

**Traffic Impact Study for
Del Rey Pointe
Los Angeles, California**

October 19, 2017

Prepared for:

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I. Introduction

This study report identifies the potential traffic impacts associated with a proposed residential project, which will be located at 5000 Beethoven Street, within the Del Rey neighborhood of the City of Los Angeles.

Prior to the start of the study, KOA Corporation coordinated with staff from the City of Los Angeles Department of Transportation (LADOT) to obtain consensus on the traffic scope, methodology and assumptions. A Memorandum of Understanding (MOU) was prepared by KOA and approved by LADOT staff on April 10, 2017. A copy of the final MOU is provided in Appendix A.

KOA previously conducted the traffic impact study (DOT Case No. CTC15-103068) for this Project, and was approved by LADOT staff, dated June 30, 2016. This traffic impact study report documents the updated intensity of the mixed-use development.

1.1 Project Description

The proposed Project would provide a total of 236 apartment units. The project name is Del Rey Pointe and the address is 5000 Beethoven Street, Los Angeles, CA90066. A private traffic bridge would be constructed over the Centinela Creek Channel connecting to the cul-de-sac on Beethoven Street.

The preliminary site plan is provided on Figure 1.

1.2 Project Study Area

The project study area, as defined through consultation with LADOT staff, includes the following study intersections. Intersection A is not part of the main study area, but is being included for specialized analysis:

1. Centinela Avenue and SR-90 WB Off Ramp
2. Centinela Avenue and SR-90 EB On-Off Ramp
3. Lincoln Boulevard and Jefferson Boulevard
4. Alla Road and Jefferson Boulevard
5. Beethoven Street and Jefferson Boulevard
6. McConnell Avenue and Jefferson Boulevard
7. Centinela Avenue/Campus Center Drive and Jefferson Boulevard
8. Centinela Avenue/Inglewood Boulevard and Jefferson Boulevard
9. Jefferson Boulevard at Freeway I-405 SB on and off Ramps
10. Jefferson Boulevard at Freeway I-405 NB on and off Ramps

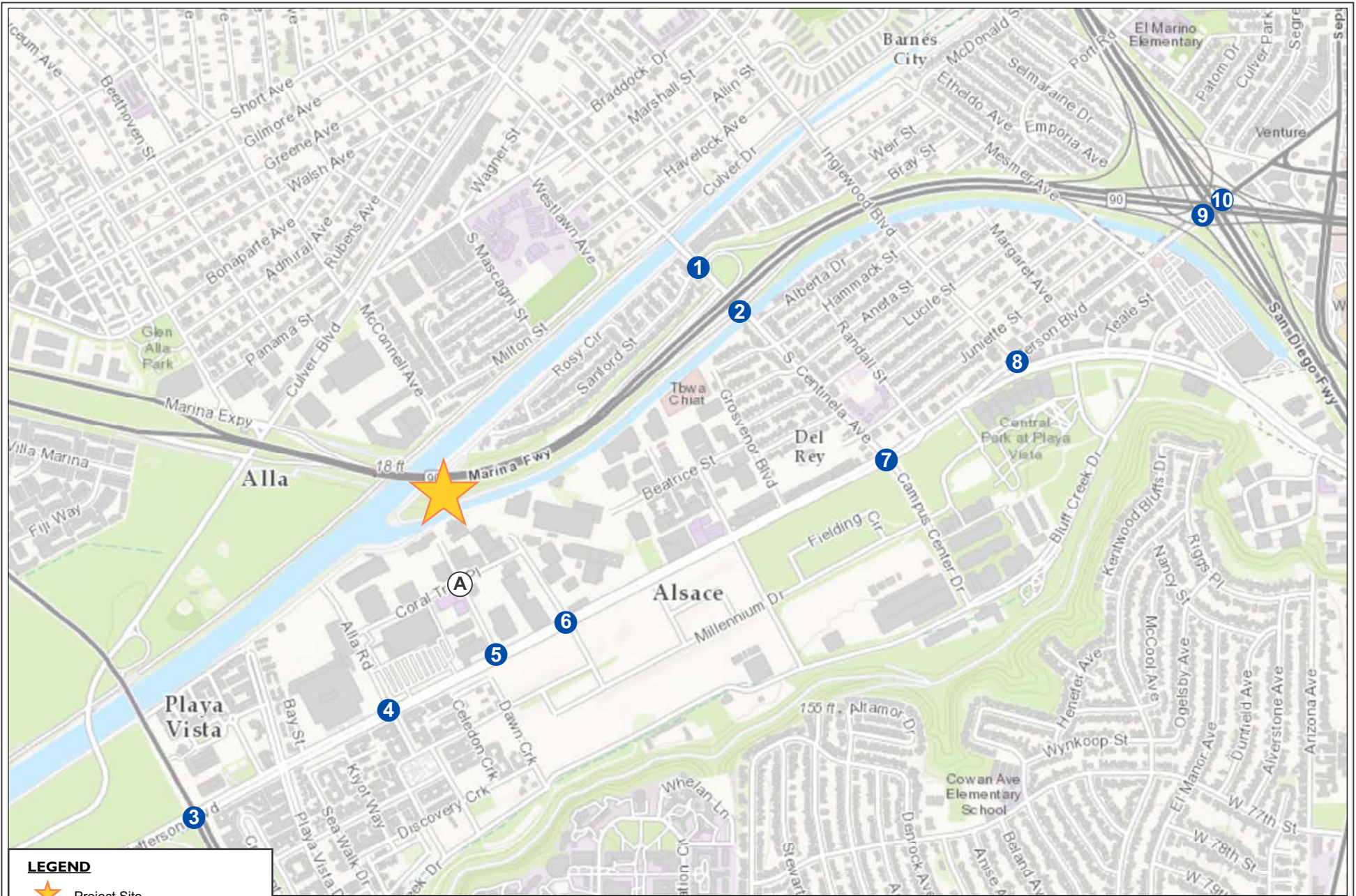
A. Beethoven Street and Coral Tree Place *

** This intersection is currently operating as an all-way stop control intersection. The intersection of Beethoven Street and Coral Tree Place was analyzed to determine the need for installation of a new traffic signal. The signal warrant analysis is discussed in section 7 of this report.*

Figure 2 illustrates the study intersection locations.



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LEGEND

- ★ Project Site
- Study Intersection
- Unsignalized Study Intersection

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1.3 Study Scenarios

Project traffic impacts were analyzed for the weekday a.m. and p.m. peak-hour time periods at the study intersections. The traffic analysis included the following scenarios:

- Existing (year 2017)
- Existing with Project (year 2017)
- Future without Project (year 2020)
- Future with Project (year 2020)

1.4 Analysis Methodology

The proposed Project site is located within the City of Los Angeles. KOA coordinated with LADOT at the start of this study to achieve consensus on assumptions such as study intersections, trip generation and trip distribution.

The general methodology and assumptions contained in this report are based on the LADOT *Traffic Study Policies and Procedures* document of December 2016. A Memorandum of Understanding (MOU) that included all major traffic study assumptions was submitted to LADOT. An approved MOU dated April 10, 2017 was received from LADOT.

The list of study intersections is finalized through this process, as are the trip generation and trip distribution assumptions. The following text describes the methodology for this report as defined in the MOU document.

Existing Condition

Fieldwork within the project study area was undertaken to identify the condition of key study area roadways, to identify traffic control and approach lane configurations at each study intersection, and to identify the locations of on-street parking and transit stops.

New Traffic counts were collected at the study intersections on a weekday during the timeframes of 7:00 a.m. to 10:00 a.m. and 3:00 p.m. to 6:00 p.m. on Thursday, February 16, 2007 and Tuesday, March 14, 2017. The traffic count data are provided in Appendix B of this report. The existing levels of service at the study intersections are discussed in Section 2 of this report.

Project Trip Generation and Distribution

The applied trip generation rates for Project trips were based on those defined within *Trip Generation (9th Edition)*, published by the Institute of Transportation Engineers (ITE). The detailed methodology utilized for the project trip generation and distribution calculations is discussed in Section 3 of this report.

Existing with-Project Conditions

Based on the traffic that is projected for the proposed Project and the existing traffic volumes, a separate existing with-Project conditions scenario was analyzed. This scenario was analyzed in order to comply with rulings in the *Sunnyvale* and *Neighbors for Smart Rail* California Environmental Quality Act (CEQA) court cases. The levels of service for existing with-Project conditions at the study intersections are discussed in Section 4 of this report.

Future without-Project Conditions

Typically, regional traffic growth that would affect operations at the study intersections by the anticipated project opening year is added to the study area roadways by applying an ambient/background traffic growth rate to the existing traffic volumes. The full operation of the proposed Project is 2020. Therefore, an annual traffic growth rate of 1% per year was assumed for the analysis of future conditions.

In addition, traffic from area/cumulative projects (approved and pending developments) was included as part of the analysis for future Year 2020 conditions. KOA obtained information from LADOT, the Los Angeles County Department of Regional Planning, and the City of Culver City pertaining to projects that would add measurable volumes to the study intersections.

The levels of service for the future without-Project conditions scenario are discussed in Section 5 of this report.

Future with-Project Conditions

Based on the future traffic volumes including traffic from ambient growth, area/cumulative projects and the proposed project, the future with-Project conditions were determined and analyzed. The levels of service for the future with-Project conditions scenario are discussed in Section 6 of this report.

Level-of-Service Methodology

For analysis of Level of Service (LOS) at signalized intersections, LADOT has designated the Circular 212 Planning methodology as the desired tool. The concept of roadway level of service under the Circular 212 method is calculated as the volume of vehicles that pass through the facility divided by the capacity of that facility. A facility is “at capacity” (V/C of 1.00 or greater) when extreme congestion occurs. This volume/capacity ratio value is a function of hourly volumes, signal phasing, and approach lane configuration on each leg of the intersection.

Level of service (LOS) values range from LOS A to LOS F. LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. LOS E is typically defined as the operating “capacity” of a roadway. Table I defines the level of service criteria applied to the study intersections.

Table I - Level-of-Service Definitions

LOS	Interpretation	Signalized Intersection Volume to Capacity Ratio (CMA)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0.000 - 0.600
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	0.601 - 0.700
C	Good operation. Occasionally backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701 - 0.800
D	Fair operation. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801 - 0.900
E	Poor operation. Some long standing vehicular queues develop on critical approaches.	0.901 - 1.000
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	Over 1.000
Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., 2000 and Interim Materials on Highway Capacity, NCHRP Circular 212, 1982		

1.5 Traffic Signal Synchronization

Automated Traffic Surveillance and Control (ATSAC) is a computer-based traffic signal control system whereby engineers monitor traffic conditions and system performance, selects appropriate signal timing (control) strategies, and performs equipment diagnostics and alert functions. Sensors in the street detect the passage of vehicles, vehicle speed, and the level of congestion. This information is received on a second-by-second (real-time) basis and is analyzed on a minute-by-minute basis at the ATSAC Operations Center to determine if better traffic flow can be achieved by changing the signal timing. If required, the signal timing is either automatically changed by the ATSAC computers or manually changed by the operator using communication lines that connect the ATSAC Center with each traffic signal. To supplement the information from electronic detectors, closed-circuit television (CCTV) surveillance equipment has been and continues to be installed at critical locations throughout the City.

