PLANNING COMMISSION AGENDA REPORT

MEETING DATE: APRIL 27, 2015 **ITEM NUMBER:** CC-2

SUBJECT: **2015 DEVELOPMENT PHASING AND PERFORMANCE MONITORING PROGRAM**

DATE: **APRIL 14, 2015**

FROM: **PLANNING DIVISION/DEVELOPMENT SERVICES DEPARTMENT**

PRESENTATION BY: **ANTONIO GARDEA, SENIOR PLANNER**

FOR FURTHER INFORMATION CONTACT: **ANTONIO GARDEA (714) 754-5692**
antonio.gardea@costamesaca.gov

DESCRIPTION

Every year Planning Commission reviews the annual Development Phasing and Performance Monitoring Program Report. This is the 2015 Development Phasing and Performance Monitoring Program (DPPMP) prepared by the City of Costa Mesa.

RECOMMENDATION

Approve Year 2015 Development Phasing and Performance Monitoring Program Report.

ANALYSIS

The Year 2015 DPPMP has been developed to fulfill the mandates of the County Measure M funding eligibility requirements and the Growth Management Element of the City of Costa Mesa 2000 General Plan. The purpose of the program is to conduct an annual review of the cumulative impacts of development and circulation system capacity. The program tracks current land use entitlements and construction activity and monitors arterial highway traffic volumes and intersection levels of service. This program also serves to identify potential deficiencies and corrective measures, if needed.

CONCLUSION

The Year 2015 Development Phasing and Monitoring Program ensures that infrastructure is added as development proceeds, and that the established level of service standard (LOS "D") is maintained throughout the community. Approval by the Planning Commission would satisfy the mandates of the County Measure M requirements and the Growth Management Element of the City of Costa Mesa 2000 General Plan.

ANTONIO GARDEA
Senior Planner

CLAIRE FLYNN, AICP
Asst. Development Services Director

Attachment: 2015 DPPMP Report

cc: Director of Economic & Development Services/Deputy CEO
Senior Deputy City Attorney
Public Services Director
City Engineer
Transportation Services Manager
Fire Protection Analyst
File (2)

City of Costa Mesa

Development Phasing and

Performance Monitoring Program

2015 Report

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DEVELOPMENT PHASING AND PERFORMANCE MONITORING PROGRAM 2015

Phasing of land use development and circulation improvements to support development-generated traffic is critical to growth management in California. The importance of the relationship between land use entitlements and circulation system capacity is recognized at the state, regional and local levels. At the state level, Section 65302(b) of the Government Code requires correlation between the Land Use and the Circulation Elements of local government general plans. At the regional level, the Revised Traffic Improvement and Growth Management Ordinance (Measure M) approved by county voters in November, 1990, requires cities to adopt development and circulation phasing plans to be eligible for the additional ½ cent sales tax increase authorized by the ordinance. Finally, at the local level, both the Land Use and the Growth Management Elements of the City of Costa Mesa 2000 General Plan require similar phasing programs.

This is the 2015 Development Phasing and Performance Monitoring Program (DPPMP) prepared for the City of Costa Mesa. Section 1.0 provides an overview of the purpose of the plan. Section 2.0 details the development activity in the City during 2013. Section 3.0 presents information regarding the City's circulation system based on the most recent traffic counts. Section 4.0 describes the overall performance of the circulation network based on the City's adopted standards. Finally, Section 5.0 presents an action plan for a coordinated and efficient circulation system.

SECTION 1.0 PURPOSE

The DPPMP has been developed to fulfill the mandates of the County Measure M funding eligibility requirements and the Growth Management Element of the City of Costa Mesa 2000 General Plan. The purpose of the program is to conduct an annual review of the cumulative impacts of development and circulation system capacity. The program tracks current land use entitlements and construction activity and monitors arterial highway traffic volumes and intersection levels of service. The primary objective of the DPPMP is to ensure that infrastructure is added as development proceeds, and that the established level of service standard (LOS "D") is maintained throughout the community. This program also serves to identify potential deficiencies and corrective measures, if needed.

While the focus of this DPPMP is on cumulative performance, project-specific analysis is also critical to ensure that the established level of service standard is maintained. This level of analysis is mandated by the City's Transportation System Management Ordinance (Chapter XII, Article 3 in Title 13 of the Costa Mesa Municipal Code). Project-specific monitoring to ensure adequate mitigation of project impacts was mandated by AB 3180, codified as Section 21081.6 of the California Public Resources Code.

The 2010 US Census Data for population estimated the City population as **109,960** persons; only slightly higher than 2000 Census data. The State Department of Finance estimates the current population at 111,846 for 2014.

SECTION 2.0 2013 DEVELOPMENT ACTIVITY

The following types of information are provided: (1) Planning approvals for new construction, (2) Building Permit finals, and (3) Demolitions. Table A, 2013 Development Activity Summary, provides a description of residential, commercial, industrial, and institutional development activity. A detailed table describing planning applications and building permit activities in the City by Traffic Analysis Zone is provided as Appendix A.

Table A - 2013 Development Activity Summary Table

TYPE	BUILDING FINALS	PLANNING APPROVALS
Residential (Units)		
New Units	22 units	163 units
Demolitions	13 units	27 units
NET NEW	+ 9 units	+ 136 units
Commercial (sq. ft.)		
Additions	0 sq. ft.	-0- sq. ft.
Demolitions	9,335 sq. ft.	8,799 sq. ft.
NET NEW	-9,355 sq. ft.	- 8,799 sq. ft.
Industrial (sq. ft.)		
Additions	-0- sq. ft.	-0- sq. ft.
Demolitions	140,308 sq. ft.	11,560 sq. ft.
NET NEW	- 140,308 sq. ft.	- 11,560 sq. ft.
Institutional (sq. ft.)		
Additions	-0- sq. ft.	-0- sq. ft.
Demolitions	22,264 sq. ft.	-0- sq. ft.
NET NEW	- 22,264 sq. ft.	-0- sq. ft.

SECTION 3.0 CIRCULATION SYSTEM PERFORMANCE

3.1 Average Daily Traffic (ADT) Volumes

Average Daily Traffic (ADT) volume counts on major roadways throughout the City is conducted periodically. Figure 1 provides the recent ADT volume counts on all major roadways.

3.2 Intersection Turning Movement Volumes

In previous years, all signalized intersections in the City were routinely counted each year. However, following Council direction, starting in year 2005 only intersections at major arterials, and locations where earlier analysis indicated congestion, were counted.

In this report, results of intersection analyses at 31 major signalized intersections located within or at the City boundary lines are included. Of these, 17 intersections are controlled by the City, 13 intersections are controlled by the California Department of Transportation (Caltrans) and 1 intersection is controlled by City of Newport Beach.

The turning movement volumes and results of Intersection Capacity Utilization analysis are discussed in the following section.

