be estimated. The average delay per vehicle in a lane group is calculated using a complex formula provided by the Highway Capacity Manual, which can be simplified and described as follows:

Delay per vehicle in a lane group is a function of the following:

1. Cycle length

2. Amount of red time faced by a lane group

3. Amount of yellow time for that lane group

4. The volume to capacity ratio of the lane group

The average delay per vehicle for each lane group is calculated, and eventually an overall average delay for all vehicles entering the intersection is calculated. This average delay per vehicle is then used to judge Level of Service. The Level of Services are defined in the table that follows this discussion.

Experience has shown that when a maximum lane capacity of 1,900 vehicles per hour is used (as recommended in the Highway Capacity Manual), little or no yellow time penalty is used, and none of the 12 penalty factors are applied, calculated delay is realistic. The delay calculation for instance assumes that yellow time is totally unused. Yet experience shows that most of the yellow time is used.

An idiosyncrasy of the delay methodology is that it is possible to add traffic to an intersection and reduce the average total delay per vehicle. If the average total delay is 30 seconds per vehicle for all vehicles traveling through an intersection, and traffic is

added to a movement that has an average total delay of 15 seconds per vehicle, then the overall average total delay is reduced.

The delay calculation for a lane group is based on a concept that the delay is a function of the amount of unused capacity available. As the volume approaches capacity and there is no more unused capacity available, then the delay rapidly increases. Delay is not proportional to volume, but rather increases rapidly as the unused capacity approaches zero.

Because delay is not linearly related to volumes, the delay does not reflect how close an intersection is to overloading. If an intersection is operating at Level of Service C and has an average total delay of 18 seconds per vehicle, you know very little as to what percent the traffic can increase before Level of Service E is reached.

LEVEL OF SERVICE DESCRIPTION[1]

Level of Service	Description	Average Total Delay Per Vehicle (Seconds)	
		Signalized	Unsignalized
A	Level of Service A occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0 to 10.00	0 to 10.00
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average total delay.	10.01 to 20.00	10.01 to 15.00
C	Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	20.01 to 35.00	15.01 to 25.00
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	35.01 to 55.00	25.01 to 35.00
E	Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent occurrences.	55.01 to 80.00	35.01 to 50.00
F	Level of Service F is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	80.01 and up	50.01 and up

[1] Source: Highway Capacity Manual Special Report 209, Transportation Research Board, National Research Council, Washington, D.C., 2000.

Existing (Year 2014)

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.846
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	11.2
Optimal Cycle: OPTIMIZED		Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	0 0	2 0	1	0 0	3 0	1
Volume Module:												
Base Vol:	0	0	0	455	0	240	0	2286	136	0	808	374
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	460	0	242	0	2309	137	0	816	378
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	460	0	242	0	2309	0	0	816	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	460	0	242	0	2309	0	0	816	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	460	0	242	0	2309	0	0	816	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	1.00	0.95	1.00	1.00	0.91	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3502	0	1615	0	3610	1900	0	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.15	0.00	0.64	0.00	0.00	0.16	0.00
Crit Moves:						****		****				
Green/Cycle:	0.00	0.00	0.00	0.18	0.00	0.18	0.00	0.76	0.00	0.00	0.76	0.00
Volume/Cap:	0.00	0.00	0.00	0.74	0.00	0.85	0.00	0.85	0.00	0.00	0.21	0.00
Delay/Veh:	0.0	0.0	0.0	28.1	0.0	44.0	0.0	7.6	0.0	0.0	2.1	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:	0.0	0.0	0.0	28.1	0.0	44.0	0.0	7.6	0.0	0.0	2.1	0.0
LOS by Move:	A	A	A	C	A	D	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	6	0	7	0	18	0	0	2	0

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.671
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	11.2
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	0 0	2 0	1	0 0	3 0	1
Volume Module:												
Base Vol:	0	0	0	548	0	404	0	1208	89	0	1919	598
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	553	0	408	0	1220	90	0	1938	604
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	553	0	408	0	1220	0	0	1938	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	553	0	408	0	1220	0	0	1938	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	553	0	408	0	1220	0	0	1938	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	1.00	0.95	1.00	1.00	0.91	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3502	0	1615	0	3610	1900	0	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.25	0.00	0.34	0.00	0.00	0.37	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.38	0.00	0.38	0.00	0.56	0.00	0.00	0.56	0.00
Volume/Cap:	0.00	0.00	0.00	0.42	0.00	0.67	0.00	0.61	0.00	0.00	0.67	0.00
Delay/Veh:	0.0	0.0	0.0	14.1	0.0	18.5	0.0	9.4	0.0	0.0	10.0	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:	0.0	0.0	0.0	14.1	0.0	18.5	0.0	9.4	0.0	0.0	10.0	0.0
LOS by Move:	A	A	A	B	A	B	A	A	A	A	B	A
HCM2kAvgQ:	0	0	0	4	0	8	0	9	0	0	10	0

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.4
Optimal Cycle: OPTIMIZED		Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	2	2	3	65	0	342	283	2262	11	13	1233	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	2	2	3	65	0	342	286	2285	11	13	1245	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	65	0	342	286	2285	11	13	1245	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	65	0	342	286	2285	11	13	1245	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	65	0	342	286	2285	11	13	1245	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	0.91	0.79	1.00	0.85	0.95	0.95	0.95	0.95	0.91	0.85
Lanes:	0.29	0.28	0.43	1.00	0.00	1.00	1.00	1.99	0.01	1.00	3.00	1.00
Final Sat.:	495	495	743	1501	0	1615	1805	3589	17	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.21	0.16	0.64	0.64	0.01	0.24	0.04
Crit Moves:						****		****		****		
Green/Cycle:	0.07	0.07	0.07	0.07	0.00	0.40	0.33	0.82	0.82	0.01	0.50	0.50
Volume/Cap:	0.06	0.06	0.06	0.63	0.00	0.53	0.48	0.77	0.77	0.77	0.48	0.07
Delay/Veh:	26.3	26.3	26.3	38.9	0.0	14.6	16.6	4.0	4.0	141.6	10.0	7.8
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:	26.3	26.3	26.3	38.9	0.0	14.6	16.6	4.0	4.0	141.6	10.0	7.8
LOS by Move:	C	C	C	D	A	B	B	A	A	F	A	A
HCM2kAvgQ:	0	0	0	2	0	5	5	13	13	1	6	1

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.825
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 13.5
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Ovl				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0	0 1!	0	0	0	1	0	0 1	1	0	1	1 0	1	0	3	0 1
Volume Module:																
Base Vol:	9	12	12		73	4	441		247	1552	13		37	2412	55	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.01	1.01	1.01		1.01	1.01	1.01	
Initial Bse:	9	12	12		73	4	441		249	1568	13		37	2436	56	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	9	12	12		73	4	441		249	1568	13		37	2436	56	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	9	12	12		73	4	441		249	1568	13		37	2436	56	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	9	12	12		73	4	441		249	1568	13		37	2436	56	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.90	0.90	0.90		0.77	0.77	0.85		0.95	0.95	0.95		0.95	0.91	0.85	
Lanes:	0.27	0.37	0.36		0.95	0.05	1.00		1.00	1.98	0.02		1.00	3.00	1.00	
Final Sat.:	468	624	624		1383	76	1615		1805	3576	30		1805	5187	1615	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.02	0.02		0.05	0.05	0.27		0.14	0.44	0.44		0.02	0.47	0.03	
Crit Moves:							****		****					****		
Green/Cycle:	0.16	0.16	0.16		0.16	0.16	0.33		0.17	0.70	0.70		0.03	0.57	0.57	
Volume/Cap:	0.12	0.12	0.12		0.32	0.32	0.83		0.83	0.62	0.62		0.62	0.83	0.06	
Delay/Veh:	21.6	21.6	21.6		23.0	23.0	28.6		40.8	5.2	5.2		47.3	12.5	5.8	
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:	21.6	21.6	21.6		23.0	23.0	28.6		40.8	5.2	5.2		47.3	12.5	5.8	
LOS by Move:	C	C	C		C	C	C		D	A	A		D	B	A	
HCM2kAvgQ:	1	1	1		2	2	10		7	9	9		2	16	0	