For capacity analysis, LADOT policies provide for a 0.07 reduction in volume-to-capacity ratio with the implementation of ATSAC and an additional 0.03 reduction in volume-to-capacity ratio with the implementation of ATCS, for a total reduction in volume-to-capacity ratio of 0.10. This reduction represents field measured benefits in flow and capacity increase by operation of this program.

All of the analyzed study intersections are operated with ATSAC and ATCS.

1.6 Significant Traffic Impacts

As defined by the LADOT traffic study guidelines, significant impacts of a proposed project on a facility must be mitigated to a level of insignificance, where feasible. Potential significant traffic impacts at the study intersections due to the proposed Project are discussed in Section 7 of this report.

2. Existing Conditions

This report section describes the existing conditions within the study area, in terms of roadway facilities and operating conditions.

2.1 Existing Roadway System

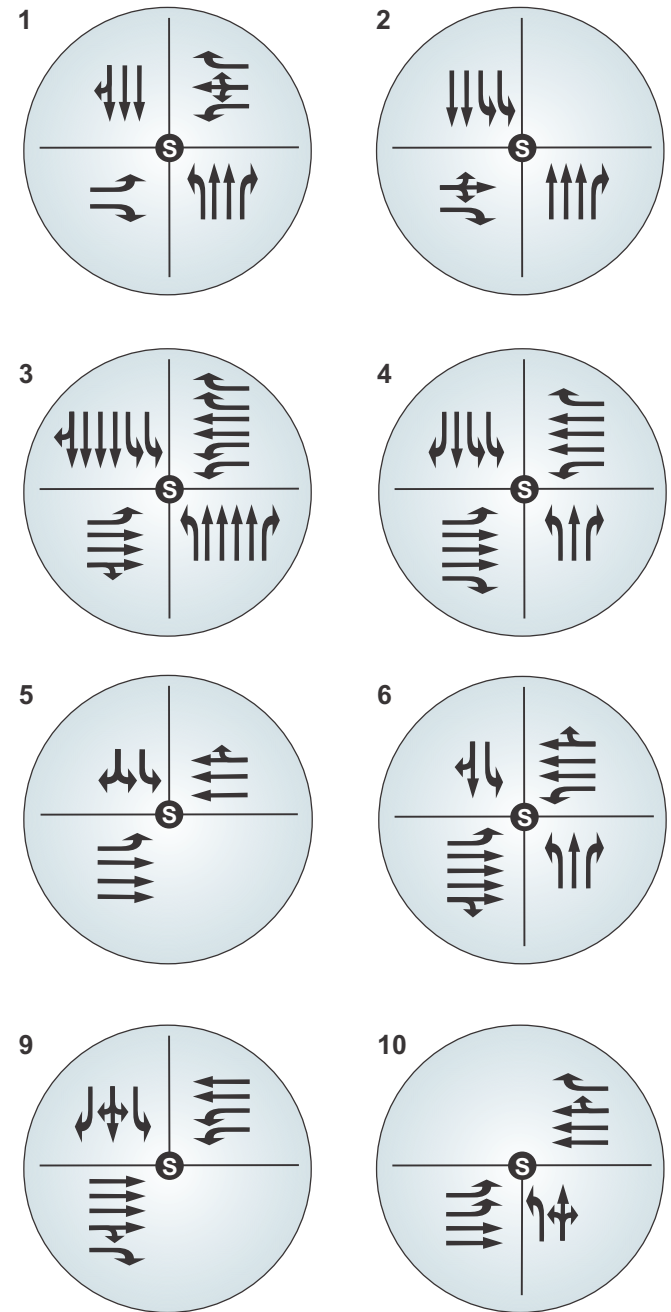
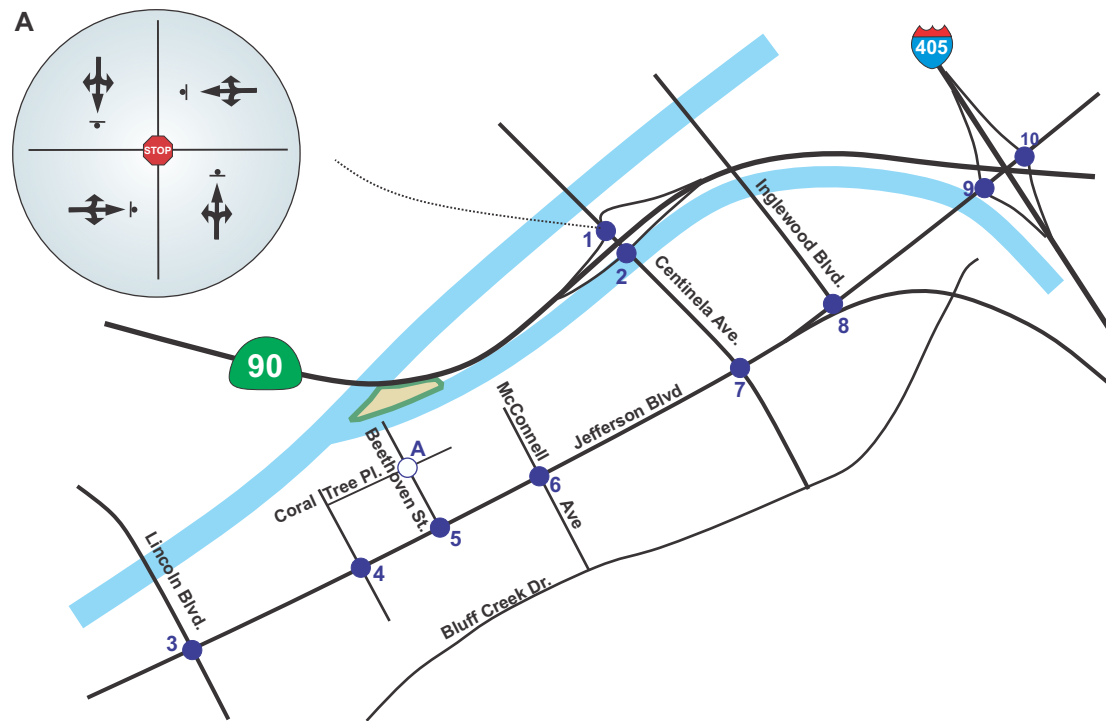
Fieldwork within the Project study area was undertaken to identify traffic control and approach lane configuration at each study intersection, and to identify the locations of on-street parking availability and locations of transit stops. Figure 3 illustrates the existing study intersection approach geometries.

The discussion presented here is limited to specific roadways that traverse the study intersections and serve the Project site. The primary roadways within the study area are described below in Table 2.

Table 2– Study Area Roadway Description

Segment	From	To	Classification	# Lanes		Median Type	Parking Restrictions		General Land Use	Posted Speed
				NB/EB	SB/WB		NB / EB	SB / WB		
NORTH-SOUTH										
Beethoven Street	Centinela Creek	Jefferson Boulevard	Collector Street	I	I	ST	Permitted	Permitted, NS 4 PM - 6 PM	Commercial	-
Lincoln Boulevard	Culver Boulevard	Jefferson Boulevard	Boulevard I	3	2	DY	NSAT	NSAT	Residential	45
	Jefferson Boulevard	Bluff Creek Drive	Boulevard I	4	4	RM	NSAT	NSAT	Residential / Open Space	45
Centinela Avenue	SR-90	Jefferson Boulevard	Avenue I	3	3	DY / 2LT	NSAT 7AM - 9AM and 4PM - 6PM, ex SAT/SUN	NSAT 7AM - 9AM and 4PM - 6PM, ex SAT/SUN	Commercial / Residential	35
Inglewood Boulevard	SR-90	Jefferson Boulevard	Secondary Highway	2	2	DY	Permitted	Permitted	Residential / Office	35
EAST-WEST										
Jefferson Boulevard	Lincoln Boulevard	Beethoven Street	Boulevard II	3	3	RM	NSAT	NSAT	Commercial / Residential	45
	Beethoven Street	Centinela Avenue	Boulevard II	4	3	RM	NSAT	NS 3PM - 6PM, NSAT	Commercial / Residential	45
	Centinela Avenue	Inglewood Boulevard	Boulevard II	3	3	RM / 2LT	NSAT	15 Min parking 8AM - 6PM, NS 7AM - 10AM and 3PM - 7PM	Commercial / Office	45
	Inglewood Boulevard	Slauson Avenue	Boulevard II	3	2	DY / 2LT	4 Hr parking 8AM - 6PM , NSAT	Permitted	Commercial / Residential	35

DY - Double Yellow
 RM - Raised Median
 ST - Striped
 2LT - Dual Left Turn
 NSAT - No Stopping Any Time
 (M) Metered Parking



2.2 Existing Transit Service

Table 3 provides a description of the transit lines that traverse the study area. The existing transit lines are illustrated on Figure 4.