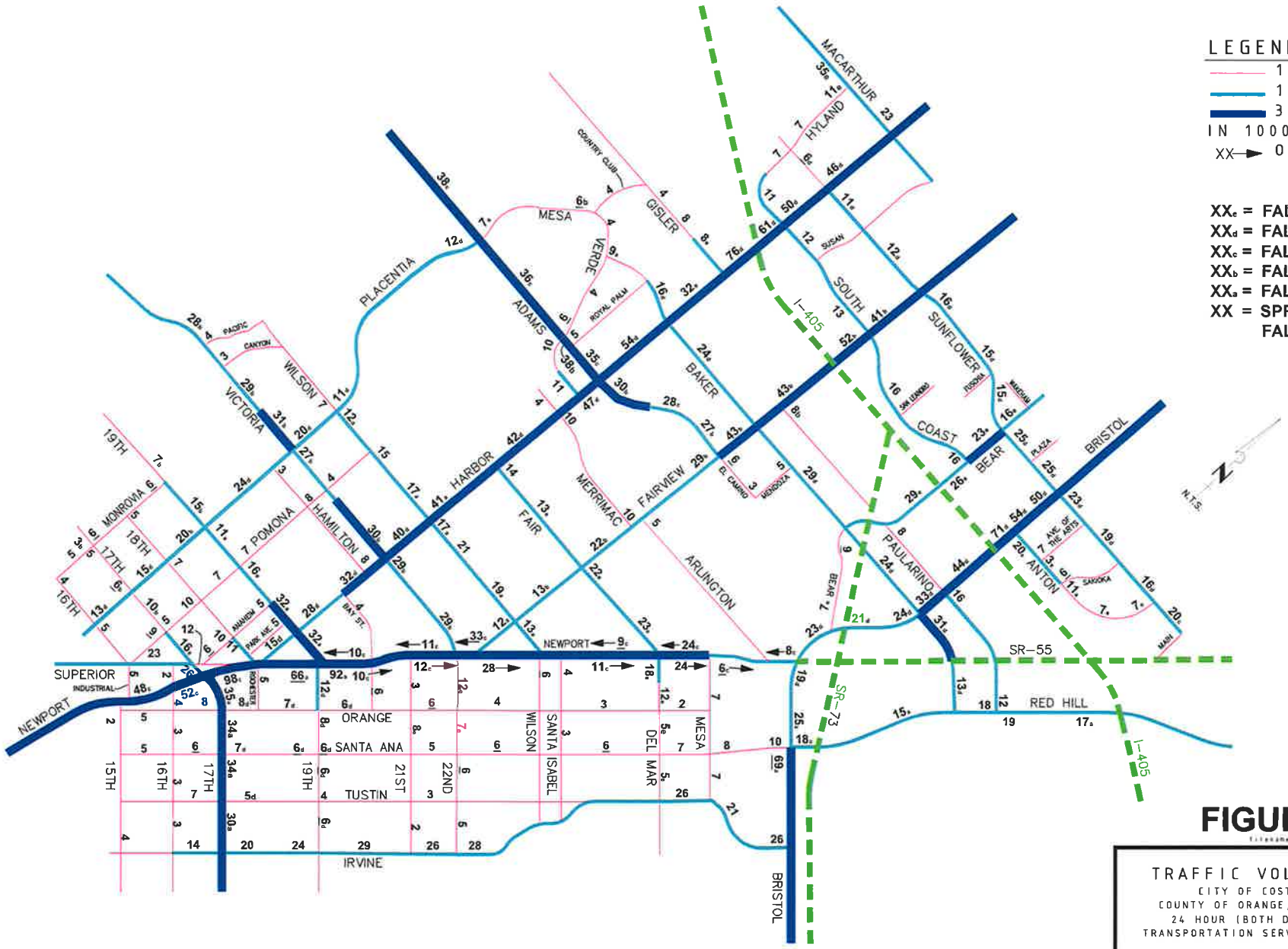

FIGURE 1

TRAFFIC VOLUME MAP
CITY OF COSTA MESA
COUNTY OF ORANGE, CALIFORNIA
24 HOUR (BOTH DIRECTIONS)
TRANSPORTATION SERVICES DIVISION

SECTION 4.0 2014 PERFORMANCE EVALUATION

4.1 Adopted Level of Service

Level Of Service (LOS) is a measure of quality of traffic flow ranging from "A" through "F", with "A" representing free-flow conditions and "F" representing over-saturated conditions. At intersections, the level of service is related to a quantitative measure called Intersection Capacity Utilization (ICU). The ICU for an intersection is determined by adding critical turning movement volume/capacity (v/c) ratios. The relationship between LOS and ICU is shown in the table below:

LOS	ICU
A	0.00 – 0.60
B	0.61 – 0.70
C	0.71 – 0.80
D	0.81 – 0.90
E	0.91 – 1.00
F	> 1.01

The 2002 General Plan identifies Level of Service (LOS) "D" or better as the established traffic level of service for all intersections under the sole control of the City.

The City of Costa Mesa does not have an adopted LOS standard for arterial segments. Typically, intersections need to be widened before widening mid-block sections. Arterial improvements, hence, are based on intersection improvements.

4.2 Intersection Capacity Analysis

The results of 2014/15 intersection capacity analyses are summarized in Table 1. In addition, ICU values for prior year condition and baseline 1993 conditions for the corresponding locations, where available, are presented for comparison purposes. The ICU worksheets showing turning movement volumes for A.M. and P.M. peak hours at intersections analyzed in 2014/15 are included in Appendix B. As indicated in Table 1, all intersections are operating at LOS "D" or better during the A.M. and P.M. peak hours.

Staff observed that overall traffic volumes are continuing to be lower compared to prior years, resulting in generally better levels of service at all intersections. Table 1a shows the LOS for intersections that were reviewed in the prior years but are not analyzed this year.

TABLE 1
YEAR 2014/15 TRAFFIC CONDITIONS

		1993 Conditions				Prior Condition				2014/15 Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
ID	Location	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
9	Bristol St & Sunflower Ave	0.38	A	0.72	C	0.61	B	0.77	C	0.59	A	0.74	C
18	Harbor Blvd & South Coast Dr	0.72	C	**1.02**	**F**	0.53	A	0.74	C	0.46	A	0.70	B
20	Fairview Rd & South Coast Dr	0.64	B	0.64	B	0.67	B	0.66	B	0.68	B	0.71	C
25	Bristol St & Anton Blvd	0.33	A	0.62	B	0.49	A	0.63	B	0.35	A	0.66	B
44	Harbor Blvd & Gisler Ave	0.73	C	0.75	C	0.66	B	0.72	C	0.60	A	0.71	C
49	Bristol St & Paularino	0.56	A	0.73	C	0.49	A	0.71	C	0.54	A	0.71	C
56	Harbor Blvd & Baker St	0.67	B	0.85	D	0.45	A	0.60	A	0.49	A	0.61	B
58	Fairview Rd & Baker St	0.58	A	0.73	C	0.58	A	0.62	B	0.62	B	0.60	A
64	Bristol St & Baker St	0.46	A	0.71	C	0.54	A	0.75	C	0.59	A	0.74	C
81	Placentia Ave & Adams Ave	0.59	A	0.70	B	0.79	C	0.81	D	0.75	C	0.71	C
84	Harbor Blvd and Adams Ave	0.77	C	**0.97**	**E**	0.65	B	**0.92**	**E**	0.56	A	0.70	B
86	Fairview Rd & Adams	0.59	A	0.87	D	0.74	C	0.55	A	0.66	B	0.53	A
125	Placentia Ave & Victoria St	0.56	A	0.65	B	0.72	C	0.74	C	0.76	C	0.77	C
127	Harbor Blvd & Victoria St	0.57	A	0.83	D	0.71	C	0.69	B	0.69	B	0.82	D
153	Orange Ave & 17th St	0.75	C	0.87	D	0.50	A	0.61	B	0.50	A	0.62	B
154	Santa Ana Ave & 17th St	0.43	A	0.73	C	0.49	A	0.62	B	0.43	A	0.57	A
155	Tustin Ave & 17th St	0.44	A	0.61	B	0.53	A	0.56	A	0.52	A	0.61	B