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec):	75	Critical Vol./Cap.(X):	0.733
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	24.2
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	1	0 0	1! 0	0	1	0 1	1 0	0 0	2 1	0
Volume Module:												
Base Vol:	0	0	0	42	0	15	25	2298	0	0	1302	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	42	0	15	25	2321	0	0	1315	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	42	0	15	25	2321	0	0	1315	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	42	0	15	25	2321	0	0	1315	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	42	0	15	25	2321	0	0	1315	35
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.96	1.00	0.96	0.95	0.95	0.95	1.00	0.91	0.91
Lanes:	0.00	0.00	1.00	0.74	0.00	0.26	1.00	2.00	0.00	0.00	2.92	0.08
Final Sat.:	0	0	1900	1350	0	482	1805	3610	0	0	5031	135
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.03	0.01	0.64	0.00	0.00	0.26	0.26
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.03	0.00	0.03	0.63	0.89	0.00	0.00	0.26	0.26
Volume/Cap:	0.00	0.00	0.00	1.02	0.00	1.02	0.02	0.72	0.00	0.00	1.02	1.02
Delay/Veh:	0.0	0.0	0.0	161.5	0.0	161.5	5.1	2.1	0.0	0.0	56.8	56.8
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:	0.0	0.0	0.0	161.5	0.0	161.5	5.1	2.1	0.0	0.0	56.8	56.8
LOS by Move:	A	A	A	F	A	F	A	A	A	A	E	E
HCM2kAvgQ:	0	0	0	4	0	4	0	10	0	0	19	19

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.631
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 3.8
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Permitted			Permitted			Protected				Permitted			
Rights:	Include			Include			Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0		0	0	0	
Lanes:	0 1	0	0 0	0	0 1!	0 0	1	0 1	1 0		0	0 2	1	0
Volume Module:														
Base Vol:	2	1	0	37	2	25	63	1575	5	0	2466	40		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01		
Initial Bse:	2	1	0	37	2	25	64	1591	5	0	2491	40		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Volume:	2	1	0	37	2	25	64	1591	5	0	2491	40		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	2	1	0	37	2	25	64	1591	5	0	2491	40		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:	2	1	0	37	2	25	64	1591	5	0	2491	40		
Saturation Flow Module:														
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:	0.83	0.83	1.00	0.77	0.77	0.77	0.95	0.95	0.95	1.00	0.91	0.91		
Lanes:	0.67	0.33	0.00	0.58	0.03	0.39	1.00	1.99	0.01	0.00	2.95	0.05		
Final Sat.:	1056	528	0	844	46	570	1805	3599	11	0	5094	83		
Capacity Analysis Module:														
Vol/Sat:	0.00	0.00	0.00	0.04	0.04	0.04	0.04	0.44	0.44	0.00	0.49	0.49		
Crit Moves:					****		****				****			
Green/Cycle:	0.07	0.07	0.00	0.07	0.07	0.07	0.06	0.83	0.83	0.00	0.77	0.77		
Volume/Cap:	0.03	0.03	0.00	0.63	0.63	0.63	0.63	0.53	0.53	0.00	0.63	0.63		
Delay/Veh:	26.1	26.1	0.0	39.3	39.3	39.3	39.9	1.7	1.7	0.0	3.3	3.3		
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:	26.1	26.1	0.0	39.3	39.3	39.3	39.9	1.7	1.7	0.0	3.3	3.3		
LOS by Move:	C	C	A	D	D	D	D	A	A	A	A	A		
HCM2kAvgQ:	0	0	0	2	2	2	2	5	5	0	8	8		

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.659
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 14.4
Optimal Cycle: OPTIMIZED 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			
Lanes:	1	0	1	1	0		3	0	1	0	1		2	0	2	1	0		1	0	3	0	1	
Volume Module:																								
Base Vol:	24	45	42				904	44	182				144	1825	21				17	1205	684			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.02	1.02	1.02				1.02	1.02	1.02			
Initial Bse:	24	45	42				904	44	182				147	1862	21				17	1229	698			
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:	24	45	42				904	44	182				147	1862	21				17	1229	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	24	45	42				904	44	182				147	1862	21				17	1229	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:	24	45	42				904	44	182				147	1862	21				17	1229	0			
Saturation Flow Module:																								
Sat/Lane:	1900	1900	1900				1900	1900	1900				1900	1900	1900				1900	1900	1900			
Adjustment:	0.95	0.88	0.88				0.92	1.00	0.85				0.92	0.91	0.91				0.95	0.91	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.:	1805	1733	1617				5253	1900	1615				3502	5118	59				1805	5187	1900			
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.03	0.03				0.17	0.02	0.11				0.04	0.36	0.36				0.01	0.24	0.00			
Crit Moves:		****					****							****					****					
Green/Cycle:	0.04	0.04	0.04				0.26	0.26	0.26				0.09	0.55	0.55				0.01	0.48	0.00			
Volume/Cap:	0.34	0.66	0.66				0.66	0.09	0.43				0.49	0.66	0.66				0.66	0.49	0.00			
Delay/Veh:	30.9	40.1	40.1				21.0	16.8	19.2				27.5	10.1	10.1				77.3	10.7	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:	30.9	40.1	40.1				21.0	16.8	19.2				27.5	10.1	10.1				77.3	10.7	0.0			
LOS by Move:	C	D	D				C	B	B				C	B	B				E	B	A			
HCM2kAvgQ:	1	2	2				6	1	3				2	10	10				1	6	0			

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.726
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 14.4
Optimal Cycle: OPTIMIZED 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
Lanes:	1 0	1	1 0	3 0	1	0 1	2 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	16	32	50	840	49	136	119	1477	22	48	2054	1170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	16	32	50	840	49	136	121	1507	22	49	2095	1193
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:	16	32	50	840	49	136	121	1507	22	49	2095	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	32	50	840	49	136	121	1507	22	49	2095	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:	16	32	50	840	49	136	121	1507	22	49	2095	0
Saturation Flow Module:												
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	1641	1641	5253	1900	1615	3502	5101	76	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.03	0.16	0.03	0.08	0.03	0.30	0.30	0.03	0.40	0.00
Crit Moves:			****	****			****				****	
Green/Cycle:	0.04	0.04	0.04	0.22	0.22	0.22	0.05	0.55	0.55	0.05	0.56	0.00
Volume/Cap:	0.21	0.46	0.73	0.73	0.12	0.38	0.73	0.53	0.53	0.53	0.73	0.00
Delay/Veh:	29.2	30.0	49.2	24.0	18.8	20.6	42.8	8.7	8.7	33.8	10.8	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:	29.2	30.0	49.2	24.0	18.8	20.6	42.8	8.7	8.7	33.8	10.8	0.0
LOS by Move:	C	C	D	C	B	C	D	A	A	C	B	A
HCM2kAvgQ:	1	1	2	7	1	3	3	7	7	2	12	0

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing (Year 2014)
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.711
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 9.0
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	383	13	25	30	5	36	30	2421	300	37	1476	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	383	13	25	30	5	36	31	2469	306	38	1506	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	383	13	25	30	5	36	31	2469	306	38	1506	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	383	13	25	30	5	36	31	2469	306	38	1506	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	383	13	25	30	5	36	31	2469	306	38	1506	15
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	0.87	0.87	0.95	0.91	0.85	0.95	0.91	0.91
Lanes:	2.77	0.08	0.15	1.00	0.12	0.88	1.00	3.00	1.00	1.00	3.96	0.04
Final Sat.:	4847	138	265	1805	201	1448	1805	5187	1615	1805	6840	70
Capacity Analysis Module:												
Vol/Sat:	0.08	0.09	0.09	0.02	0.02	0.02	0.02	0.48	0.19	0.02	0.22	0.22
Crit Moves:		****			****			****			****	
Green/Cycle:	0.13	0.13	0.13	0.03	0.03	0.03	0.05	0.67	0.67	0.03	0.65	0.65
Volume/Cap:	0.60	0.71	0.71	0.48	0.71	0.71	0.34	0.71	0.28	0.71	0.34	0.34
Delay/Veh:	25.9	28.9	28.9	34.0	62.5	62.5	29.8	6.9	4.2	65.1	4.8	4.8
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:	25.9	28.9	28.9	34.0	62.5	62.5	29.8	6.9	4.2	65.1	4.8	4.8
LOS by Move:	C	C	C	C	E	E	C	A	A	E	A	A
HCM2kAvgQ:	4	5	5	1	2	2	1	12	2	2	4	4