Table 3 – Transit Service Summary

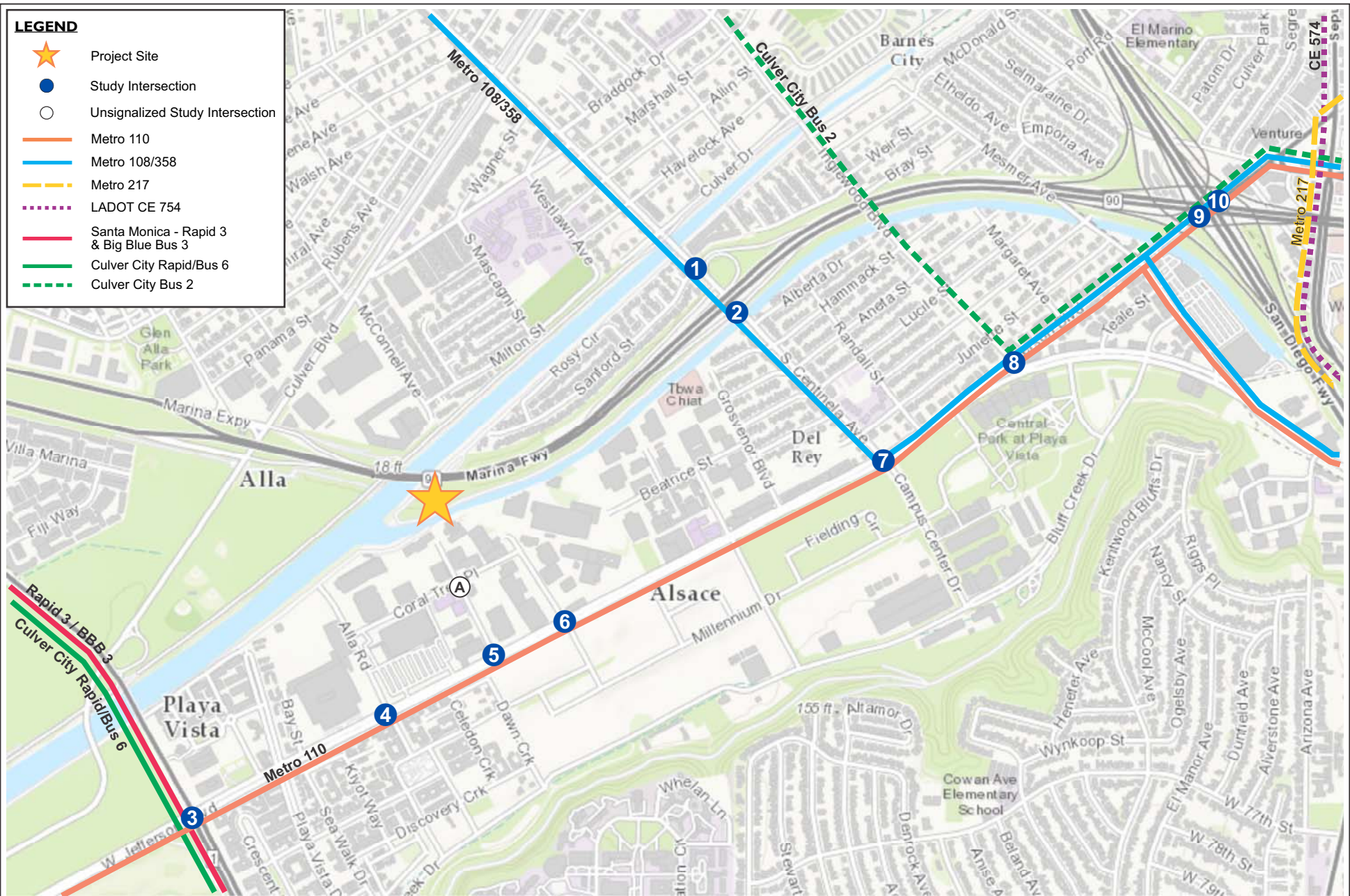
Agency	Line	From	To	Via	Peak Frequency
Metro	108	Marina Del Rey	Pico Rivera	Slauson Avenue / Jefferson Boulevard / Centinela Avenue	8-15 Minutes
Metro	110	Playa Vista	Bell Gardens	Jefferson Boulevard / Slauson Avenue / Sepulveda Boulevard	10 - 20 Minutes
Metro	217	Fox Hills	Hollywood	Sepulveda Boulevard	12 - 20 Minutes
Metro	358	Marina Del Rey	Pico Rivera	Slauson Avenue / Jefferson Boulevard / Centinela Avenue	10 - 20 Minutes
Santa Monica's Rapid	3	Santa Monica	El Segundo	Lincoln Boulevard	10 - 30 Minutes
Santa Monica's Big Blue Bus	3	Santa Monica	El Segundo	Lincoln Boulevard	12 - 30 Minutes
Culver City Bus Rapid	6	Westwood	El Segundo	Sepulveda Boulevard	15 - 20 Minutes
Culver City Bus	2	Culver City	Venice	Inglewood Boulevard / Jefferson Boulevard / Slauson Avenue	60 Minutes
Culver City Bus	6	Westwood	El Segundo	Sepulveda Boulevard	12 - 20 Minutes
LADOT Commuter Express	574	Encino	El Segundo	I-405 Freeway / Sepulveda Boulevard	25 - 30 Minutes

2.3 Existing Bikeways

The City of Los Angeles 2010 Bicycle Plan documents the existing and proposed bicycle facilities in the City. Within the study area, bicycle lane facilities are provided on the following roadways:

- Lincoln Boulevard: south of Fiji Way to Jefferson Boulevard and Loyola Marymount University Drive to Sepulveda Boulevard

The installation of bicycle facilities along Lincoln Boulevard has been completed as verified in field investigations.



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2.4 Existing Intersection Levels of Service

Based on the existing traffic volumes and the intersection geometries depicted on Figure 3, volume-to-capacity ratios and corresponding levels of service (LOS) were determined for the study intersections during the weekday a.m. and p.m. peak hours.

Table 4 summarizes the volume/capacity ratios and LOS values for this scenario. As indicated by the data within this table, eight out of the ten signalized study intersections are currently operating at LOS D or better during the weekday a.m. and p.m. peak hours.

**Table 4 – Study Intersection Operation
Existing Conditions**

Study Intersections		AM Peak		PM Peak	
		V/C	LOS	V/C	LOS
1	Centinela Avenue & SR-90 WB Off-Ramp	0.526	A	0.467	A
2	Centinela Avenue & SR-90 EB Ramps	0.570	A	0.452	A
3	Lincoln Boulevard & Jefferson Boulevard	0.899	D	0.685	B
4	Alla Road & Jefferson Boulevard	0.484	A	0.603	B
5	Beethoven Street & Jefferson Boulevard	0.345	A	0.403	A
6	McConnell Avenue & Jefferson Boulevard	0.379	A	0.361	A
7	Centinela Avenue / Campus Ctr. Drive & Jefferson Boulevard	0.885	D	0.604	B
8	Centinela Avenue / Inglewood Boulevard & Jefferson Boulevard	0.992	E	1.105	F
9	I-405 SB Ramps & Jefferson Boulevard	0.760	C	0.611	B
10	I-405 NB Ramps & Jefferson Boulevard	1.037	F	1.181	F

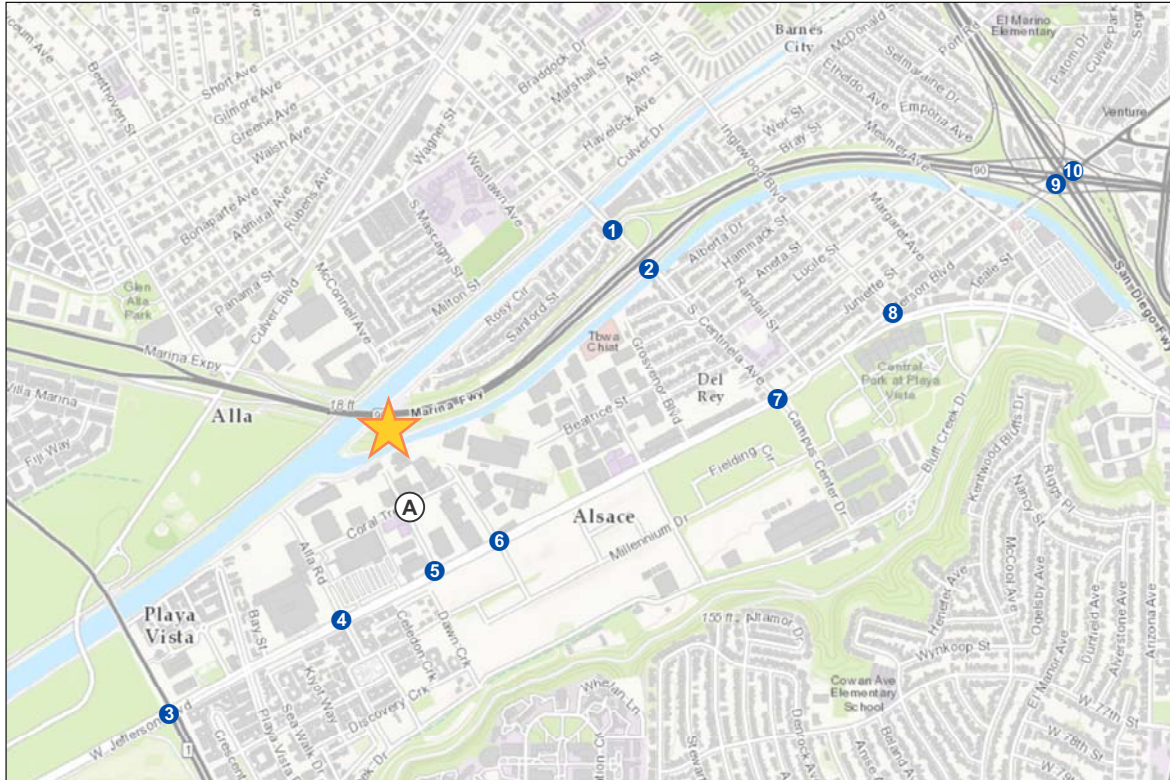
LOS = Level of Service

V/C = Volume-to-Capacity Ratio

The following intersections are operating at LOS E or F during the analyzed peak hours under existing conditions:

- Centinela Avenue/Campus Center Drive at Jefferson Boulevard – operating at LOS E during the a.m. peak hour, and LOS F during the p.m. peak hour
- Jefferson Boulevard at Freeway I-405 northbound on-and-off ramps – operating at LOS F during both weekday a.m. and p.m. peak hours

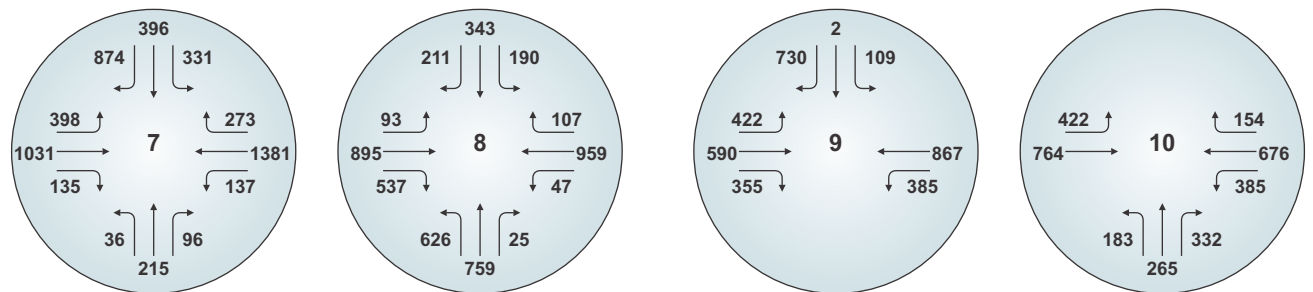
The existing weekday a.m. and p.m. peak hour turn movement volumes are provided on Figures 5 and 6, respectively. The LADOT Critical Movement Analysis (CMA) calculation worksheets for all analyzed scenarios are provided in Appendix C of this report.