TABLE 1
YEAR 2014/15 TRAFFIC CONDITIONS

		1993 Conditions				Prior Condition				2014/15 Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
ID	Location	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
INTERSECTIONS CONTROLLED BY CALTRANS													
42	Bristol St. & I-405 NB Ramps					0.42	A	0.71	C	0.35	A	0.70	B
43	Bristol St. & I-405 SB Ramps					0.53	A	0.59	A	0.43	A	0.62	B
51	SR-55 SB Frontage & Paularino Ave					0.71	C	0.62	B	0.75	C	0.63	B
52	SR-55 NB Frontage & Paularino Ave					0.66	B	0.70	B	0.70	B	0.65	B
65	SR- 55 SB Frontage & Baker St					0.65	B	0.69	B	0.66	B	0.79	C
66	SR-55 NB Frontage & Baker St					0.67	B	0.73	C	0.77	C	0.75	C
140	Newport Blvd &19th St					0.86	D	0.82	D	0.88	D	0.81	D
141	Newport Blvd at Broadway					0.61	B	0.66	B	0.61	B	0.58	A
142	Newport Blvd at Harbor Blvd					0.69	B	0.78	C	0.77	C	0.75	C
144	Newport Blvd at Rochester & 18th St					0.73	C	0.79	C	0.79	C	0.81	D
152	Newport Blvd & 17th St					0.73	C	0.77	C	0.80	C	0.79	C
157	Newport Blvd & 16th St					0.46	A	0.54	A	0.62	B	0.58	A
160	Newport Blvd & Industrial Way					0.45	A	0.56	A	0.65	B	0.55	A
INTERSECTIONS CONTROLLED BY NEWPORT BEACH													
156	Irvine Ave & 17th St					0.54	A	0.66	B	0.50	A	0.74	C

TABLE 1a
PRIOR TRAFFIC CONDITIONS

ID	Location	2013 Conditions			
		AM Peak		PM Peak	
		ICU	LOS	ICU	LOS
2	Harbor & Sunflower	0.65	B	0.73	C
4	Fairview & Sunflower	0.69	B	0.68	B
18	Harbor & South Coast Drive	0.53	A	0.74	C
25	Bristol & Anton	0.49	A	0.63	B
63	Bear & Baker	0.60	A	0.77	C
127	Harbor Blvd. & Victoria St.	0.71	C	0.69	B
128	Newport SB & Victoria Blvd.	0.57	A	0.54	A
129	Newport NB & Victoria (22nd St)	0.79	C	0.58	A
INTERSECTIONS CONTROLLED BY CALTRANS					
38	Harbor Blvd. & I-405 NB Ramps	0.59	A	0.75	C
39	Harbor Blvd. & I-405 SB Ramps	0.47	A	0.63	B
40	Fairview Rd. & I-405 NB Ramps	0.61	B	0.65	B
41	Fairview Rd. & I-405 SB Ramps	0.60	A	0.57	A

In 2014, a capacity enhancement project was completed at the intersection of Harbor Boulevard and Adams Avenue. The following improvements were implemented at this location.

- Addition of third eastbound left-turn lane
- Extension of storage length for northbound left-turn lanes
- Addition of southbound right-turn lane
- Addition of northbound far-side bus turn-out
- Consolidation of southbound bus turn-outs

As a result of these improvements the Level of Service at the intersection of Harbor Boulevard and Adams Avenue improved from E in 2013 to Level of Service B in 2014/15.

Table 2 shows the comparison of intersections operating at various LOS for 2014/15 and prior year conditions. As shown in Table 2, traffic levels have generally remained similar in year 2014/15 compared to prior year. The overall traffic operations in the City are at acceptable levels.

TABLE 2
COMPARISON OF LEVELS OF SERVICE

Level of Service	Number of Locations					
	2014/15 Conditions		Prior Year Conditions		Change (2014/15 vs. Prior)	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
A	11	3	9	3	2	0
B	4	6	4	6	0	0
C	2	7	4	6	-2	1
D	0	1	0	1	0	0
E	0	0	0	1	0	-1
F	0	0	0	0	0	0
	17	17	17	17		

4.3 Development Activity

A review of the Year 2013 development activities presented in Section 2.0 was conducted. Adverse impacts to intersection operations are not anticipated as a result of the Year 2013 planning approvals and building finals. When appropriate, projects are conditioned to pay a traffic impact fee, which is used to mitigate cumulative impacts to the City's roadway system. Some projects, however, require additional mitigation. This is determined during the conduct of respective project's traffic impact study.

APPENDIX A
2013 DEVELOPMENT ACTIVITY TABLE

Summary of 2013 Development Activity By Traffic Analysis Zone

TAZ	Planning Approvals	Demolition Permits	Building Finals
34			Construction of a new SFR (1678 Iowa St)
73	PA-13-34 Construction of six detached units (2183 Miner St)	Demolition of two SFRs (2183 & 2191 Miner St)	
77	PA-13-35 Construction of five detached units; Demolition of five apartments (2294 Pacific Ave)		Construction of a new SFR (2160 Pacific Ave)
110		Demolition of 7,200 SF institutional buildings (1259 Victoria St)	
117	PA-13-21 Construction of 38 live/work units; Demolition of a 760-SF industrial building (2025 Placentia)		
118		Demolition of two SFRs (1036 & 1042 W. 18th Street)	
131	PA-13-22 Construction of 49 live/work units; Demolition of three commercial buildings (8,799 SF) and an industrial building (10,800 SF) (643-651 W. 17th St &1677 Superior Ave)		
132		Demolition of 5,655 SF restaurant (Denny's) & 10,500 SF industrial building (1726 Superior Ave)	
133	PA-13-07 Construction of 22 live/work units (132 Industrial Way)	Demolition of 129,808 SF industrial buildings (1527 Newport Blvd)	
135	PA-13-30 Construction of 11 detached units; Demolition of 12 apartments (687 Victoria St)	Demolition of 13,664 SF institutional buildings (650 Hamilton St)	
137		Demolition of a SFR (743 20th St)	
140		Demolition of a SFR (1974 Meyer Pl)	
142	PA-13-16 Construction of ten units & Tract Map for condominium purposes; Demolition of seven units (522 Bernard St)	Demolition of a SFR (2070 Maple Ave)	
146			Construction of five new SFRs (449 Hamilton St A-E)
162	PA-13-03 Construction of two SFR (2590 Orange Ave)		
163		Demolition of a 3,680 SF commercial buildings (2460 Newport Blvd);	Construction of four new SFRs (137-143 Monte Vista Ave & 2493-2497 Elden Ave)