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing (Year 2014)
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.675
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	9.8
Optimal Cycle: OPTIMIZED		Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	410	8	29	23	16	38	50	1895	473	57	2863	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	410	8	29	23	16	38	51	1933	482	58	2920	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	410	8	29	23	16	38	51	1933	482	58	2920	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	410	8	29	23	16	38	51	1933	482	58	2920	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	410	8	29	23	16	38	51	1933	482	58	2920	23
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	0.89	0.89	0.95	0.91	0.85	0.95	0.91	0.91
Lanes:	2.80	0.04	0.16	1.00	0.30	0.70	1.00	3.00	1.00	1.00	3.97	0.03
Final Sat.:	4870	81	293	1805	503	1195	1805	5187	1615	1805	6854	55
Capacity Analysis Module:												
Vol/Sat:	0.08	0.10	0.10	0.01	0.03	0.03	0.03	0.37	0.30	0.03	0.43	0.43
Crit Moves:		****				****	****				****	
Green/Cycle:	0.15	0.15	0.15	0.05	0.05	0.05	0.04	0.62	0.62	0.05	0.63	0.63
Volume/Cap:	0.57	0.68	0.68	0.27	0.68	0.68	0.68	0.60	0.48	0.60	0.68	0.68
Delay/Veh:	24.9	27.0	27.0	29.3	48.6	48.6	49.9	7.2	6.6	37.9	7.5	7.5
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:	24.9	27.0	27.0	29.3	48.6	48.6	49.9	7.2	6.6	37.9	7.5	7.5
LOS by Move:	C	C	C	C	D	D	D	A	A	D	A	A
HCM2kAvgQ:	4	5	5	1	2	2	2	9	5	2	11	11

Note: Queue reported is the number of cars per lane.

Existing + Growth (Year 2017) + Approved Projects
+ Cumulative Projects

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.933
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 15.6
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	2 0	0 0	1	0 0	2 0	1	0 0	3 0	1
Volume Module:												
Base Vol:	0	0	0	455	0	240	0	2286	136	0	808	374
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	473	0	250	0	2377	141	0	840	389
Added Vol:	0	0	0	14	0	0	0	100	0	0	124	12
PasserByVol:	0	0	0	26	0	35	0	31	4	0	46	6
Initial Fut:	0	0	0	513	0	285	0	2508	145	0	1010	407
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	513	0	285	0	2508	0	0	1010	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	513	0	285	0	2508	0	0	1010	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	513	0	285	0	2508	0	0	1010	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	1.00	0.95	1.00	1.00	0.91	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3502	0	1615	0	3610	1900	0	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.18	0.00	0.69	0.00	0.00	0.19	0.00
Crit Moves:						****		****				
Green/Cycle:	0.00	0.00	0.00	0.19	0.00	0.19	0.00	0.74	0.00	0.00	0.74	0.00
Volume/Cap:	0.00	0.00	0.00	0.78	0.00	0.93	0.00	0.93	0.00	0.00	0.26	0.00
Delay/Veh:	0.0	0.0	0.0	28.9	0.0	58.4	0.0	13.2	0.0	0.0	2.5	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:	0.0	0.0	0.0	28.9	0.0	58.4	0.0	13.2	0.0	0.0	2.5	0.0
LOS by Move:	A	A	A	C	A	E	A	B	A	A	A	A
HCM2kAvgQ:	0	0	0	7	0	9	0	27	0	0	2	0

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing + Growth (Year 2017 - Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

****

Cycle (sec):	60	Critical Vol./Cap.(X):	0.746
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	12.5
Optimal Cycle: OPTIMIZED		Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	0 0	2	0 1	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	548	0	404	0	1208	89	0	1919	598
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	570	0	420	0	1256	93	0	1996	622
Added Vol:	0	0	0	49	0	0	0	157	0	0	152	17
PasserByVol:	0	0	0	41	0	19	0	90	7	0	51	11
Initial Fut:	0	0	0	660	0	439	0	1503	100	0	2199	650
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	660	0	439	0	1503	0	0	2199	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	660	0	439	0	1503	0	0	2199	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	660	0	439	0	1503	0	0	2199	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	1.00	0.95	1.00	1.00	0.91	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3502	0	1615	0	3610	1900	0	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.27	0.00	0.42	0.00	0.00	0.42	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.36	0.00	0.36	0.00	0.57	0.00	0.00	0.57	0.00
Volume/Cap:	0.00	0.00	0.00	0.52	0.00	0.75	0.00	0.73	0.00	0.00	0.75	0.00
Delay/Veh:	0.0	0.0	0.0	15.3	0.0	21.8	0.0	11.0	0.0	0.0	10.8	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:	0.0	0.0	0.0	15.3	0.0	21.8	0.0	11.0	0.0	0.0	10.8	0.0
LOS by Move:	A	A	A	B	A	C	A	B	A	A	B	A
HCM2kAvgQ:	0	0	0	5	0	9	0	12	0	0	13	0

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Note: Queue reported is the number of cars per lane.

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Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec): 65 Critical Vol./Cap.(X): 0.841
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 9.6
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	2	2	3	65	0	342	283	2262	11	13	1233	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	2	2	3	65	0	342	294	2352	11	14	1282	60
Added Vol:	0	0	0	0	0	13	33	94	0	0	172	0
PasserByVol:	0	0	0	1	0	1	0	128	0	0	96	0
Initial Fut:	2	2	3	66	0	356	327	2574	11	14	1550	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	66	0	356	327	2574	11	14	1550	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	66	0	356	327	2574	11	14	1550	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	66	0	356	327	2574	11	14	1550	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	1.00	1.00	0.85	0.95	0.95	0.95	0.95	0.91	0.85
Lanes:	0.29	0.28	0.43	1.00	0.00	1.00	1.00	1.99	0.01	1.00	3.00	1.00
Final Sat.:	466	466	699	1900	0	1615	1805	3590	16	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.22	0.18	0.72	0.72	0.01	0.30	0.04
Crit Moves:						****		****		****		
Green/Cycle:	0.05	0.05	0.05	0.05	0.00	0.37	0.33	0.85	0.85	0.01	0.54	0.54
Volume/Cap:	0.09	0.09	0.09	0.75	0.00	0.59	0.56	0.84	0.84	0.84	0.56	0.07
Delay/Veh:	30.2	30.2	30.2	59.8	0.0	18.1	19.3	4.7	4.7	177.9	10.2	7.3
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:	30.2	30.2	30.2	59.8	0.0	18.1	19.3	4.7	4.7	177.9	10.2	7.3
LOS by Move:	C	C	C	E	A	B	B	A	A	F	B	A
HCM2kAvgQ:	0	0	0	3	0	7	6	17	17	1	8	1