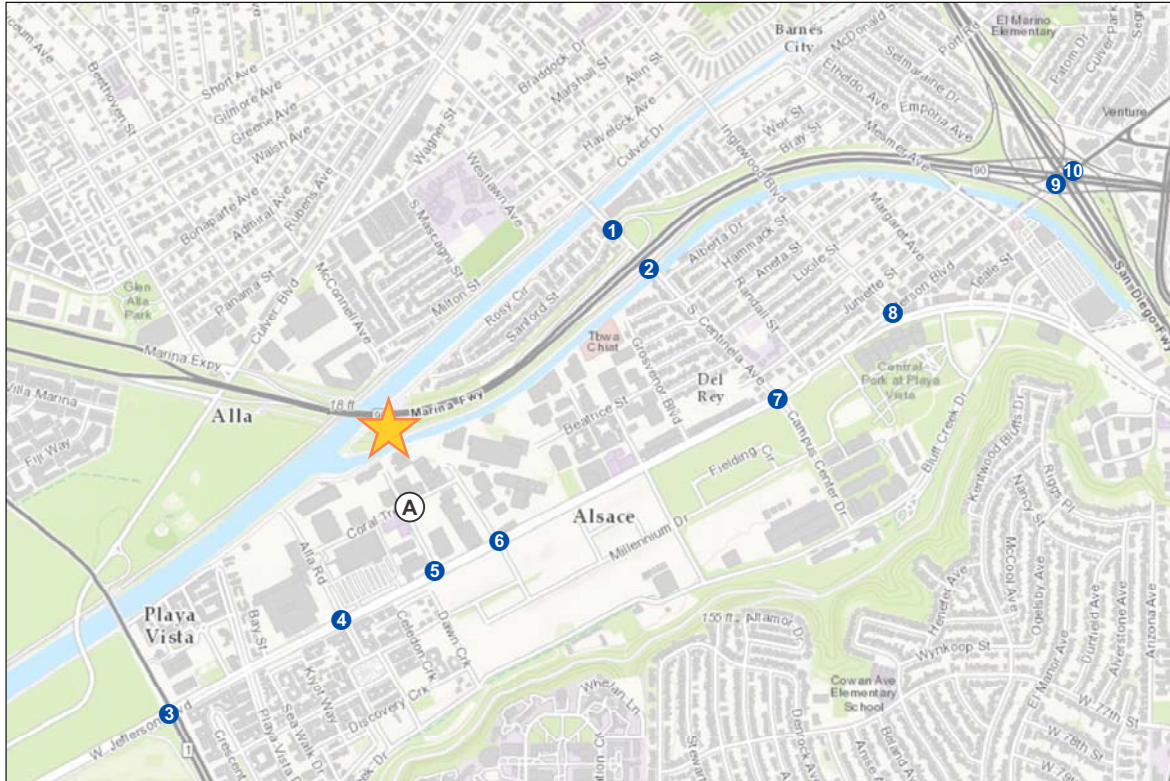


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LEGEND

- Project Site
- Study Intersection
- Unsignalized Study Intersection
- Intersection Turn Volumes

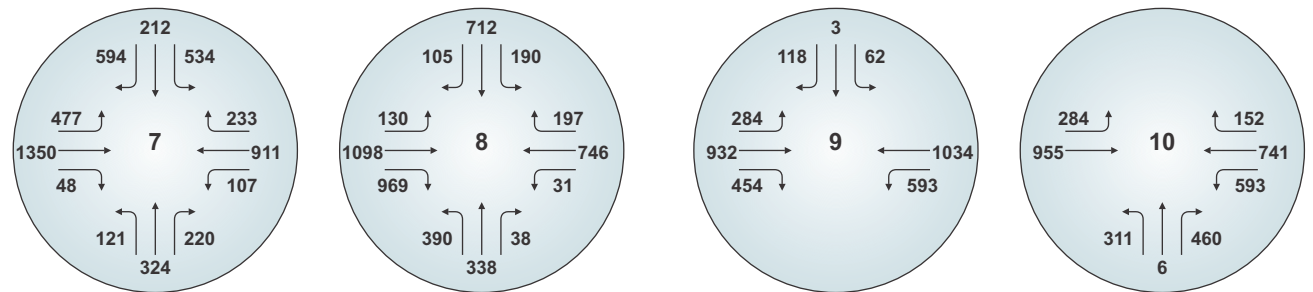




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LEGEND

- Project Site
- Study Intersection
- Unsignalized Study Intersection
- Intersection Turn Volumes



3. Project Traffic

This section defines the traffic that would be generated by the proposed Project.

3.1 Project Trip Generation

The trip rates and the associated traffic generation forecast for the proposed Project are provided in Table 5.

Table 5 – Project Trip Generation

Land Use	ITE Code	Intensity		Average Weekday	AM Peak Hour			PM Peak Hour [a]		
					In	Out	Total	In	Out	Total
Trip Generation Rates										
Apartments *	220	1	unit	6.65	20%	80%	0.51	65%	35%	0.70
Estimated Trips										
Apartments *	220	236	unit	1,569	24	96	120	107	58	165
Total				1,569	24	96	120	107	58	165

Source: ITE, 9th Edition

[a] PM peak hour trip rates obtained from the City of Los Angeles Coastal Transportation Corridor Specific Plan Appendix A.

* Local Serving Uses

The proposed project is projected to generate approximately 1,569 weekday daily trips, including 120 trips during the a.m. peak hour (24 inbound trips and 96 outbound trips) and 165 trips during the p.m. peak hour (107 inbound trips and 58 outbound trips).

3.2 Project Trip Distribution

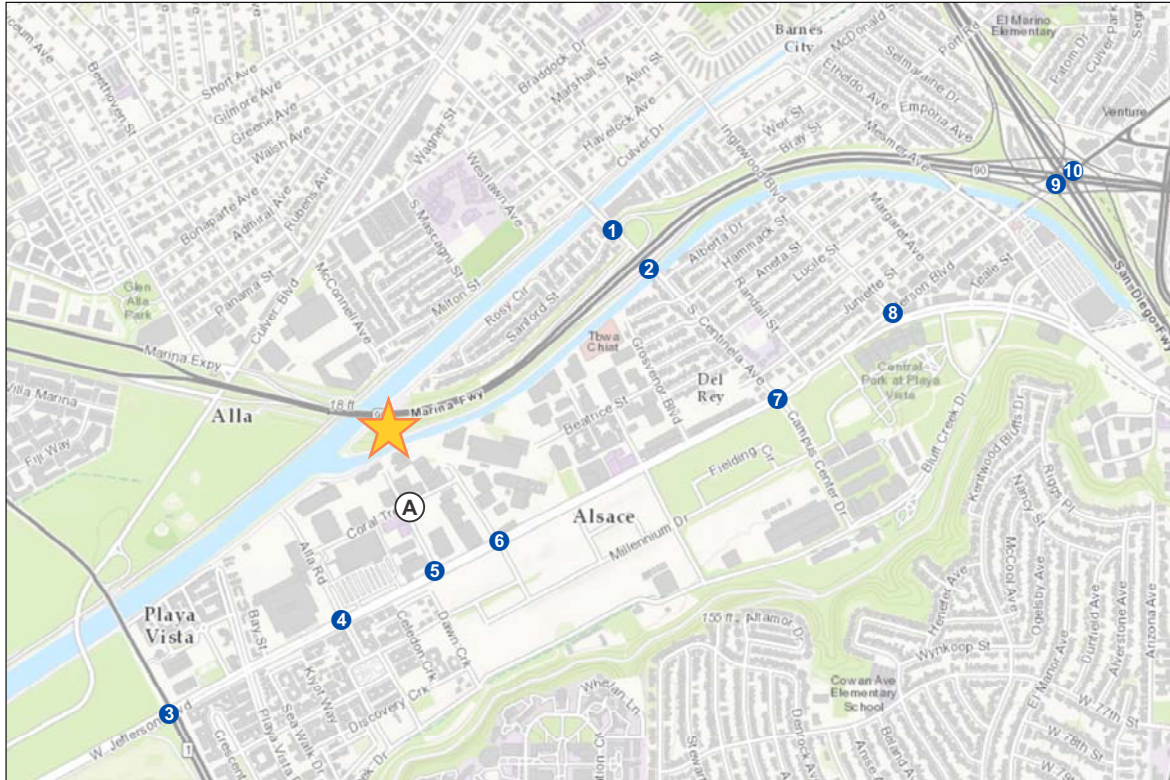
Trip distribution is the process of assigning the directions from which traffic will access a project site. Trip distribution is dependent upon the land use characteristics of the project, the local roadway network, and the general locations of other land uses to which project trips would originate or terminate.

Figure 7 illustrates the intersection trip distribution percentages that were applied to the Project trip generation.

3.3 Project Trip Assignment

Based on the trip generation and distribution assumptions described above, Project traffic was assigned to the roadway system based on site driveway locations and the roadways that would likely be used to access the regional highway system.

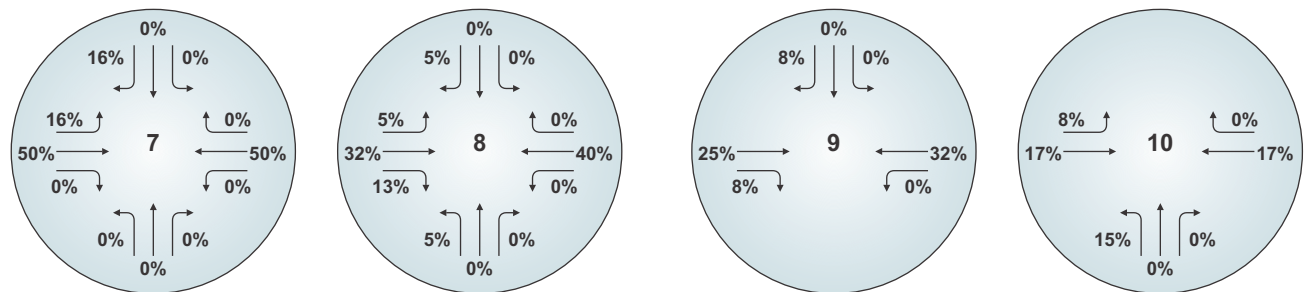
Figures 8 and 9 illustrate the assigned project trips for the weekday a.m. and p.m. peak hours, respectively.