Summary of 2013 Development Activity By Traffic Analysis Zone

TAZ	Planning Approvals	Demolition Permits	Building Finals
165			Construction of two new SFRs (2427-2429 Santa Ana Ave)
173		Demolition of a SFR (2375 Orange Ave)	
180			Construction of two new SFRs (283 Albert Pl & 2201 Santa Ana Ave)
183			Construction of a new SFR (208 21st St)
184	PA-13-04 Construction of 14 SFR units; Demolition of two SFRs (2157 Tustin Ave)		
188		Demolition of a SFR (300 23rd St)	
198	PA-13-24 Construction of two SFR units;	Demolition of a SFR (160 E. 19th St)	
208	DR-13-03 Construction of two SFR units; Demolition of a SFR (341 16th Pl)		
210		Demolition of a SFR (1523 Orange Ave)	
213			Construction of a new SFR (1596 Santa Ana Ave)
215	ZA-13-010 Minor Design Review for a two SFR-units (185 E. 19th St)	Demolition of a SFR (185 E. 19th St)	Construction of two new SFRs (162-164 Flower St)
223		Demolition of a SFR (1826 Fullerton Ave)	
242		Demolition of 1,400 SF institutional building (320 E. 18th St)	

APPENDIX B
INTERSECTION CAPACITY UTILIZATION TABLES

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Bristol St at Sunflower Ave

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	2	3400	99	0.03	*	521	0.15	
NBT	2.5	4250	487	0.11		1475	0.35	*
NBR	1.5	2550	124	0.05		202	0.08	
SBL	2	3400	255	0.08		191	0.06	*
SBT	3	5100	1322	0.26	*	798	0.16	
SBR	1	1700	89	0.05		142	0.08	
EBL	2	3400	100	0.03		274	0.08	*
EBT	2.5	4250	795	0.19	*	523	0.12	
EBR	1.5	2550	322	0.13		223	0.09	
WBL	2	3400	214	0.06	*	264	0.08	
WBT	3	5100	352	0.07		1064	0.21	*
WBR	1	1700	145	0.09	*	284	0.17	
		N/S Movements		0.29			0.40	
		E/W Movements		0.25			0.29	
		Rt. Turn Component		0.00			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.59**			**0.74**	
LEVEL OF SERVICE (LOS)				**A**			**C**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Harbor Blvd at South Coast Dr

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	2	3400	261	0.08	*	395	0.12	
NBT	3.5	5950	1571	0.26		1868	0.31	*
NBR	1.5	2550	225	0.09		214	0.08	
SBL	2	3400	91	0.03		136	0.04	*
SBT	4	6800	1847	0.27	*	1576	0.23	
SBR	1	1700	66	0.04		108	0.06	
EBL	1	1700	12	0.01		32	0.02	*
EBT	0.5	850	35	0.04	*	70	0.08	
EBR	1.5	2550	204	0.08		354	0.14	
WBL	2	3400	63	0.02	*	376	0.11	
WBT	2	3400	148	0.04		958	0.28	*
WBR	1	1700	47	0.03	*	239	0.14	
		N/S Movements		0.35			0.35	
		E/W Movements		0.06			0.30	
		Rt. Turn Component		0.00			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.46**			**0.70**	
LEVEL OF SERVICE (LOS)				**A**			**B**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Fairview Rd at South Coast Dr

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	2	3400	40	0.01		121	0.04	
NBT	3	5100	1924	0.38	*	1961	0.38	*
NBR	1	1700	62	0.04		366	0.22	
SBL	2	3400	229	0.07	*	75	0.02	*
SBT	3	5100	1225	0.27		1455	0.30	
SBR	0		162	0.00		59	0.00	
EBL	1	1700	274	0.16	*	77	0.05	
EBT	1.5	2550	100	0.04		210	0.08	*
EBR	1.5	2550	65	0.03		503	0.20	*
WBL	2	3400	12	0.00		299	0.09	*
WBT	2	3400	66	0.02	*	272	0.08	
WBR	1	1700	93	0.05		158	0.09	
		N/S Movements		0.44			0.41	
		E/W Movements		0.18			0.17	
		Rt. Turn Component		0.00			0.08	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.68**			**0.71**	
LEVEL OF SERVICE (LOS)				**B**			**C**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Bristol St at Anton Blvd

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	2	3400	53	0.02	*	407	0.12	
NBT	4	6800	998	0.15		2054	0.30	*
NBR	1	1700	1068	0.00		882	0.00	
SBL	2	3400	231	0.07		163	0.05	*
SBT	4	6800	1436	0.21	*	1316	0.19	
SBR	1	1700	16	0.01		88	0.05	
EBL	1	1700	7	0.00		103	0.06	
EBT	1	1700	21	0.01	*	38	0.02	*
EBR	1	1700	11	0.01		122	0.07	
WBL	3	5100	329	0.06	*	868	0.17	*
WBT	1	1700	10	0.01		103	0.06	
WBR	1	1700	81	0.05		295	0.17	*
		N/S Movements		0.23			0.35	
		E/W Movements		0.08			0.19	
		Rt. Turn Component		0.00			0.07	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.35**			**0.66**	
LEVEL OF SERVICE (LOS)				**A**			**B**	

ICU			LOS
0.10	-	0.6	A
0.61	-	0.7	B
0.71	-	0.8	C
0.81	-	0.9	D
0.91	-	1.00	E
1.01	-	UP	F

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Bristol St at I-405 NB Ramps

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	0		0	0.00		0	0.00	
NBT	4	6800	1576	0.23	*	2334	0.34	*
NBR	1	1700	201	0.12		207	0.12	
SBL	0		0	0.00	*	0	0.00	*
SBT	5	8500	1760	0.21		2267	0.27	
SBR	0		10	0.00		30	0.00	
EBL	0		0	0.00		0	0.00	
EBT	0		0	0.00	*	0	0.00	*
EBR	2	3400	37	0.01	*	263	0.08	*
WBL	1.5	2550	149	0.06	*	587	0.23	*
WBT	1.5	2550	47	0.02		338	0.13	
WBR	2	3400	553	0.16	*	980	0.29	*
		N/S Movements		0.23			0.34	
		E/W Movements		0.06			0.23	
		Rt. Turn Component		0.01			0.08	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.35**			**0.70**	
LEVEL OF SERVICE (LOS)				**A**			**B**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Bristol St at I-405 SB Ramps