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.937
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 18.7
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	9	12	12	73	4	441	247	1552	13	37	2412	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	9	12	12	73	4	441	257	1614	14	38	2508	57
Added Vol:	0	0	0	0	0	43	28	192	0	0	154	0
PasserByVol:	0	0	0	2	0	0	1	144	0	0	155	1
Initial Fut:	9	12	12	75	4	484	286	1950	14	38	2817	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	12	12	75	4	484	286	1950	14	38	2817	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	12	12	75	4	484	286	1950	14	38	2817	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	12	12	75	4	484	286	1950	14	38	2817	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	0.90	0.77	0.77	0.85	0.95	0.95	0.95	0.95	0.91	0.85
Lanes:	0.27	0.37	0.36	0.95	0.05	1.00	1.00	1.99	0.01	1.00	3.00	1.00
Final Sat.:	468	624	624	1380	74	1615	1805	3582	25	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.05	0.05	0.30	0.16	0.54	0.54	0.02	0.54	0.04
Crit Moves:						****	****				****	
Green/Cycle:	0.15	0.15	0.15	0.15	0.15	0.32	0.17	0.72	0.72	0.03	0.58	0.58
Volume/Cap:	0.13	0.13	0.13	0.36	0.36	0.94	0.94	0.76	0.76	0.76	0.94	0.06
Delay/Veh:	22.3	22.3	22.3	23.9	23.9	44.5	59.7	6.4	6.4	76.1	18.1	5.5
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:	22.3	22.3	22.3	23.9	23.9	44.5	59.7	6.4	6.4	76.1	18.1	5.5
LOS by Move:	C	C	C	C	C	D	E	A	A	E	B	A
HCM2kAvgQ:	1	1	1	2	2	14	10	13	13	2	24	0

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec): 90 Critical Vol./Cap.(X): 0.810
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 46.5
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	1	0 0	1! 0	0	1	0 1	1 0	0 0	2 1	0
Volume Module:												
Base Vol:	0	0	0	42	0	15	25	2298	0	0	1302	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	42	0	15	26	2390	0	0	1354	36
Added Vol:	0	0	0	0	0	0	0	94	0	0	172	0
PasserByVol:	0	0	0	0	0	0	0	133	0	0	96	0
Initial Fut:	0	0	0	42	0	15	26	2617	0	0	1622	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:	0	0	0	42	0	15	26	2617	0	0	1622	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	42	0	15	26	2617	0	0	1622	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:	0	0	0	42	0	15	26	2617	0	0	1622	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.96	1.00	0.96	0.95	0.95	0.95	1.00	0.91	0.91
Lanes:	0.00	0.00	1.00	0.74	0.00	0.26	1.00	2.00	0.00	0.00	2.93	0.07
Final Sat.:	0	0	1900	1350	0	482	1805	3610	0	0	5058	114
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.03	0.01	0.72	0.00	0.00	0.32	0.32
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.03	0.00	0.03	0.63	0.91	0.00	0.00	0.28	0.28
Volume/Cap:	0.00	0.00	0.00	1.11	0.00	1.11	0.02	0.80	0.00	0.00	1.15	1.15
Delay/Veh:	0.0	0.0	0.0	203.7	0.0	203.7	6.3	3.0	0.0	0.0	111	110.5
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:	0.0	0.0	0.0	203.7	0.0	203.7	6.3	3.0	0.0	0.0	111	110.5
LOS by Move:	A	A	A	F	A	F	A	A	A	A	F	F
HCM2kAvgQ:	0	0	0	4	0	4	0	16	0	0	30	30

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing + Growth (Year 2017 - Approved Projects - Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.713
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 4.3
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	0	0 0	1! 0	0	1 0	1 1	0	0 0	2 1	0
Volume Module:												
Base Vol:	2	1	0	37	2	25	63	1575	5	0	2466	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	2	1	0	37	2	25	66	1638	5	0	2565	42
Added Vol:	0	0	0	0	0	0	0	192	0	0	154	0
PasserByVol:	0	0	0	0	0	0	0	146	0	0	157	0
Initial Fut:	2	1	0	37	2	25	66	1976	5	0	2876	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	1	0	37	2	25	66	1976	5	0	2876	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	1	0	37	2	25	66	1976	5	0	2876	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	1	0	37	2	25	66	1976	5	0	2876	42
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	1.00	0.81	0.81	0.81	0.95	0.95	0.95	1.00	0.91	0.91
Lanes:	0.67	0.33	0.00	0.58	0.03	0.39	1.00	1.99	0.01	0.00	2.96	0.04
Final Sat.:	1148	574	0	893	48	603	1805	3601	9	0	5103	74
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.04	0.04	0.04	0.55	0.55	0.00	0.56	0.56
Crit Moves:					****		****				****	
Green/Cycle:	0.06	0.06	0.00	0.06	0.06	0.06	0.05	0.84	0.84	0.00	0.79	0.79
Volume/Cap:	0.03	0.03	0.00	0.68	0.68	0.68	0.71	0.65	0.65	0.00	0.72	0.72
Delay/Veh:	26.6	26.6	0.0	45.4	45.4	45.4	51.4	2.3	2.3	0.0	3.7	3.7
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:	26.6	26.6	0.0	45.4	45.4	45.4	51.4	2.3	2.3	0.0	3.7	3.7
LOS by Move:	C	C	A	D	D	D	D	A	A	A	A	A
HCM2kAvgQ:	0	0	0	3	3	3	3	8	8	0	11	11

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.732
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 15.0
Optimal Cycle: OPTIMIZED 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	
Lanes:	1	0	1	1 0	3	0	1	0 1	2	0	2	1 0	1	0	3	0 1
Volume Module:																
Base Vol:	24	45	42		904	44	182		144	1825	21		17	1205	684	
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:	24	45	42		904	44	182		151	1916	22		18	1265	718	
Added Vol:	0	0	0		38	0	0		0	94	0		0	172	61	
PasserByVol:	0	0	0		19	0	9		9	120	0		0	86	9	
Initial Fut:	24	45	42		961	44	191		160	2130	22		18	1523	788	
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:	24	45	42		961	44	191		160	2130	22		18	1523	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	24	45	42		961	44	191		160	2130	22		18	1523	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:	24	45	42		961	44	191		160	2130	22		18	1523	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.88	0.88		0.92	1.00	0.85		0.92	0.91	0.91		0.95	0.91	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.:	1805	1733	1617		5253	1900	1615		3502	5129	53		1805	5187	1900	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.03	0.03		0.18	0.02	0.12		0.05	0.42	0.42		0.01	0.29	0.00	
Crit Moves:		****			****					****			****			
Green/Cycle:	0.04	0.04	0.04		0.25	0.25	0.25		0.08	0.57	0.57		0.01	0.50	0.00	
Volume/Cap:	0.37	0.73	0.73		0.73	0.09	0.47		0.58	0.73	0.73		0.73	0.58	0.00	
Delay/Veh:	31.9	49.3	49.3		22.8	17.4	20.0		29.9	10.6	10.6		102.7	10.8	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:	31.9	49.3	49.3		22.8	17.4	20.0		29.9	10.6	10.6		102.7	10.8	0.0	
LOS by Move:	C	D	D		C	B	C		C	B	B		F	B	A	
HCM2kAvgQ:	1	2	2		7	1	4		3	12	12		1	8	0	

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.835
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 16.4
Optimal Cycle: OPTIMIZED 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
Lanes:	1 0	1	1 0	3 0	1	0 1	2 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	16	32	50	840	49	136	119	1477	22	48	2054	1170
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:	16	32	50	840	49	136	125	1551	23	50	2157	1229
Added Vol:	0	0	0	70	0	0	0	192	0	0	154	59
PasserByVol:	0	0	0	13	0	16	27	123	0	0	150	26
Initial Fut:	16	32	50	923	49	152	152	1866	23	50	2461	1314
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:	16	32	50	923	49	152	152	1866	23	50	2461	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	32	50	923	49	152	152	1866	23	50	2461	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:	16	32	50	923	49	152	152	1866	23	50	2461	0
Saturation Flow Module:												
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	1641	1641	5253	1900	1615	3502	5113	63	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.03	0.18	0.03	0.09	0.04	0.36	0.36	0.03	0.47	0.00
Crit Moves:			****	****			****				****	
Green/Cycle:	0.04	0.04	0.04	0.21	0.21	0.21	0.05	0.58	0.58	0.04	0.57	0.00
Volume/Cap:	0.24	0.53	0.84	0.84	0.12	0.45	0.84	0.63	0.63	0.63	0.84	0.00
Delay/Veh:	30.0	32.1	72.0	28.4	19.3	21.6	55.3	9.0	9.0	43.7	12.9	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:	30.0	32.1	72.0	28.4	19.3	21.6	55.3	9.0	9.0	43.7	12.9	0.0
LOS by Move:	C	C	E	C	B	C	E	A	A	D	B	A
HCM2kAvgQ:	1	1	3	9	1	3	4	9	9	2	17	0