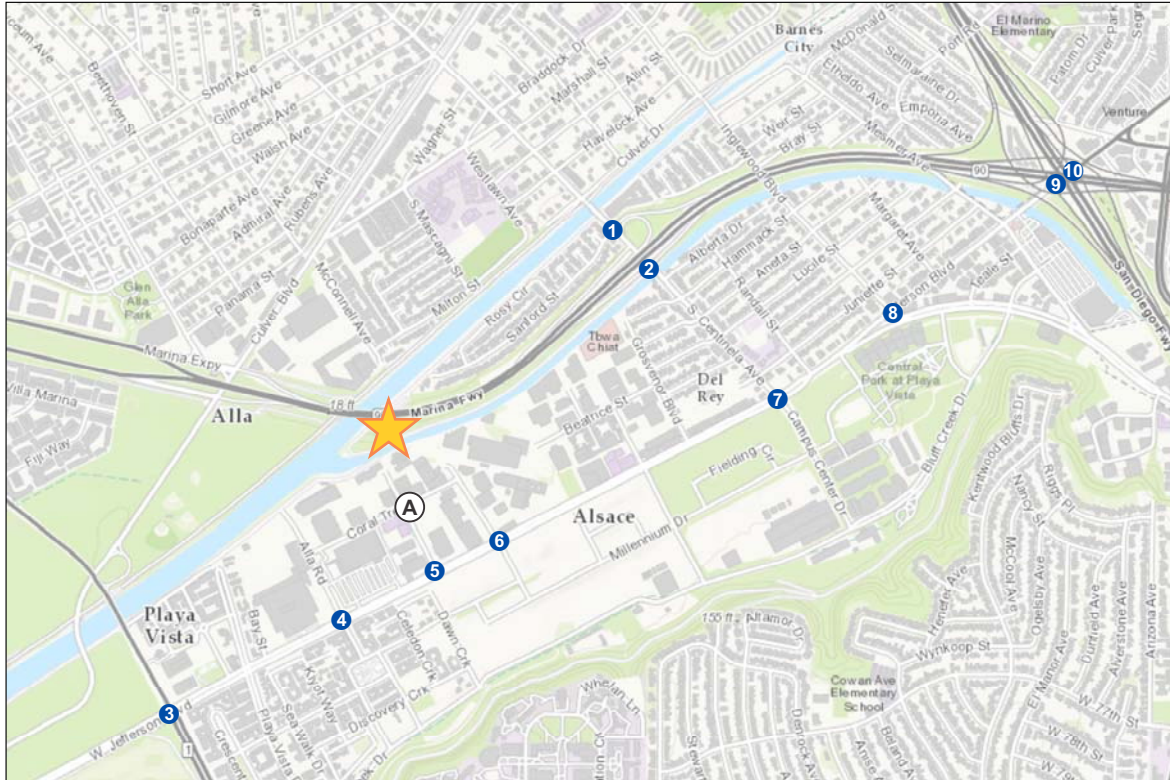


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LEGEND

- Project Site
- Study Intersection
- Unsignalized Study Intersection
- Project Trip Distribution

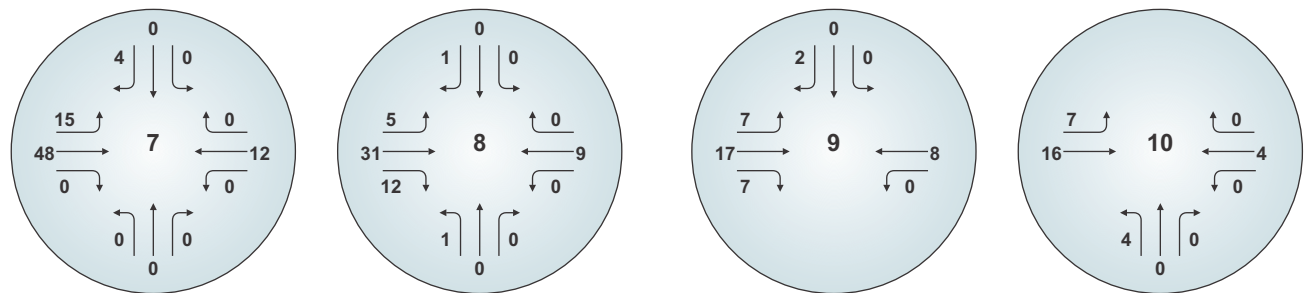


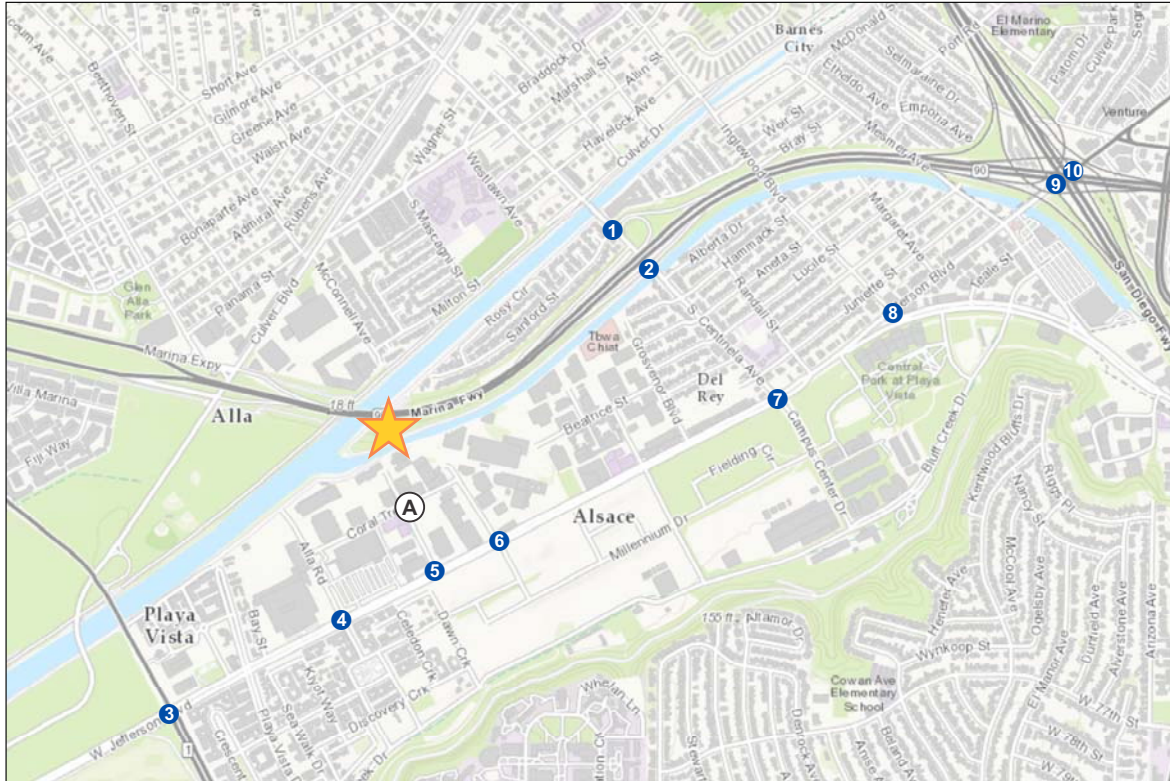


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LEGEND

- Project Site
- Study Intersection
- Unsignalized Study Intersection
- Intersection Turn Volumes

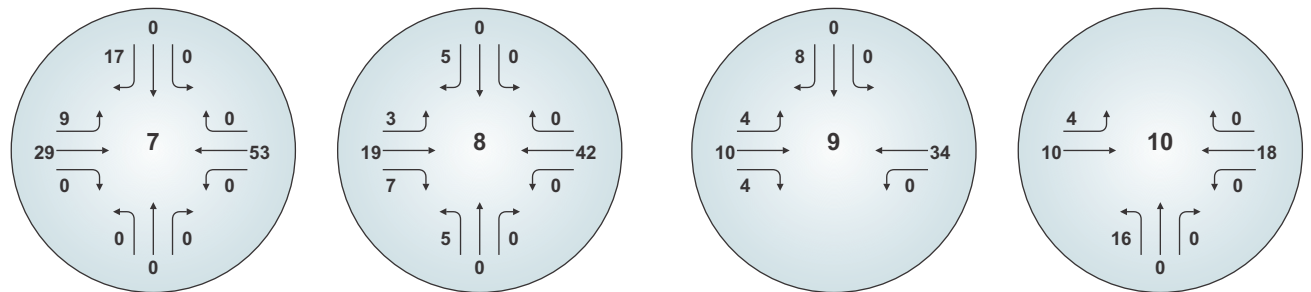




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LEGEND

- Project Site
- Study Intersection
- Unsignalized Study Intersection
- Intersection Turn Volumes



4. Existing with-Project Conditions

This section documents existing traffic conditions at the study intersections with the addition of Project-generated traffic. This scenario was analyzed in order to comply with rulings in the *Sunnyvale and Neighbors for Smart Rail CEQA* court cases.

Traffic volumes for these conditions were derived by adding the net project trips to the existing traffic volumes. The existing with-Project traffic volumes are illustrated on Figure 10 (a.m. peak hour) and Figure 11 (p.m. peak hour).

Table 6 summarizes the resulting V/C and LOS values at the study intersections for the existing with-Project conditions. The LADOT Critical Movement Analysis (CMA) calculation worksheets are provided in Appendix C of this report.

**Table 6 – Study Intersection Operations
Existing with-Project Conditions**

Study Intersections		AM Peak		PM Peak	
		V/C	LOS	V/C	LOS
1	Centinela Avenue & SR-90 WB Off-Ramp	0.527	A	0.468	A
2	Centinela Avenue & SR-90 EB Ramps	0.572	A	0.458	A
3	Lincoln Boulevard & Jefferson Boulevard	0.905	E	0.689	B
4	Alla Road & Jefferson Boulevard	0.491	A	0.607	B
5	Beethoven Street & Jefferson Boulevard	0.386	A	0.463	A
6	McConnell Avenue & Jefferson Boulevard	0.382	A	0.377	A
7	Centinela Avenue / Campus Ctr. Drive & Jefferson Boulevard	0.891	D	0.627	B
8	Centinela Avenue / Inglewood Boulevard & Jefferson Boulevard	1.003	F	1.111	F
9	I-405 SB Ramps & Jefferson Boulevard	0.768	C	0.618	B
10	I-405 NB Ramps & Jefferson Boulevard	1.043	F	1.185	F

LOS = Level of Service

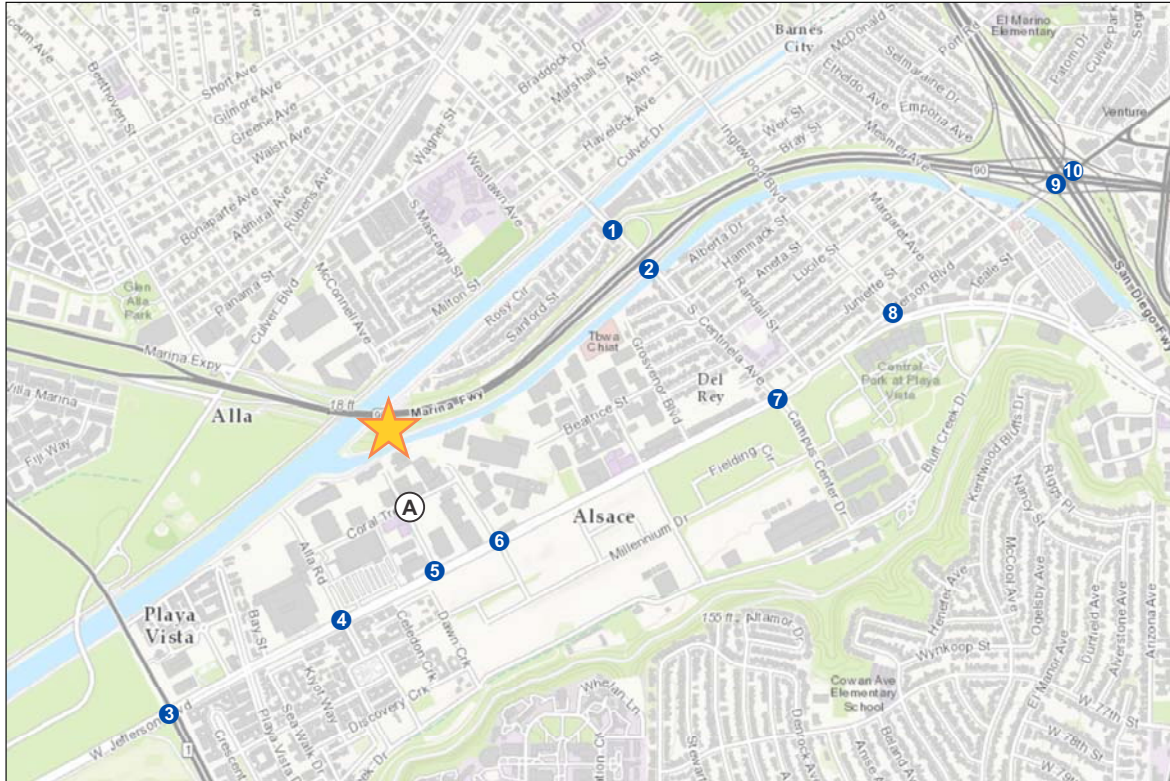
V/C = Volume-to-Capacity Ratio

Seven out of the ten study intersections are projected to continue operating at of LOS D or better under existing with-Project conditions during the weekday a.m. and p.m. peak hours.