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	1	1700	107	0.06	*	141	0.08	*
NBT	4	6800	1143	0.17		1733	0.25	
NBR	0		0	0.00		0	0.00	
SBL	0		0	0.00		0	0.00	
SBT	3	5100	977	0.19	*	1680	0.33	*
SBR	2	3400	679			893		
EBL	3	5100	636	0.12	*	802	0.16	*
EBT	0		0	0.00		0	0.00	
EBR	1	1700	448			285		
WBL	0		0	0.00		0	0.00	
WBT	0		0	0.00	*	0	0.00	*
WBR	0		0	0.00		0	0.00	
		N/S Movements		0.25			0.41	
		E/W Movements		0.12			0.16	
		Rt. Turn Component		0.00			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.43**			**0.62**	
LEVEL OF SERVICE (LOS)				**A**			**B**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Harbor Blvd at Gisler Ave

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C	PM PEAK HOUR VOLUME	PM PEAK HOUR V/C
NBL	1	1700	67	0.04 *	156	0.09 *
NBT	5	8500	1886	0.22	1999	0.24
NBR	0		8	0.00	14	0.00
SBL	1	1700	89	0.05	123	0.07
SBT	4	6800	1873	0.30 *	2464	0.42 *
SBR	0		182	0.00	411	0.00
EBL	2	3400	608	0.18 *	385	0.11 *
EBT	0.5	850	52	0.06	23	0.03
EBR	0.5	850	80	0.09	106	0.12 *
WBL	1	1700	24	0.01	37	0.02
WBT	1	1700	28	0.02 *	37	0.02 *
WBR	1	1700	145	0.09 *	121	0.07
		N/S Movements		0.34		0.51
		E/W Movements		0.20		0.14
		Rt. Turn Component		0.02		0.01
		Yellow Clearance		0.05		0.05
TOTAL CAPACITY UTILIZATION				**0.60**		**0.71**
LEVEL OF SERVICE (LOS)				**A**		**C**

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT:	**DPPMP 2015**
ANALYSIS CONDITION:	**Year 2014/15 Conditions**
INTERSECTION:	**Bristol St at Paularino Ave**

			AM PEAK HOUR			PM PEAK HOUR		
MOVEMENT	**LANES**	**CAPACITY**	**VOLUME**	**V/C**		**VOLUME**	**V/C**	
NBL	1	1700	22	0.01		119	0.07	*
NBT	3	5100	982	0.21	*	1160	0.25	
NBR	0		82	0.00		97	0.00	
SBL	2	3400	302	0.09	*	274	0.08	
SBT	3	5100	936	0.19		1388	0.29	*
SBR	0		20	0.00		98	0.00	
EBL	1	1700	205	0.12		118	0.07	*
EBT	1	1700	242	0.16	*	147	0.12	
EBR	0		26	0.00		57	0.00	
WBL	1	1700	62	0.04	*	190	0.11	
WBT	1	1700	66	0.04		392	0.23	*
WBR	1	1700	166	0.10	*	412	0.24	
		N/S Movements		0.30			0.36	
		E/W Movements		0.19			0.30	
		Rt. Turn Component		0.00			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.54**			**0.71**	
LEVEL OF SERVICE (LOS)				**A**			**C**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: SR-55 SB Ramps at Paularino Ave

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C	PM PEAK HOUR VOLUME	PM PEAK HOUR V/C
NBL	0		0	0.00 *	0	0.00 *
NBT	0		0	0.00	0	0.00
NBR	0		0	0.00	0	0.00
SBL	0		547	0.00	94	0.00
SBT	2	3400	667	0.42 *	647	0.31 *
SBR	0		210	0.00	328	0.00
EBL	0		0	0.00	0	0.00
EBT	2	3400	741	0.26 *	372	0.16 *
EBR	0		128	0.00	188	0.00
WBL	1	1700	39	0.02 *	165	0.10 *
WBT	2	3400	159	0.05	737	0.22
WBR	0		0	0.00	0	0.00
		N/S Movements		0.42		0.31
		E/W Movements		0.28		0.26
		Rt. Turn Component		0.00		0.00
		Yellow Clearance		0.05		0.05
TOTAL CAPACITY UTILIZATION				**0.75**		**0.63**
LEVEL OF SERVICE (LOS)				**C**		**B**

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: SR-55 NB Ramps at Paularino Ave

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	0		109	0.00		165	0.00	
NBT	2	3400	993	0.36	*	505	0.22	*
NBR	0		130	0.00		73	0.00	
SBL	0		0	0.00	*	0	0.00	*
SBT	0		0	0.00		0	0.00	
SBR	0		0	0.00		0	0.00	
EBL	1	1700	298	0.18		158	0.09	*
EBT	2	3400	993	0.29	*	304	0.09	
EBR	0		0	0.00		0	0.00	
WBL	0		0	0.00	*	0	0.00	
WBT	2	3400	90	0.06		702	0.29	*
WBR	0		124	0.00		273	0.00	
		N/S Movements		0.36			0.22	
		E/W Movements		0.29			0.38	
		Rt. Turn Component		0.00			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.70**			**0.65**	
LEVEL OF SERVICE (LOS)				**B**			**B**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT:	**DPPMP 2015**
ANALYSIS CONDITION:	**Year 2014/15 Conditions**
INTERSECTION:	**Harbor Blvd at Baker St**

			AM PEAK HOUR			PM PEAK HOUR		
MOVEMENT	**LANES**	**CAPACITY**	**VOLUME**	**V/C**		**VOLUME**	**V/C**	
NBL	2	3400	53	0.02		100	0.03	*
NBT	4	6800	1617	0.24	*	1486	0.22	
NBR	1	1700	191	0.11		198	0.12	
SBL	2	3400	227	0.07	*	255	0.08	
SBT	4	6800	1290	0.19		1879	0.28	*
SBR	1	1700	153	0.09		272	0.16	
EBL	2	3400	243	0.07	*	207	0.06	*
EBT	2	3400	240	0.07		236	0.07	
EBR	1	1700	42	0.02		64	0.04	
WBL	2	3400	193	0.06		420	0.12	
WBT	2	3400	224	0.07	*	664	0.20	*
WBR	1	1700	112	0.07		325	0.19	
		N/S Movements		0.30			0.31	
		E/W Movements		0.14			0.26	
		Rt. Turn Component		0.00			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.49**			**0.61**	
LEVEL OF SERVICE (LOS)				**A**			**B**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT:	**DPPMP 2015**
ANALYSIS CONDITION:	**Year 2014/15 Conditions**
INTERSECTION:	**Fairview Rd at Baker St**

			AM PEAK HOUR			PM PEAK HOUR		
MOVEMENT	**LANES**	**CAPACITY**	**VOLUME**	**V/C**		**VOLUME**	**V/C**	
NBL	2	3400	124	0.04		200	0.06	
NBT	3	5100	1288	0.25	*	927	0.18	*
NBR	1	1700	626	0.37	*	319	0.19	
SBL	2	3400	218	0.06	*	195	0.06	*
SBT	4	6800	817	0.12		1118	0.16	
SBR	1	1700	237	0.14		298	0.18	
EBL	2	3400	188	0.06		287	0.08	
EBT	2	3400	465	0.14	*	450	0.13	*
EBR	1	1700	124	0.07		149	0.09	
WBL	2	3400	244	0.07	*	604	0.18	*
WBT	3	5100	266	0.05		1070	0.21	
WBR	1	1700	153	0.09	*	213	0.13	
		N/S Movements		0.32			0.24	
		E/W Movements		0.21			0.31	
		Rt. Turn Component		0.04			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.62**			**0.60**	
LEVEL OF SERVICE (LOS)				**B**			**A**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Bristol St at Baker St