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects - Cumulative Projects
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.809
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 12.6
Optimal Cycle: OPTIMIZED 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
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	383	13	25	30	5	36	30	2421	300	37	1476	15
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:	383	13	25	30	5	36	32	2542	315	39	1550	16
Added Vol:	0	7	0	22	4	26	39	93	0	0	207	19
PasserByVol:	1	0	1	44	0	18	35	95	0	0	64	0
Initial Fut:	384	20	26	96	9	80	106	2730	315	39	1821	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	384	20	26	96	9	80	106	2730	315	39	1821	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	384	20	26	96	9	80	106	2730	315	39	1821	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	384	20	26	96	9	80	106	2730	315	39	1821	35
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	0.87	0.87	0.95	0.91	0.85	0.95	0.91	0.91
Lanes:	2.74	0.11	0.15	1.00	0.10	0.90	1.00	3.00	1.00	1.00	3.93	0.07
Final Sat.:	4792	203	263	1805	166	1477	1805	5187	1615	1805	6766	129
Capacity Analysis Module:												
Vol/Sat:	0.08	0.10	0.10	0.05	0.05	0.05	0.06	0.53	0.20	0.02	0.27	0.27
Crit Moves:			****			****		****		****		
Green/Cycle:	0.12	0.12	0.12	0.07	0.07	0.07	0.12	0.65	0.65	0.03	0.56	0.56
Volume/Cap:	0.66	0.81	0.81	0.79	0.81	0.81	0.48	0.81	0.30	0.81	0.48	0.48
Delay/Veh:	27.6	34.6	34.6	56.9	61.9	61.9	26.3	9.3	4.7	92.3	8.2	8.2
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:	27.6	34.6	34.6	56.9	61.9	61.9	26.3	9.3	4.7	92.3	8.2	8.2
LOS by Move:	C	C	C	E	E	E	C	A	A	F	A	A
HCM2kAvgQ:	4	6	6	4	4	4	3	16	3	2	6	6

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.854
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 15.1
Optimal Cycle: OPTIMIZED 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	
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1		1 0	3 1	0	
Volume Module:														
Base Vol:	410	8	29	23	16	38	50	1895	473		57	2863	23	
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:	410	8	29	23	16	38	53	1990	497		60	3006	24	
Added Vol:	0	7	0	27	9	50	41	221	0		0	163	28	
PasserByVol:	3	0	0	71	0	29	26	83	2		0	127	0	
Initial Fut:	413	15	29	121	25	117	120	2294	499		60	3296	52	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	413	15	29	121	25	117	120	2294	499		60	3296	52	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
Reduced Vol:	413	15	29	121	25	117	120	2294	499		60	3296	52	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	413	15	29	121	25	117	120	2294	499		60	3296	52	
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:	2.76	0.08	0.16	1.00	0.18	0.82	1.00	3.00	1.00		1.00	3.94	0.06	
Final Sat.:	4830	145	281	1805	293	1371	1805	5187	1615		1805	6795	108	
Capacity Analysis Module:														
Vol/Sat:	0.09	0.10	0.10	0.07	0.09	0.09	0.07	0.44	0.31		0.03	0.49	0.49	
Crit Moves:		****				****	****					****		
Green/Cycle:	0.12	0.12	0.12	0.10	0.10	0.10	0.08	0.60	0.60		0.05	0.57	0.57	
Volume/Cap:	0.71	0.85	0.85	0.67	0.85	0.85	0.85	0.74	0.51		0.74	0.85	0.85	
Delay/Veh:	29.0	38.5	38.5	35.5	59.0	59.0	64.2	9.5	7.4		57.5	12.8	12.8	
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:	29.0	38.5	38.5	35.5	59.0	59.0	64.2	9.5	7.4		57.5	12.8	12.8	
LOS by Move:	C	D	D	D	E	E	E	A	A		E	B	B	
HCM2kAvgQ:	4	6	6	4	5	5	5	13	6		3	18	18	

Note: Queue reported is the number of cars per lane.

Existing + Growth (Year 2017) + Approved Projects + Cumulative Projects + Project

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.934
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 15.6
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	2 0	0 0	1	0 0	2 0	1	0 0	3 0	1
Volume Module:												
Base Vol:	0	0	0	455	0	240	0	2286	136	0	808	374
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	473	0	250	0	2377	141	0	840	389
Added Vol:	0	0	0	15	0	0	0	101	0	0	124	12
PasserByVol:	0	0	0	26	0	35	0	31	4	0	46	6
Initial Fut:	0	0	0	514	0	285	0	2509	145	0	1010	407
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	514	0	285	0	2509	0	0	1010	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	514	0	285	0	2509	0	0	1010	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	514	0	285	0	2509	0	0	1010	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	1.00	0.95	1.00	1.00	0.91	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3502	0	1615	0	3610	1900	0	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.18	0.00	0.70	0.00	0.00	0.19	0.00
Crit Moves:						****		****				
Green/Cycle:	0.00	0.00	0.00	0.19	0.00	0.19	0.00	0.74	0.00	0.00	0.74	0.00
Volume/Cap:	0.00	0.00	0.00	0.78	0.00	0.93	0.00	0.93	0.00	0.00	0.26	0.00
Delay/Veh:	0.0	0.0	0.0	29.0	0.0	58.4	0.0	13.3	0.0	0.0	2.5	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:	0.0	0.0	0.0	29.0	0.0	58.4	0.0	13.3	0.0	0.0	2.5	0.0
LOS by Move:	A	A	A	C	A	E	A	B	A	A	A	A
HCM2kAvgQ:	0	0	0	7	0	10	0	27	0	0	2	0

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing+Growth (Year 2017) +Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Newport Boulevard SB Ramp (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.746
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 12.5
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2 0	0	0 1	0 0	2	0 1	0 0	3	0 1
Volume Module:												
Base Vol:	0	0	0	548	0	404	0	1208	89	0	1919	598
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	570	0	420	0	1256	93	0	1996	622
Added Vol:	0	0	0	54	0	0	0	162	0	0	154	19
PasserByVol:	0	0	0	41	0	19	0	90	7	0	51	11
Initial Fut:	0	0	0	665	0	439	0	1508	100	0	2201	652
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	665	0	439	0	1508	0	0	2201	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	665	0	439	0	1508	0	0	2201	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	665	0	439	0	1508	0	0	2201	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	1.00	0.95	1.00	1.00	0.91	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3502	0	1615	0	3610	1900	0	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.27	0.00	0.42	0.00	0.00	0.42	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.36	0.00	0.36	0.00	0.57	0.00	0.00	0.57	0.00
Volume/Cap:	0.00	0.00	0.00	0.52	0.00	0.75	0.00	0.73	0.00	0.00	0.75	0.00
Delay/Veh:	0.0	0.0	0.0	15.3	0.0	21.8	0.0	11.0	0.0	0.0	10.8	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:	0.0	0.0	0.0	15.3	0.0	21.8	0.0	11.0	0.0	0.0	10.8	0.0
LOS by Move:	A	A	A	B	A	C	A	B	A	A	B	A
HCM2kAvgQ:	0	0	0	6	0	9	0	12	0	0	13	0