Under existing with Project conditions, the following intersections would operate at LOS E or F during the analyzed peak hours:

- Lincoln Boulevard and Jefferson Boulevard is projected to worsen in operations from LOS D to LOS E in the a.m. peak hour.
- Centinela Avenue/Inglewood Boulevard and Jefferson Boulevard is projected to worsen in operations from LOS E to LOS F in the a.m. peak hour, and worsen within LOS F in the p.m. peak hour.
- Jefferson Boulevard and Freeway I-405 northbound on-and-off ramps would worsen within LOS F during both a.m. and p.m. peak hours.

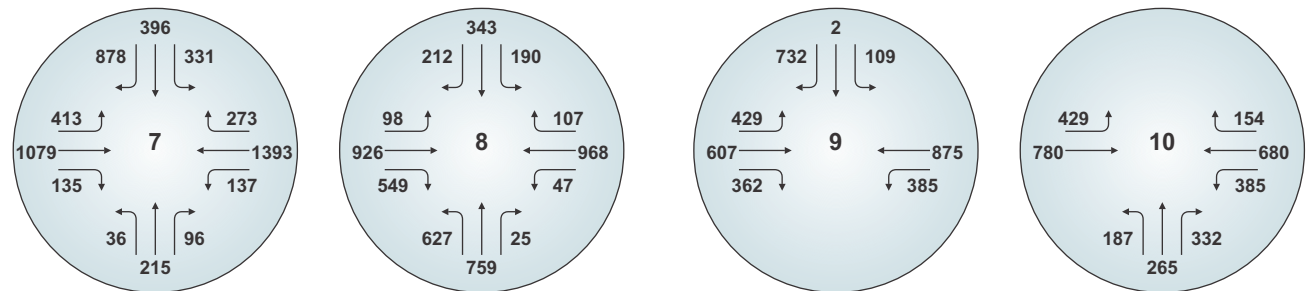
Determinations of significant traffic impacts created by Project traffic are discussed in Section 7 of this report.

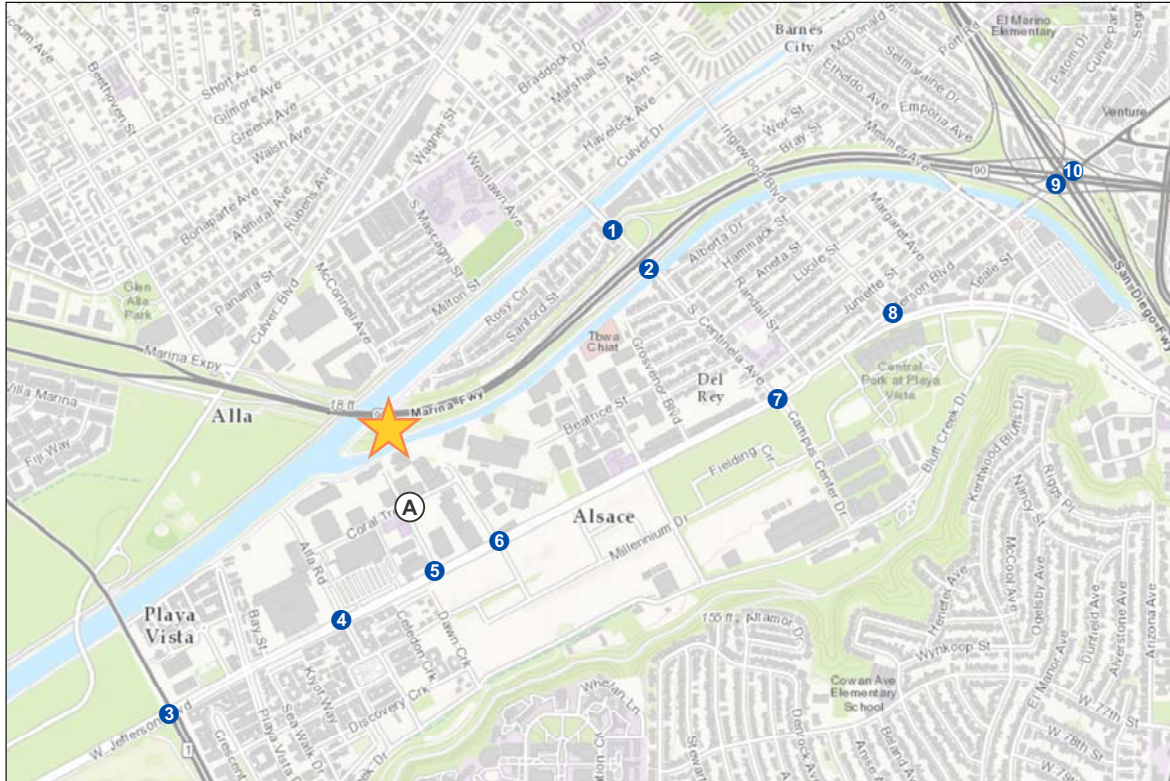


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LEGEND

- Project Site
- Study Intersection
- Unsignalized Study Intersection
- Intersection Turn Volumes

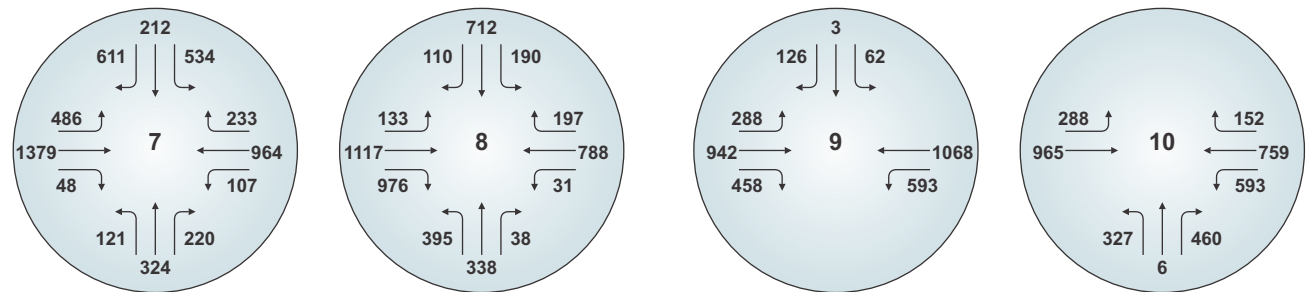




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LEGEND

-  Project Site
-  Study Intersection
-  Unsignalized Study Intersection
-  Intersection Turn Volumes



5. Future 2020 without-Project Conditions

This section provides an analysis of future traffic conditions in the study area with ambient growth and area/cumulative projects added but without the proposed Project. The year 2020 was selected for analysis based on the anticipated completion date of the Project.

5.1 Ambient Growth

For the analysis of background traffic for year 2020, a traffic growth factor of 1.00 percent per year was utilized to provide for increases in traffic from the existing (2017) traffic volumes.

To apply this ambient growth rate to the existing traffic volumes, a factor of 1.0303 was utilized. This factor simulates a one percent increase over a three-year period between existing (2017) and future (2020) conditions.

5.2 Area Cumulative Projects

Based on a review of the area project lists provided by LADOT Development Review, Los Angeles County Department of Regional Planning, and Culver City, 23 area projects were included in the traffic analysis. These projects are all located within an approximate two-mile radius from the Project site.

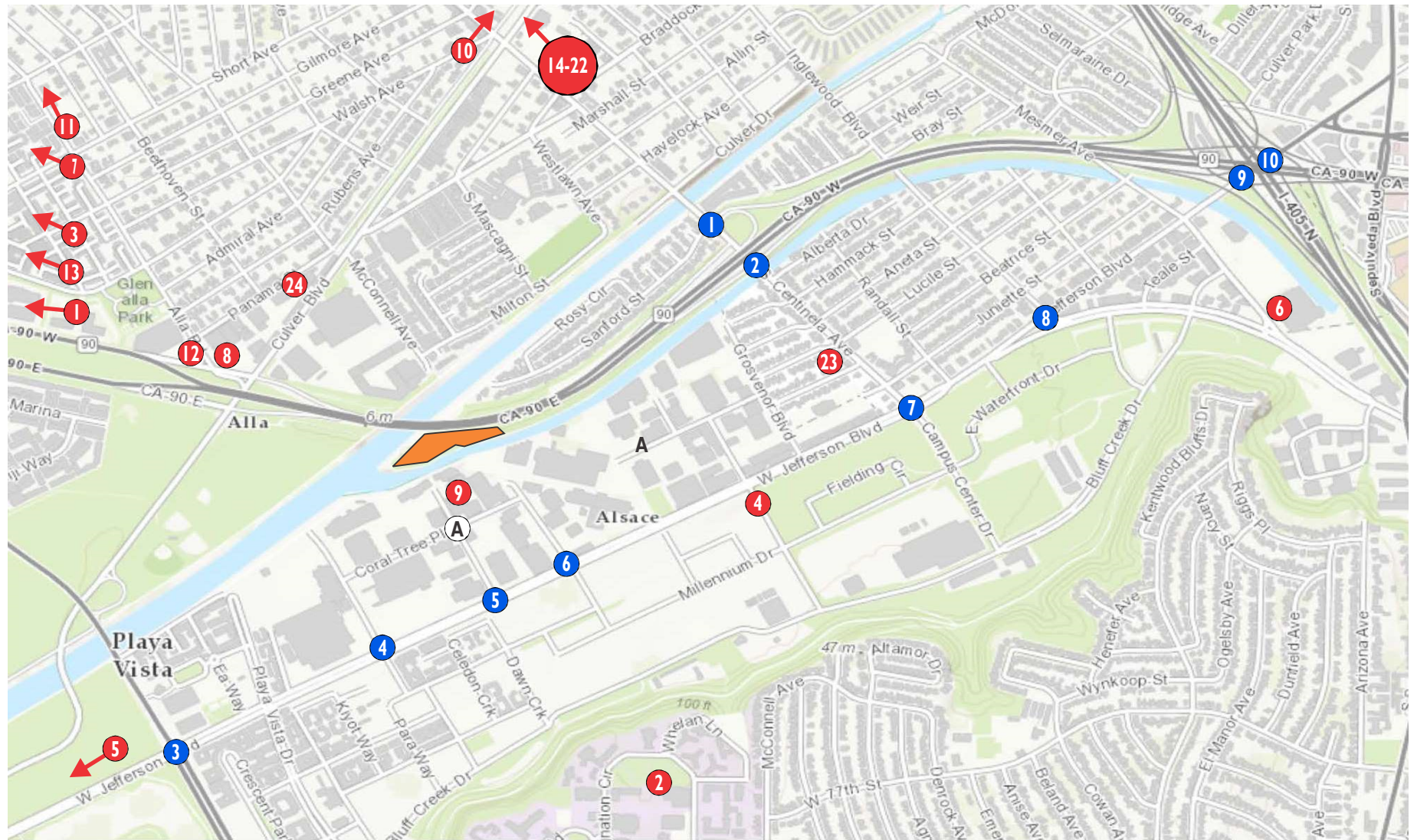
Figure 12 illustrates the locations of the area projects, and Table 7 provides the area project trip generation calculations. Figures 13 and 14 illustrate the total a.m. and p.m. trips generated by the area projects at the study intersections.