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	2	3400	40	0.01		246	0.07	
NBT	3	5100	517	0.10	*	807	0.16	*
NBR	1	1700	203	0.12		209	0.12	
SBL	2	3400	372	0.11	*	438	0.13	*
SBT	3	5100	571	0.11		744	0.15	
SBR	1	1700	100	0.06		447	0.26	*
EBL	2	3400	251	0.07		240	0.07	*
EBT	2	3400	812	0.26	*	378	0.13	
EBR	0		77	0.00		76	0.00	
WBL	2	3400	179	0.05	*	248	0.07	
WBT	2	3400	240	0.07		987	0.29	*
WBR	1	1700	326	0.19	*	312	0.18	
		N/S Movements		0.21			0.29	
		E/W Movements		0.31			0.36	
		Rt. Turn Component		0.01			0.05	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.59**			**0.74**	
LEVEL OF SERVICE (LOS)				**A**			**C**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT:	**DPPMP 2015**
ANALYSIS CONDITION:	**Year 2014/15 Conditions**
INTERSECTION:	**SR-55 SB Ramps at Baker St**

			AM PEAK HOUR			PM PEAK HOUR		
MOVEMENT	**LANES**	**CAPACITY**	**VOLUME**	**V/C**		**VOLUME**	**V/C**	
NBL	0		0	0.00	*	0	0.00	*
NBT	0		0	0.00		0	0.00	
NBR	0		0	0.00		0	0.00	
SBL	0		381	0.00		83	0.00	
SBT	2	3400	146	0.23	*	395	0.30	*
SBR	0		253	0.00		529	0.00	
EBL	0		0	0.00		0	0.00	*
EBT	2	3400	1097	0.32	*	418	0.12	
EBR	1	1700	240	0.14		424	0.25	*
WBL	1	1700	92	0.05	*	307	0.18	
WBT	2	3400	412	0.12		1073	0.32	*
WBR	0		0	0.00		0	0.00	
		N/S Movements		0.23			0.30	
		E/W Movements		0.38			0.32	
		Rt. Turn Component		0.00			0.13	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.66**			**0.79**	
LEVEL OF SERVICE (LOS)				**B**			**C**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: SR-55 NB Ramps at Baker St

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C	PM PEAK HOUR VOLUME	PM PEAK HOUR V/C
NBL	0		275	0.00	315	0.00
NBT	2	3400	622	0.39 *	259	0.26 *
NBR	0		423	0.00	310	0.00
SBL	0		0	0.00 *	0	0.00 *
SBT	0		0	0.00	0	0.00
SBR	0		0	0.00	0	0.00
EBL	1	1700	424	0.25 *	219	0.13 *
EBT	2	3400	1055	0.31	319	0.09
EBR	0		0	0.00	0	0.00
WBL	0		0	0.00	0	0.00
WBT	2	3400	228	0.07 *	1041	0.31 *
WBR	1	1700	134	0.08 *	236	0.14
		N/S Movements		0.39		0.26
		E/W Movements		0.32		0.44
		Rt. Turn Component		0.01		0.00
		Yellow Clearance		0.05		0.05
TOTAL CAPACITY UTILIZATION				**0.77**		**0.75**
LEVEL OF SERVICE (LOS)				**C**		**C**

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Placentia Ave at Adams Ave

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C	PM PEAK HOUR VOLUME	PM PEAK HOUR V/C
NBL	2	3400	187	0.06	252	0.07 *
NBT	1	1700	240	0.14 *	122	0.07
NBR	1	1700	231	0.14	223	0.13
SBL	1	1700	25	0.01 *	24	0.01
SBT	2	3400	246	0.07	138	0.04 *
SBR	1	1700	112	0.07	217	0.13 *
EBL	1	1700	102	0.06	72	0.04 *
EBT	3	5100	2268	0.44 *	725	0.14
EBR	1	1700	207	0.12	186	0.11
WBL	1	1700	161	0.09 *	172	0.10
WBT	3	5100	635	0.13	2288	0.46 *
WBR	0		21	0.00	33	0.00
		N/S Movements		0.16		0.11
		E/W Movements		0.54		0.50
		Rt. Turn Component		0.00		0.04
		Yellow Clearance		0.05		0.05
TOTAL CAPACITY UTILIZATION				**0.75**		**0.71**
LEVEL OF SERVICE (LOS)				**C**		**C**

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Harbor Blvd at Adams Ave

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C	PM PEAK HOUR VOLUME	PM PEAK HOUR V/C
NBL	2	3400	146	0.04	365	0.11 *
NBT	3	5100	992	0.21 *	1279	0.27
NBR	0		69	0.00	97	0.00
SBL	2	3400	90	0.03 *	126	0.04
SBT	4	6800	1047	0.15	1545	0.23 *
SBR	2	3400	272	0.08	663	0.20
EBL	3	5100	897	0.18	341	0.07 *
EBT	3	5100	1236	0.24 *	510	0.10
EBR	1	1700	174	0.10	105	0.06
WBL	2	3400	111	0.03 *	169	0.05
WBT	3	5100	308	0.06	1282	0.25 *
WBR	1	1700	63	0.04 *	54	0.03
		N/S Movements		0.23		0.33
		E/W Movements		0.28		0.32
		Rt. Turn Component		0.00		0.00
		Yellow Clearance		0.05		0.05
TOTAL CAPACITY UTILIZATION				**0.56**		**0.70**
LEVEL OF SERVICE (LOS)				**A**		**B**

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Fairview Rd at Adams Ave

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	2	3400	96	0.03		367	0.11	*
NBT	3	5100	675	0.14	*	846	0.18	
NBR	0		56	0.00		54	0.00	
SBL	1	1700	72	0.04	*	105	0.06	
SBT	3	5100	739	0.14		753	0.15	*
SBR	1	1700	363	0.00		1030	0.00	
EBL	2	3400	1244	0.37	*	601	0.18	*
EBT	1	1700	90	0.05		68	0.04	
EBR	1	1700	199	0.12	*	135	0.08	
WBL	1	1700	63	0.04		43	0.03	
WBT	2	3400	87	0.03	*	153	0.05	*
WBR	1	1700	117	0.07	*	92	0.05	
		N/S Movements		0.19			0.26	
		E/W Movements		0.39			0.22	
		Rt. Turn Component		0.04			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.66**			**0.53**	
LEVEL OF SERVICE (LOS)				**B**			**A**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT:	**DPPMP 2015**
ANALYSIS CONDITION:	**Year 2014/15 Conditions**
INTERSECTION:	**Placentia Ave at Victoria St**