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing+Growth (Year 2017 +Approved Projects-Cumulative Projects-Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec): 65 Critical Vol./Cap.(X): 0.842
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 9.7
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	2	2	3	65	0	342	283	2262	11	13	1233	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	2	2	3	65	0	342	294	2352	11	14	1282	60
Added Vol:	0	0	0	0	0	13	33	97	0	0	174	0
PasserByVol:	0	0	0	1	0	1	0	128	0	0	96	0
Initial Fut:	2	2	3	66	0	356	327	2577	11	14	1552	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	66	0	356	327	2577	11	14	1552	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	66	0	356	327	2577	11	14	1552	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	66	0	356	327	2577	11	14	1552	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	1.00	1.00	0.85	0.95	0.95	0.95	0.95	0.91	0.85
Lanes:	0.29	0.28	0.43	1.00	0.00	1.00	1.00	1.99	0.01	1.00	3.00	1.00
Final Sat.:	466	466	699	1900	0	1615	1805	3590	16	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.22	0.18	0.72	0.72	0.01	0.30	0.04
Crit Moves:						****		****		****		
Green/Cycle:	0.05	0.05	0.05	0.05	0.00	0.37	0.32	0.85	0.85	0.01	0.54	0.54
Volume/Cap:	0.09	0.09	0.09	0.75	0.00	0.59	0.56	0.84	0.84	0.84	0.56	0.07
Delay/Veh:	30.2	30.2	30.2	59.9	0.0	18.1	19.3	4.8	4.8	178.4	10.2	7.3
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:	30.2	30.2	30.2	59.9	0.0	18.1	19.3	4.8	4.8	178.4	10.2	7.3
LOS by Move:	C	C	C	E	A	B	B	A	A	F	B	A
HCM2kAvgQ:	0	0	0	3	0	7	6	18	18	1	8	1

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing+Growth (Year 2017) +Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Riverside Avenue (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.938
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 18.9
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	9	12	12	73	4	441	247	1552	13	37	2412	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	9	12	12	73	4	441	257	1614	14	38	2508	57
Added Vol:	0	0	0	0	0	43	28	207	0	0	161	0
PasserByVol:	0	0	0	2	0	0	1	144	0	0	155	1
Initial Fut:	9	12	12	75	4	484	286	1965	14	38	2824	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	12	12	75	4	484	286	1965	14	38	2824	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	12	12	75	4	484	286	1965	14	38	2824	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	12	12	75	4	484	286	1965	14	38	2824	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	0.90	0.77	0.77	0.85	0.95	0.95	0.95	0.95	0.91	0.85
Lanes:	0.27	0.37	0.36	0.95	0.05	1.00	1.00	1.99	0.01	1.00	3.00	1.00
Final Sat.:	468	624	624	1380	74	1615	1805	3582	25	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.05	0.05	0.30	0.16	0.55	0.55	0.02	0.54	0.04
Crit Moves:						****	****				****	
Green/Cycle:	0.15	0.15	0.15	0.15	0.15	0.32	0.17	0.72	0.72	0.03	0.58	0.58
Volume/Cap:	0.13	0.13	0.13	0.36	0.36	0.94	0.94	0.76	0.76	0.76	0.94	0.06
Delay/Veh:	22.3	22.3	22.3	23.9	23.9	44.9	60.1	6.5	6.5	77.6	18.2	5.5
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:	22.3	22.3	22.3	23.9	23.9	44.9	60.1	6.5	6.5	77.6	18.2	5.5
LOS by Move:	C	C	C	C	C	D	E	A	A	E	B	A
HCM2kAvgQ:	1	1	1	2	2	14	10	14	14	2	24	0

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec): 90 Critical Vol./Cap.(X): 0.811
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 46.7
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 1	0 0	1! 0	0	1 0	1	1 0	0 0	2	1 0
Volume Module:												
Base Vol:	0	0	0	42	0	15	25	2298	0	0	1302	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	0	0	42	0	15	26	2390	0	0	1354	36
Added Vol:	0	0	0	0	0	0	0	97	0	0	174	0
PasserByVol:	0	0	0	0	0	0	0	133	0	0	96	0
Initial Fut:	0	0	0	42	0	15	26	2620	0	0	1624	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:	0	0	0	42	0	15	26	2620	0	0	1624	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	42	0	15	26	2620	0	0	1624	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:	0	0	0	42	0	15	26	2620	0	0	1624	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.96	1.00	0.96	0.95	0.95	0.95	1.00	0.91	0.91
Lanes:	0.00	0.00	1.00	0.74	0.00	0.26	1.00	2.00	0.00	0.00	2.93	0.07
Final Sat.:	0	0	1900	1350	0	482	1805	3610	0	0	5058	113
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.03	0.01	0.73	0.00	0.00	0.32	0.32
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.03	0.00	0.03	0.63	0.91	0.00	0.00	0.28	0.28
Volume/Cap:	0.00	0.00	0.00	1.11	0.00	1.11	0.02	0.80	0.00	0.00	1.16	1.16
Delay/Veh:	0.0	0.0	0.0	202.1	0.0	202.1	6.3	3.0	0.0	0.0	111	111.1
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:	0.0	0.0	0.0	202.1	0.0	202.1	6.3	3.0	0.0	0.0	111	111.1
LOS by Move:	A	A	A	F	A	F	A	A	A	A	F	F
HCM2kAvgQ:	0	0	0	4	0	4	0	16	0	0	30	30

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing+Growth (Year 2017) +Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Tustin Avenue (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.713
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 4.3
Optimal Cycle: OPTIMIZED Level Of Service: A

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Permitted			Permitted			Protected				Permitted			
Rights:	Include			Include			Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0		0	0	0	
Lanes:	0 1	0	0 0	0	0 1!	0	1	0 1	1	0	0	0 2	1	0
Volume Module:														
Base Vol:	2	1	0	37	2	25	63	1575	5		0	2466		40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.04	1.04		1.04	1.04		1.04
Initial Bse:	2	1	0	37	2	25	66	1638	5		0	2565		42
Added Vol:	0	0	0	0	0	0	0	207	0		0	161		0
PasserByVol:	0	0	0	0	0	0	0	146	0		0	157		0
Initial Fut:	2	1	0	37	2	25	66	1991	5		0	2883		42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00
PHF Volume:	2	1	0	37	2	25	66	1991	5		0	2883		42
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0		0
Reduced Vol:	2	1	0	37	2	25	66	1991	5		0	2883		42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	2	1	0	37	2	25	66	1991	5		0	2883		42
Saturation Flow Module:														
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900		1900	1900		1900
Adjustment:	0.93	0.93	1.00	0.83	0.83	0.83	0.95	0.95	0.95		1.00	0.91		0.91
Lanes:	0.67	0.33	0.00	0.58	0.03	0.39	1.00	1.99	0.01		0.00	2.96		0.04
Final Sat.:	1173	586	0	912	49	616	1805	3601	9		0	5103		74
Capacity Analysis Module:														
Vol/Sat:	0.00	0.00	0.00	0.04	0.04	0.04	0.04	0.55	0.55		0.00	0.56		0.56
Crit Moves:					****		****					****		
Green/Cycle:	0.06	0.06	0.00	0.06	0.06	0.06	0.05	0.84	0.84		0.00	0.79		0.79
Volume/Cap:	0.03	0.03	0.00	0.68	0.68	0.68	0.72	0.66	0.66		0.00	0.72		0.72
Delay/Veh:	26.7	26.7	0.0	45.4	45.4	45.4	51.6	2.3	2.3		0.0	3.7		3.7
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:	26.7	26.7	0.0	45.4	45.4	45.4	51.6	2.3	2.3		0.0	3.7		3.7
LOS by Move:	C	C	A	D	D	D	D	A	A		A	A		A
HCM2kAvgQ:	0	0	0	3	3	3	3	8	8		0	11		11