Table 7 – Area/Cumulative Projects Trip Generation

Map ID	Name	Location	Land Use	Intensity	Units	Daily Total	AM Peak Hour			PM Peak Hour		
							In	Out	Total	In	Out	Total
City of Los Angeles												
1	MDR Tower	4363 Lincoln Boulevard	Retail	3,178	k.s.f.	136	2	1	3	8	8	16
			Condominiums	158	d.u.	926	12	58	70	74	37	111
			Subtotal:			1,062	14	59	73	82	45	127
2	LMU Master Plan	1 LMU Drive	University Expansion	7,800	students	2,540	115	32	147	82	175	257
3	Mixed-Use: Residential/Office	4210 S Del Rey Avenue	Condominiums	136	d.u.	627	24	47	71	48	37	85
			Office	20,000	k.s.f.							
4	Village at Playa Vista Phase II	s/o Jefferson Boulevard/Westlawn Avenue	Condominiums	2,600	d.u.	24,220	577	1,049	1,626	1,275	1,027	2,302
			Office	175	k.s.f.							
			Retail	150	k.s.f.							
			Community Serving	40	k.s.f.							
5	Ballona Wetlands Restoration Project	Ballona Wetlands	Urban Ecology Center	46	k.s.f.	1,530	38	4	42	57	147	204
			Ecological Reserve	600	acre							
6	Hooman	5448 Mesmer	Other	113163	s.f.	2,694	139	44	183	90	176	266
7	Mixed-Use	4040 S Del Rey Ave	Mixed Use	195	units	1,839	-50	139	88	149	-28	121
			Mixed Use	235	units							
8	Teledyne Office Project	12964 W Panama St	Office	159,000	s.f.	777	72	9	81	20	71	91
9	New Multi-Story Office Building	12575 W Beatrice St	Office	199,500	s.f.	1,946	242	33	275	57	277	334
10	Expansion of Charter School	4471 Inglewood Blvd	School	800	Students	275	55	45	100	45	31	67
11	Mixed Use Project	4065 S Glencoe Ave	Office	35,206	s.f.	-191	67	38	105	2	99	101
			Retail	1,500	s.f.							
			Apartments	49	units							
			Other	14	bays							
			Industrial	5,050	s.f.							
			Mixed Use		other							
12	COU Warehouse to Office	4721 S Alla Rd	Office	118,352	s.f.	267	38	5	43	9	48	57
13	Apartment Bldg	13488 W Maxella Ave	Apartments	65	units	362	6	23	29	26	14	40
24	Ocean Charter School	12870 Panama St	School (K-8)	532	students	862	263	216	479	79	89	168
Los Angeles Subtotal						38,810	1,600	1,743	3,342	2,021	2,208	4,220
City of Culver City												
14	Grandview Apartments	4025 Grand View Blvd	Apartments	36	d.u.	239	3	15	18	16	9	25
15	Washington Place Condos	12464 Washington Place	Condominiums	3	d.u.	17	0	1	1	1	1	2
16	Office Building	12038 Washington Boulevard	Office	2,685	k.s.f.	30	3	1	4	1	3	4
17	Pennylane Mixed Use Washington/Inglewood	11924 Washington Blvd	Restaurant	3,750	k.s.f.	477	22	18	40	23	16	39
			Specialty Retail	11,250	k.s.f.	499	9	6	15	13	17	30
			Apartments	98,000	units	652	10	40	50	45	24	69
			Subtotal:			1,914	47	80	129	99	70	170
18	Townhome Development	4118 Wade Street	Townhome	4	units	23	0	2	2	2	1	3
19	Office/Retail Building	13112-13114 Washington Blvd	Shopping Center	1,536	k.s.f.	66	1	0	1	3	3	6
			Apartments	2	d.u.	13	0	1	1	1	0	1
			Office	3,702	k.s.f.	41	5	1	6	1	5	6
			Subtotal:			120	6	2	8	5	8	13
20	Baldwin Site	12803 Washington Blvd	Apartments	37	d.u.	246	25	100	125	17	9	26
			Shopping Center	7,206	k.s.f.	308	4	3	7	13	14	27
			Subtotal:			554	29	103	132	30	23	53
21	Market Hall	12403 Washington Blvd	Supermarket	31,590	k.s.f.	3,230	67	40	107	153	147	299
22	Kayvon Mixed Use	12712-12718 Washington Boulevard	Shopping Center	3,308	k.s.f.	141	2	1	3	6	6	12
			Apartments	5	d.u.	33	1	2	3	2	2	4
			Subtotal:			175	2	3	6	8	8	16
Culver City Subtotal						6,301	158	246	408	315	269	584
Los Angeles County												
23	Professional Office Building	5465 Centinela Ave	Office	2,915	k.s.f.	32	44	6	50	13	62	75
NET TOTAL						45,143	1,802	1,995	3,800	2,349	2,539	4,879

d.u. = dwelling units, k.s.f. = 1,000 square feet of floor area

Trip Generation Rates Source: Institute of Transportation Engineers (ITE) "Trip Generation - 9th Edition".