			AM PEAK HOUR			PM PEAK HOUR		
MOVEMENT	**LANES**	**CAPACITY**	**VOLUME**	**V/C**		**VOLUME**	**V/C**	
NBL	2	3400	253	0.07	*	600	0.18	*
NBT	2	3400	398	0.12		630	0.19	
NBR	1	1700	142	0.08		208	0.12	
SBL	1	1700	111	0.07		88	0.05	
SBT	2	3400	558	0.16	*	408	0.12	*
SBR	1	1700	60	0.04		119	0.07	
EBL	1	1700	50	0.03		60	0.04	*
EBT	2	3400	1287	0.38	*	549	0.16	
EBR	1	1700	716	0.42		327	0.19	
WBL	1	1700	165	0.10	*	130	0.08	
WBT	2	3400	480	0.14		1330	0.39	*
WBR	1	1700	111	0.07		78	0.05	
		N/S Movements		0.24			0.30	
		E/W Movements		0.48			0.43	
		Rt. Turn Component		0.00			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.76**			**0.77**	
LEVEL OF SERVICE (LOS)				**C**			**C**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Harbor Blvd at Victoria St

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	1	1700	54	0.03	*	187	0.11	*
NBT	3	5100	570	0.11		1145	0.22	
NBR	1	1700	44	0.03		122	0.07	
SBL	1	1700	129	0.08		100	0.06	
SBT	3	5100	947	0.19	*	1206	0.24	*
SBR	1	1700	179	0.11		319	0.19	
EBL	2	3400	282	0.08		232	0.07	*
EBT	2	3400	1298	0.38	*	532	0.16	
EBR	1	1700	134	0.08		132	0.08	
WBL	2	3400	136	0.04	*	85	0.03	
WBT	2	3400	631	0.19		1194	0.35	*
WBR	1	1700	116	0.07		110	0.06	
		N/S Movements		0.22			0.35	
		E/W Movements		0.42			0.42	
		Rt. Turn Component		0.00			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.69**			**0.82**	
LEVEL OF SERVICE (LOS)				**B**			**D**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Newport Blvd at 19th St

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	1	1700	14	0.01		72	0.04	
NBT	4	6800	3441	0.51	*	2940	0.44	*
NBR	0		32	0.00		49	0.00	
SBL	1	1700	179	0.11	*	177	0.10	*
SBT	4	6800	2812	0.41		2620	0.39	
SBR	1	1700	585	0.34		780	0.46	
EBL	3	5100	855	0.17	*	736	0.14	*
EBT	1	1700	193	0.11		228	0.13	
EBR	1	1700	22	0.01		82	0.05	
WBL	1	1700	33	0.02		76	0.04	
WBT	3	5100	164	0.03	*	362	0.07	*
WBR	1	1700	254	0.15	*	193	0.11	
		N/S Movements		0.62			0.54	
		E/W Movements		0.20			0.22	
		Rt. Turn Component		0.01			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.88**			**0.81**	
LEVEL OF SERVICE (LOS)				**D**			**D**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Newport Blvd at Broadway

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	1	1700	16	0.01	*	51	0.03	*
NBT	4	6800	3333	0.49		2892	0.43	
NBR	1	1700	50	0.03		62	0.04	
SBL	1	1700	42	0.02		67	0.04	
SBT	3	5100	2776	0.54	*	2554	0.50	*
SBR	1	1700	52	0.03		164	0.10	
EBL	1	1700	5	0.00	*	2	0.00	*
EBT	0		14	0.00		11	0.00	
EBR	2	3400	15	0.00		5	0.00	
WBL	0		38	0.00		52	0.00	
WBT	0		31	0.00	*	43	0.00	*
WBR	0		109	0.00		95	0.00	
		N/S Movements		0.55			0.53	
		E/W Movements		0.00			0.00	
		Rt. Turn Component		0.00			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.61**			**0.58**	
LEVEL OF SERVICE (LOS)				**B**			**A**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Newport Blvd at Harbor Blvd

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C	PM PEAK HOUR VOLUME	PM PEAK HOUR V/C
NBL	2	3400	273	0.08 *	497	0.15 *
NBT	4	6800	3364	0.49	2950	0.43
NBR	0		0	0.00	0	0.00
SBL	0		0	0.00	0	0.00
SBT	3	5100	2804	0.56 *	2543	0.52 *
SBR	0		27	0.00	84	0.00
EBL	1	1700	34	0.02 *	61	0.04 *
EBT	0		0	0.00	0	0.00
EBR	2	3400	483	0.14 *	483	0.14
WBL	0		0	0.00	0	0.00
WBT	0		0	0.00 *	0	0.00 *
WBR	0		0	0.00	0	0.00
		N/S Movements		0.64		0.66
		E/W Movements		0.02		0.04
		Rt. Turn Component		0.06		0.00
		Yellow Clearance		0.05		0.05
TOTAL CAPACITY UTILIZATION				**0.77**		**0.75**
LEVEL OF SERVICE (LOS)				**C**		**C**

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Newport Blvd at Rochester & 18th St

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C	PM PEAK HOUR VOLUME	PM PEAK HOUR V/C
NBL	1	1700	36	0.02 *	85	0.05 *
NBT	4	6800	3338	0.49	3092	0.46
NBR	0		10	0.00	26	0.00
SBL	1	1700	78	0.05	107	0.06
SBT	3	5100	3034	0.59 *	2769	0.54 *
SBR	1	1700	105	0.06	159	0.09
EBL	2	3400	247	0.07 *	265	0.08 *
EBT	1	1700	85	0.05	83	0.05
EBR	1	1700	45	0.03	50	0.03
WBL	1	1700	7	0.00	27	0.02
WBT	1	1700	62	0.05 *	96	0.08 *
WBR	0		28	0.00	47	0.00
		N/S Movements		0.62		0.59
		E/W Movements		0.13		0.16
		Rt. Turn Component		0.00		0.00
		Yellow Clearance		0.05		0.05
TOTAL CAPACITY UTILIZATION				**0.79**		**0.81**
LEVEL OF SERVICE (LOS)				**C**		**D**

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Newport Blvd at 17th St

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	1	1700	34	0.02		64	0.04	
NBT	4	6800	2048	0.33	*	1613	0.26	*
NBR	0		162	0.00		155	0.00	
SBL	2	3400	652	0.19	*	717	0.21	*
SBT	3	5100	1726	0.34		1560	0.31	
SBR	1	1700	383	0.23		331	0.19	
EBL	3	5100	827	0.16	*	867	0.17	*
EBT	2	3400	458	0.14		478	0.16	
EBR	0		25	0.00		49	0.00	
WBL	2	3400	158	0.05		270	0.08	
WBT	3	5100	384	0.08	*	530	0.10	*
WBR	1	1700	188	0.11		162	0.10	
		N/S Movements		0.52			0.47	
		E/W Movements		0.24			0.27	
		Rt. Turn Component		0.00			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.80**			**0.79**	
LEVEL OF SERVICE (LOS)				**C**			**C**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Orange Ave at 17th St