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.733
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 15.0
Optimal Cycle: OPTIMIZED 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
Lanes:	1 0 1	1 0		3 0 1	0 1		2 0 2	1 0		1 0 3	0 1	
Volume Module:												
Base Vol:	24	45	42	904	44	182	144	1825	21	17	1205	684
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:	24	45	42	904	44	182	151	1916	22	18	1265	718
Added Vol:	0	0	0	41	0	0	0	97	0	0	174	62
PasserByVol:	0	0	0	19	0	9	9	120	0	0	86	9
Initial Fut:	24	45	42	964	44	191	160	2133	22	18	1525	789
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:	24	45	42	964	44	191	160	2133	22	18	1525	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	45	42	964	44	191	160	2133	22	18	1525	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:	24	45	42	964	44	191	160	2133	22	18	1525	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.88	0.88	0.92	1.00	0.85	0.92	0.91	0.91	0.95	0.91	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.:	1805	1733	1617	5253	1900	1615	3502	5129	53	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.18	0.02	0.12	0.05	0.42	0.42	0.01	0.29	0.00
Crit Moves:		****		****				****		****		
Green/Cycle:	0.04	0.04	0.04	0.25	0.25	0.25	0.08	0.57	0.57	0.01	0.50	0.00
Volume/Cap:	0.38	0.73	0.73	0.73	0.09	0.47	0.58	0.73	0.73	0.73	0.58	0.00
Delay/Veh:	32.0	49.5	49.5	22.8	17.3	20.0	30.0	10.6	10.6	103.2	10.9	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:	32.0	49.5	49.5	22.8	17.3	20.0	30.0	10.6	10.6	103.2	10.9	0.0
LOS by Move:	C	D	D	C	B	B	C	B	B	F	B	A
HCM2kAvgQ:	1	2	2	7	1	4	3	12	12	1	8	0

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing+Growth (Year 2017, +Approved Projects+Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Dover Drive (NS) at West Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.841
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 16.6
Optimal Cycle: OPTIMIZED 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
Lanes:	1 0 1	1 0		3 0 1	0 1		2 0 2	1 0		1 0 3	0 1	
Volume Module:												
Base Vol:	16	32	50	840	49	136	119	1477	22	48	2054	1170
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:	16	32	50	840	49	136	125	1551	23	50	2157	1229
Added Vol:	0	0	0	88	0	0	0	207	0	0	161	67
PasserByVol:	0	0	0	13	0	16	27	123	0	0	150	26
Initial Fut:	16	32	50	941	49	152	152	1881	23	50	2468	1322
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:	16	32	50	941	49	152	152	1881	23	50	2468	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	32	50	941	49	152	152	1881	23	50	2468	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:	16	32	50	941	49	152	152	1881	23	50	2468	0
Saturation Flow Module:												
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	1641	1641	5253	1900	1615	3502	5114	63	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.03	0.18	0.03	0.09	0.04	0.37	0.37	0.03	0.48	0.00
Crit Moves:			****	****			****				****	
Green/Cycle:	0.04	0.04	0.04	0.21	0.21	0.21	0.05	0.57	0.57	0.04	0.57	0.00
Volume/Cap:	0.24	0.54	0.84	0.84	0.12	0.44	0.84	0.64	0.64	0.64	0.84	0.00
Delay/Veh:	30.1	32.2	73.5	28.5	19.2	21.4	56.4	9.1	9.1	44.8	13.1	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:	30.1	32.2	73.5	28.5	19.2	21.4	56.4	9.1	9.1	44.8	13.1	0.0
LOS by Move:	C	C	E	C	B	C	E	A	A	D	B	A
HCM2kAvgQ:	1	1	3	9	1	3	4	10	10	2	17	0

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing+Growth (Year 2017)+Approved Projects+Cumulative Projects+Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.811
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 12.7
Optimal Cycle: OPTIMIZED 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
Lanes:	2 0	1! 0	0	1 0	0 1	0	1 0	3 0	1	1 0	3 1	0
Volume Module:												
Base Vol:	383	13	25	30	5	36	30	2421	300	37	1476	15
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:	383	13	25	30	5	36	32	2542	315	39	1550	16
Added Vol:	1	7	0	22	4	26	41	94	0	3	207	19
PasserByVol:	1	0	1	44	0	18	35	95	0	0	64	0
Initial Fut:	385	20	26	96	9	80	108	2731	315	42	1821	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	385	20	26	96	9	80	108	2731	315	42	1821	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	385	20	26	96	9	80	108	2731	315	42	1821	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	385	20	26	96	9	80	108	2731	315	42	1821	35
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	0.87	0.87	0.95	0.91	0.85	0.95	0.91	0.91
Lanes:	2.74	0.11	0.15	1.00	0.10	0.90	1.00	3.00	1.00	1.00	3.93	0.07
Final Sat.:	4793	202	263	1805	166	1477	1805	5187	1615	1805	6766	129
Capacity Analysis Module:												
Vol/Sat:	0.08	0.10	0.10	0.05	0.05	0.05	0.06	0.53	0.20	0.02	0.27	0.27
Crit Moves:			****			****		****		****		
Green/Cycle:	0.12	0.12	0.12	0.07	0.07	0.07	0.12	0.65	0.65	0.03	0.56	0.56
Volume/Cap:	0.66	0.81	0.81	0.80	0.81	0.81	0.48	0.81	0.30	0.81	0.48	0.48
Delay/Veh:	27.6	34.8	34.8	57.4	62.4	62.4	26.2	9.4	4.7	89.8	8.2	8.2
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:	27.6	34.8	34.8	57.4	62.4	62.4	26.2	9.4	4.7	89.8	8.2	8.2
LOS by Move:	C	C	C	E	E	E	C	A	A	F	A	A
HCM2kAvgQ:	4	6	6	4	4	4	3	16	3	2	6	6

Note: Queue reported is the number of cars per lane.

Balboa Marina West
Existing+Growth (Year 2017) -Approved Projects-Cumulative Projects+Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Bayside Drive (NS) at East Coast Highway (EW)

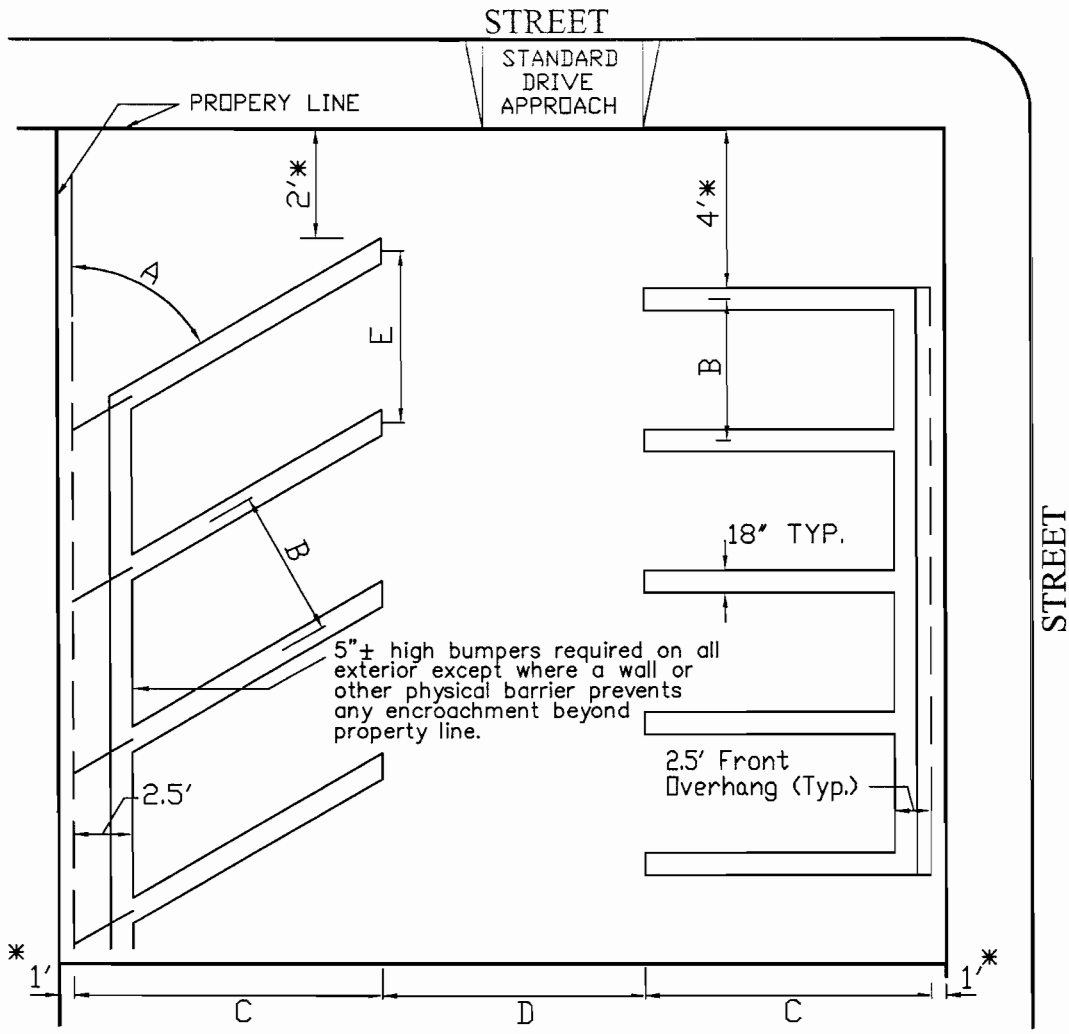
Cycle (sec): 60 Critical Vol./Cap.(X): 0.862
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 15.6
Optimal Cycle: OPTIMIZED Level Of Service: B