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C	PM PEAK HOUR VOLUME	PM PEAK HOUR V/C
NBL	1	1700	131	0.08 *	153	0.09
NBT	1	1700	136	0.08	198	0.12 *
NBR	1	1700	48	0.03	73	0.04
SBL	1	1700	130	0.08	187	0.11 *
SBT	1	1700	137	0.08 *	187	0.11
SBR	1	1700	91	0.05	110	0.06
EBL	1	1700	47	0.03	87	0.05 *
EBT	2	3400	896	0.26 *	984	0.29
EBR	1	1700	148	0.09	136	0.08
WBL	1	1700	50	0.03 *	86	0.05
WBT	2	3400	729	0.21	1008	0.30 *
WBR	1	1700	66	0.04	125	0.07
		N/S Movements		0.16		0.23
		E/W Movements		0.29		0.35
		Rt. Turn Component		0.00		0.00
		Yellow Clearance		0.05		0.05
TOTAL CAPACITY UTILIZATION				**0.50**		**0.62**
LEVEL OF SERVICE (LOS)				**A**		**B**

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Santa Ana Ave at 17th St

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C	PM PEAK HOUR VOLUME	PM PEAK HOUR V/C
NBL	1	1700	83	0.05	113	0.07 *
NBT	1	1700	126	0.07 *	142	0.08
NBR	1	1700	70	0.04	102	0.06
SBL	1	1700	68	0.04 *	86	0.05
SBT	1	1700	106	0.06	127	0.07 *
SBR	1	1700	68	0.04	75	0.04
EBL	1	1700	47	0.03	77	0.05 *
EBT	2	3400	866	0.25 *	1004	0.30
EBR	1	1700	64	0.04	72	0.04
WBL	1	1700	27	0.02 *	134	0.08
WBT	2	3400	727	0.21	1127	0.33 *
WBR	1	1700	44	0.03	102	0.06
		N/S Movements		0.11		0.14
		E/W Movements		0.27		0.38
		Rt. Turn Component		0.00		0.00
		Yellow Clearance		0.05		0.05
TOTAL CAPACITY UTILIZATION				**0.43**		**0.57**
LEVEL OF SERVICE (LOS)				**A**		**A**

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Tustin Ave at 17th St

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C	PM PEAK HOUR VOLUME	PM PEAK HOUR V/C
NBL	1	1700	94	0.06	100	0.06
NBT	1	1700	115	0.12 *	99	0.10 *
NBR	0		95	0.00	74	0.00
SBL	1	1700	50	0.03 *	68	0.04 *
SBT	1	1700	87	0.05	122	0.07
SBR	1	1700	67	0.04	72	0.04
EBL	1	1700	44	0.03	62	0.04 *
EBT	2	3400	894	0.28 *	906	0.29
EBR	0		71	0.00	86	0.00
WBL	1	1700	50	0.03 *	98	0.06
WBT	2	3400	725	0.23	1207	0.38 *
WBR	0		51	0.00	89	0.00
		N/S Movements		0.15		0.14
		E/W Movements		0.31		0.42
		Rt. Turn Component		0.00		0.00
		Yellow Clearance		0.05		0.05
TOTAL CAPACITY UTILIZATION				**0.52**		**0.61**
LEVEL OF SERVICE (LOS)				**A**		**B**

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Irvine Ave & 17th St

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C	PM PEAK HOUR VOLUME	PM PEAK HOUR V/C
NBL	2	3400	247	0.07	268	0.08 *
NBT	2	3400	540	0.17 *	441	0.14
NBR	0		23	0.00	47	0.00
SBL	2	3400	250	0.07 *	143	0.04
SBT	2	3400	360	0.15	640	0.31 *
SBR	0		151	0.00	430	0.00
EBL	2	3400	264	0.08 *	276	0.08 *
EBT	2	3400	535	0.19	536	0.22
EBR	0		109	0.00	195	0.00
WBL	1	1700	36	0.02	110	0.06
WBT	2	3400	410	0.14 *	675	0.22 *
WBR	0		49	0.00	69	0.00
		N/S Movements		0.24		0.39
		E/W Movements		0.21		0.30
		Rt. Turn Component		0.00		0.00
		Yellow Clearance		0.05		0.05
TOTAL CAPACITY UTILIZATION				**0.50**		**0.74**
LEVEL OF SERVICE (LOS)				**A**		**C**

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Newport Blvd at 16th St

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	1	1700	3	0.00		24	0.01	*
NBT	3	5100	2133	0.43	*	1570	0.32	
NBR	0		36	0.00		47	0.00	
SBL	1	1700	80	0.05	*	87	0.05	
SBT	3	5100	1756	0.34		1892	0.37	*
SBR	1	1700	42	0.02		31	0.02	
EBL	0		20	0.00	*	26	0.00	*
EBT	1	1700	47	0.04		29	0.04	
EBR	0		3	0.00		11	0.00	
WBL	0		37	0.00		72	0.00	
WBT	1	1700	48	0.10	*	67	0.14	*
WBR	0		88	0.00		103	0.00	
		N/S Movements		0.47			0.39	
		E/W Movements		0.10			0.14	
		Rt. Turn Component		0.00			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.62**			**0.58**	
LEVEL OF SERVICE (LOS)				**B**			**A**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005

INTERSECTION CAPACITY UTILIZATION
CALCULATION WORKSHEET

PROJECT: DPPMP 2015
ANALYSIS CONDITION: Year 2014/15 Conditions
INTERSECTION: Newport Blvd at Industrial Way

MOVEMENT	LANES	CAPACITY	AM PEAK HOUR VOLUME	AM PEAK HOUR V/C		PM PEAK HOUR VOLUME	PM PEAK HOUR V/C	
NBL	1	1700	56	0.03		47	0.03	*
NBT	3	5100	2017	0.40	*	1571	0.31	
NBR	0		21	0.00		6	0.00	
SBL	1	1700	128	0.08	*	48	0.03	
SBT	3	5100	1553	0.33		1741	0.35	*
SBR	0		117	0.00		63	0.00	
EBL	0		67	0.00		116	0.00	
EBT	1	1700	143	0.12	*	69	0.11	*
EBR	1	1700	81	0.05		59	0.03	
WBL	1	1700	4	0.00	*	18	0.01	*
WBT	1	1700	78	0.05		61	0.04	
WBR	1	1700	83	0.05		82	0.05	
		N/S Movements		0.47			0.38	
		E/W Movements		0.13			0.12	
		Rt. Turn Component		0.00			0.00	
		Yellow Clearance		0.05			0.05	
TOTAL CAPACITY UTILIZATION				**0.65**			**0.55**	
LEVEL OF SERVICE (LOS)				**B**			**A**	

ICU			LOS	
0.10	-	0.6	A	0.1
0.61	-	0.7	B	0.605
0.71	-	0.8	C	0.705
0.81	-	0.9	D	0.805
0.91	-	1.00	E	0.905
1.01	-	UP	F	1.005