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			
Lanes:	2	0 1!	0 0	1	0 0	1 0	1	0	3	0	1		1	0	3	1	0	
Volume Module:																		
Base Vol:	410	8	29	23	16	38	50	1895	473				57	2863	23			
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:	410	8	29	23	16	38	53	1990	497				60	3006	24			
Added Vol:	5	7	0	27	9	50	52	227	0				13	163	28			
PasserByVol:	3	0	0	71	0	29	26	83	2				0	127	0			
Initial Fut:	418	15	29	121	25	117	131	2300	499				73	3296	52			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	418	15	29	121	25	117	131	2300	499				73	3296	52			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
Reduced Vol:	418	15	29	121	25	117	131	2300	499				73	3296	52			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	418	15	29	121	25	117	131	2300	499				73	3296	52			
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:	2.77	0.08	0.15	1.00	0.18	0.82	1.00	3.00	1.00				1.00	3.94	0.06			
Final Sat.:	4834	144	278	1805	293	1371	1805	5187	1615				1805	6795	108			
Capacity Analysis Module:																		
Vol/Sat:	0.09	0.10	0.10	0.07	0.09	0.09	0.07	0.44	0.31				0.04	0.49	0.49			
Crit Moves:		****				****	****							****				
Green/Cycle:	0.12	0.12	0.12	0.10	0.10	0.10	0.08	0.59	0.59				0.05	0.56	0.56			
Volume/Cap:	0.72	0.86	0.86	0.68	0.86	0.86	0.86	0.75	0.52				0.75	0.86	0.86			
Delay/Veh:	29.2	39.3	39.3	36.1	60.8	60.8	63.5	10.0	7.7				54.9	13.3	13.3			
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:	29.2	39.3	39.3	36.1	60.8	60.8	63.5	10.0	7.7				54.9	13.3	13.3			
LOS by Move:	C	D	D	D	E	E	E	A	A				D	B	B			
HCM2kAvgQ:	4	6	6	4	5	5	5	13	6				3	18	18			

Note: Queue reported is the number of cars per lane.

APPENDIX I

City of Newport Beach
Parking Lot Standards



* Minimum setback unless otherwise specified in planning and zoning regulations.

MINIMUM DIMENSIONS OF PARKING SPACES AND ISLES				
"A" ANGLE OF PARKING	"B" WIDTH OF SPACE	"C" DEPTH OF SPACE PERPENDICULAR TO AISLE	"D" WIDTH OF AISLE	"E" WIDTH OF SPACE PARALLEL TO AISLE
30°	8'–6"	16'	10'	17'
45°	8'–6"	18'	11'	12'
60°	8'–6"	19'	18'	9'–10"
90°	8'–6"	17'	26'	8'–6"

CITY OF NEWPORT BEACH

PUBLIC WORKS DEPARTMENT

PARKING LOT STANDARDS

APPROVED:

RCE NO. 36106

PUBLIC WORKS DIRECTOR

Drawn: M.Wagner	Scale: N.T.S.
Date: Jan 2003	F:\USERS\PBW\Shared\CAD_STD\STD Details\2003_Std\

DRAWING NO. STD-805-L-A

OFF-STREET PARKING STANDARDS

1. PARKING SPACES PARALLEL TO A PROPERTY LINE SHALL BE NOT LESS THAN 8'-0" BY 22'-0" PER VEHICHLE.
2. SPACES SHALL BE MARKED WITH APPROVED TRAFFIC MARKERS OR PAINTED WHITE LINES NOT LESS THAN 4" WIDE.
3. AISLES AND ENTRANCES INTENDED FOR TWO-DIRECTIONAL TRAVEL SHALL NOT BE LESS THAN 24' WIDE. ONE-WAY TRAVEL AISLES SHALL BE A MINIMUM OF 14' UNLESS IT ALIGNS WITH A NARROWER PARKING AISLE.
4. PARKING LOTS AND AREAS SHALL BE PAVED WITH ASPHALT, CONCRETE OR OTHER STREET SURFACING MATERIAL OF A PERMANENT NATURE.
5. PARKING LOTS AND AREAS SHALL BE GRADED AND IMPROVED SO THAT SURFACE WATER DRAINS DIRECTLY FROM THE PARKING LOT OR AREA INTO A STREET, ALLEY OR APPROVED DRAINAGE STRUCTURE.
6. PARKING LOTS SHALL BE SO DESIGNED THAT CARS LEAVING THE LOT WILL NOT BE PERMITTED TO BACK OUT ON THE PORTION OF STREET RIGHT-OF-WAY (EXCEPTING ALLEYS) USED FOR VEHICULAR TRAVEL.
7. DIRECT ACCESS TO PARKING SPACES WILL BE PERMITTED FROM ALLEYS PROVIDING NOT OVER 10 FEET OF THE ALLEY RIGHT-OF-WAY IS USED FOR THE REAR PORTION OF THE REQUIRED AISLE WIDTH, AND PROVIDED THE SPACES ARE SET BACK FROM THE ALLEY THE MINIMUM DISTANCES SHOWN IN THE FOLLOWING TABLE:

ALLEY WIDTH	MINIMUM SET-BACK
15'-0" OR LESS	5'-0"
15'-1" TO 19'-11"	3'-9"
20'-0" OR MORE	2'-6"

8. DIRECT ACCESS TO PARKING SPACES WILL BE PERMITTED FROM LOCAL STREETS PROVIDING THE ALLOWABLE CURB OPENING IS NOT EXCEEDED AND PROVIDED THE SPACE IS SET-BACK A MINIMUM OF 2'-0" FROM THE RIGHT-OF-WAY LINE.
9. PARKING WILL NOT BE PERMITTED ON SLOPES GREATER THAN 5%.
10. THE MAXIMUM RAMP SLOPE SHALL NOT EXCEED 15%.
11. CHANGES IN RAMP SLOPE SHALL NOT EXCEED 11% AND MAY OCCUR AT FIVE FOOT INTERVALS.
12. THE WIDTH OF SPACES NEXT TO WALLS OR SIMILAR OBSTRUCTIONS SHALL BE 9'-0".
13. STRUCTURAL ELEMENTS SHALL NOT ENCROACH INTO THE REQUIRED STALL, WITH THE EXCEPTION THAT THEY WILL BE ALLOWED IN AN ONE FOOT SQUARE AREA AT THE FRONT CORNERS.

REV 10/93

CITY OF NEWPORT BEACH
PUBLIC WORKS DEPARTMENT

PARKING LOT STANDARDS

APPROVED

DIRECTOR OF PUBLIC WORKS
R.C.E. NO. 36106

DATE	13 Oct 1993	SCALE	N.T.S.
DRAWN	LEON		STD-805-L-B

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