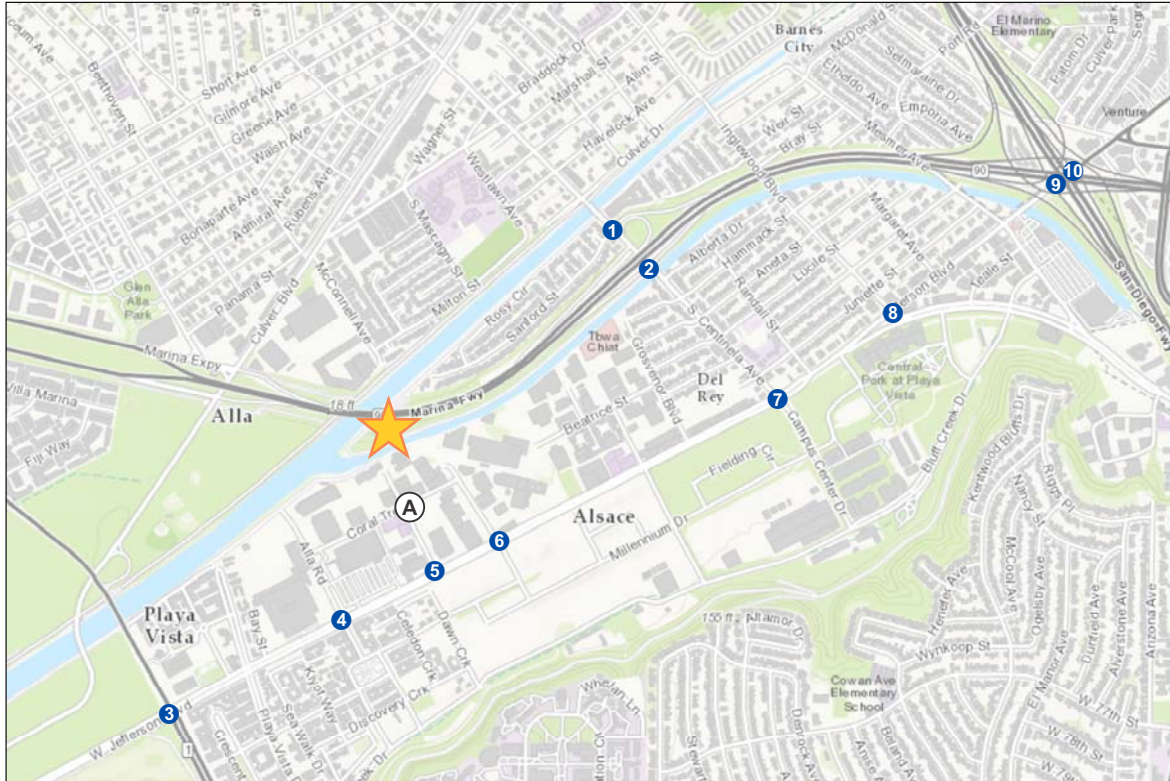


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LEGEND

- Project Site
- Study Intersection
- Related Project Location

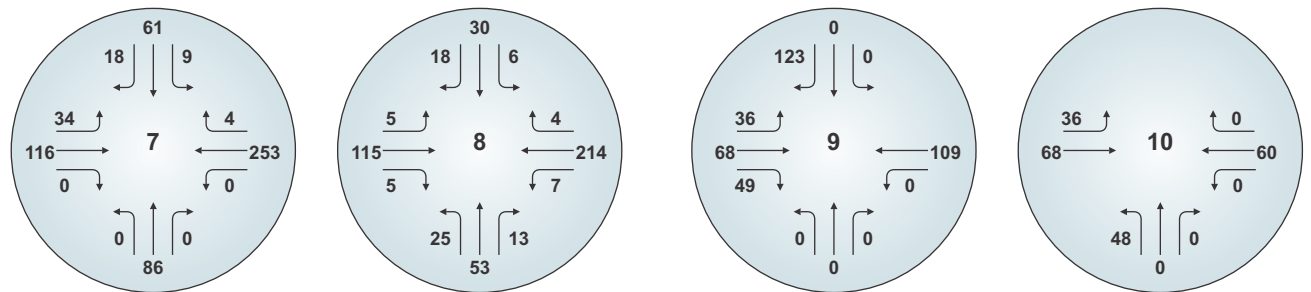


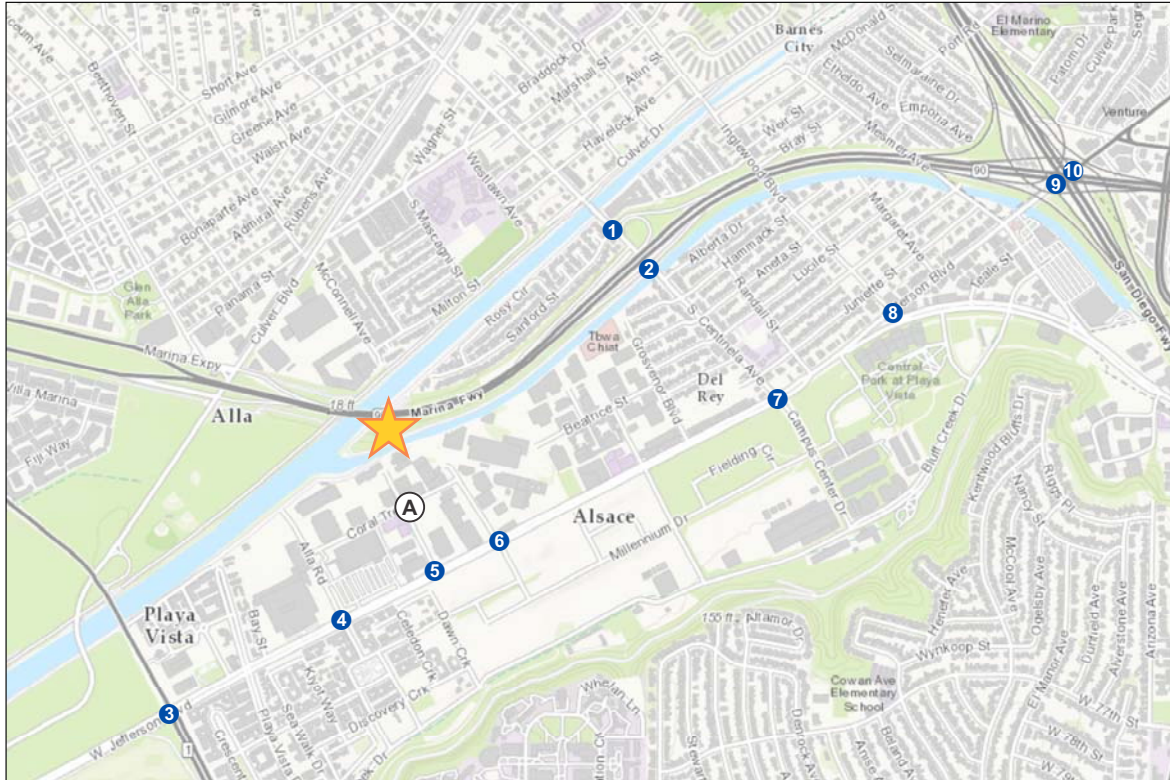


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LEGEND

- Project Site
- Study Intersection
- Unsignalized Study Intersection
- Intersection Turn Volumes

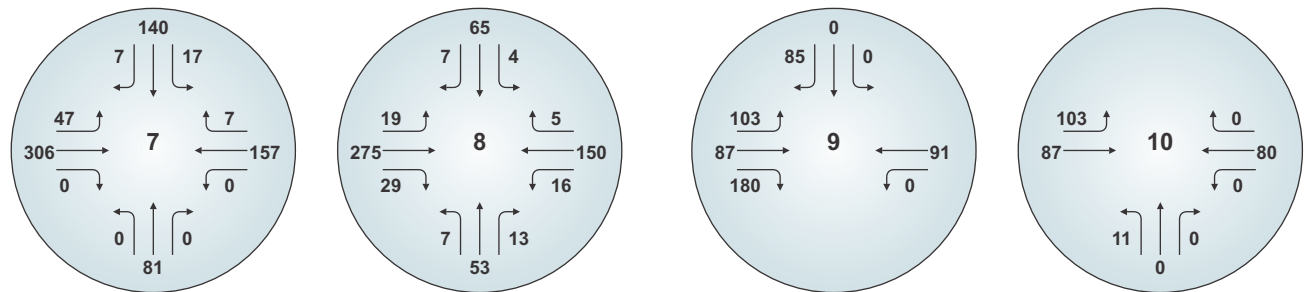




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LEGEND

- Project Site
- Study Intersection
- Unsignalized Study Intersection
- Intersection Turn Volumes



5.3 Future without Project Intersection Levels of Service

The future 2020 without-Project traffic volumes are illustrated on Figure 15 (a.m. peak hour) and Figure 16 (p.m. peak hour). The LADOT CMA calculation worksheets are provided in Appendix C.

Table 8 summarizes the V/C and LOS values at the study intersections for this scenario.

**Table 8 – Study Intersection Operations
Future (Year 2020) without Project Conditions**

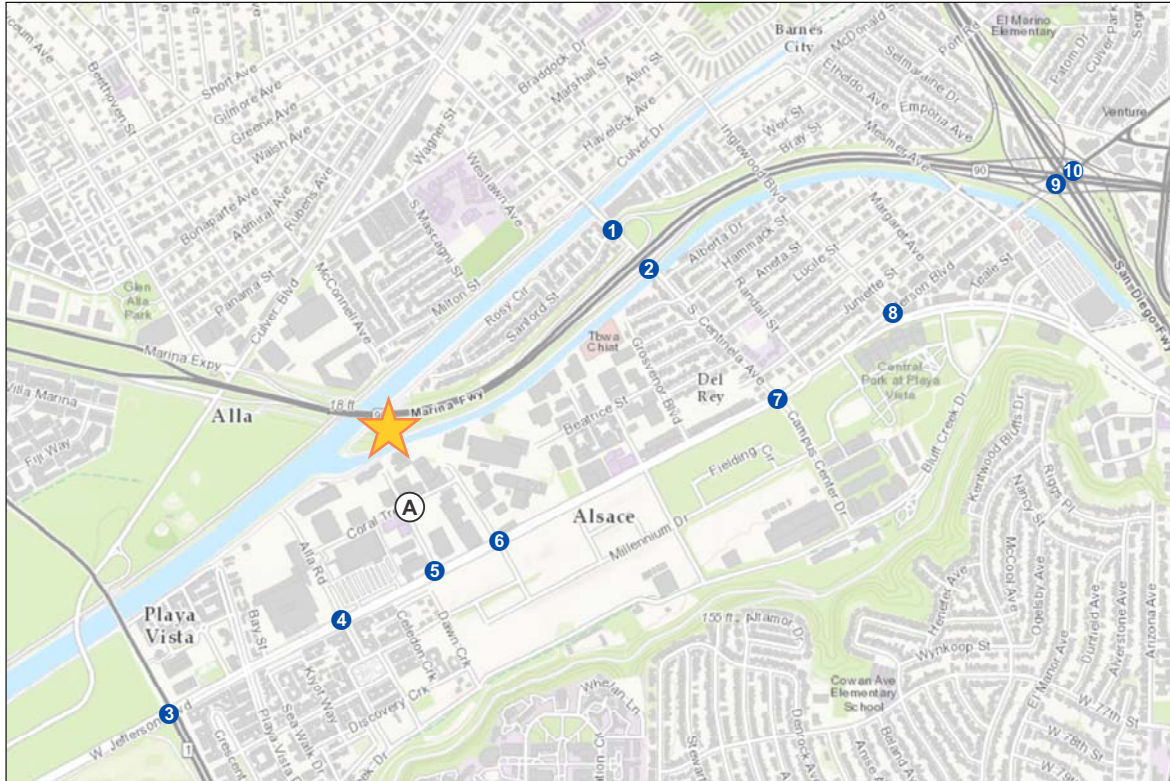
Study Intersections		AM Peak		PM Peak	
		V/C	LOS	V/C	LOS
1	Centinela Avenue & SR-90 WB Off-Ramp	0.572	A	0.515	A
2	Centinela Avenue & SR-90 EB Ramps	0.631	B	0.523	A
3	Lincoln Boulevard & Jefferson Boulevard	0.954	E	0.768	C
4	Alla Road & Jefferson Boulevard	0.533	A	0.686	B
5	Beethoven Street & Jefferson Boulevard	0.411	A	0.479	A
6	McConnell Avenue & Jefferson Boulevard	0.417	A	0.410	A
7	Centinela Avenue / Campus Ctr. Drive & Jefferson Boulevard	0.989	E	0.708	C
8	Centinela Avenue / Inglewood Boulevard & Jefferson Boulevard	1.133	F	1.243	F
9	I-405 SB Ramps & Jefferson Boulevard	0.899	D	0.738	C
10	I-405 NB Ramps & Jefferson Boulevard	1.100	F	1.256	F

LOS = Level of Service

V/C = Volume-to-Capacity Ratio

Six out of the ten study intersections are projected to operate at LOS D or better under the future without Project conditions during the weekday a.m. and p.m. peak hours. Under the future without Project conditions, the following intersections would operate at LOS E or LOS F:

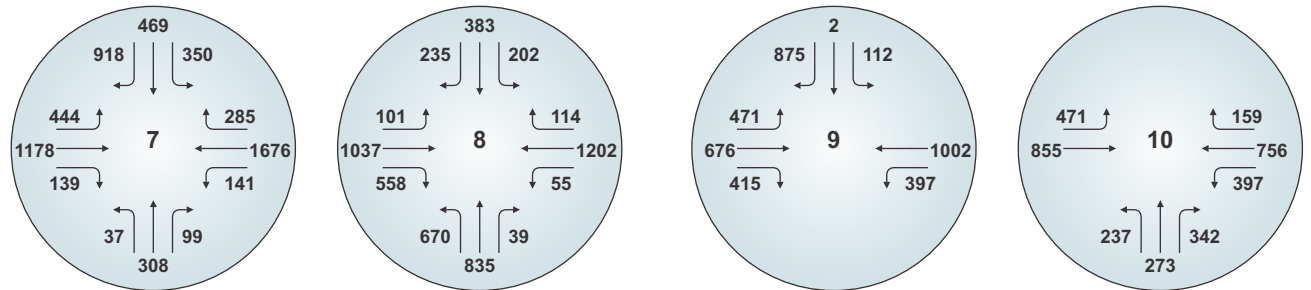
- Lincoln Boulevard and Jefferson Boulevard is projected to worsen in operations from LOS D to LOS E during the a.m. peak hour.
- Centinela Avenue-Campus Center Drive and Jefferson Boulevard would worsen in operations from LOS D to LOS E during the a.m. peak hour.
- Centinela Avenue-Inglewood Boulevard and Jefferson Boulevard would worsen in operations from LOS E to LOS F during the a.m. peak hour, and would continue to operate at LOS F during the p.m. peak hour.
- Jefferson Boulevard at Freeway I-405 northbound on and off ramps would continue to operate at LOS F during both the a.m. and p.m. peak hours.

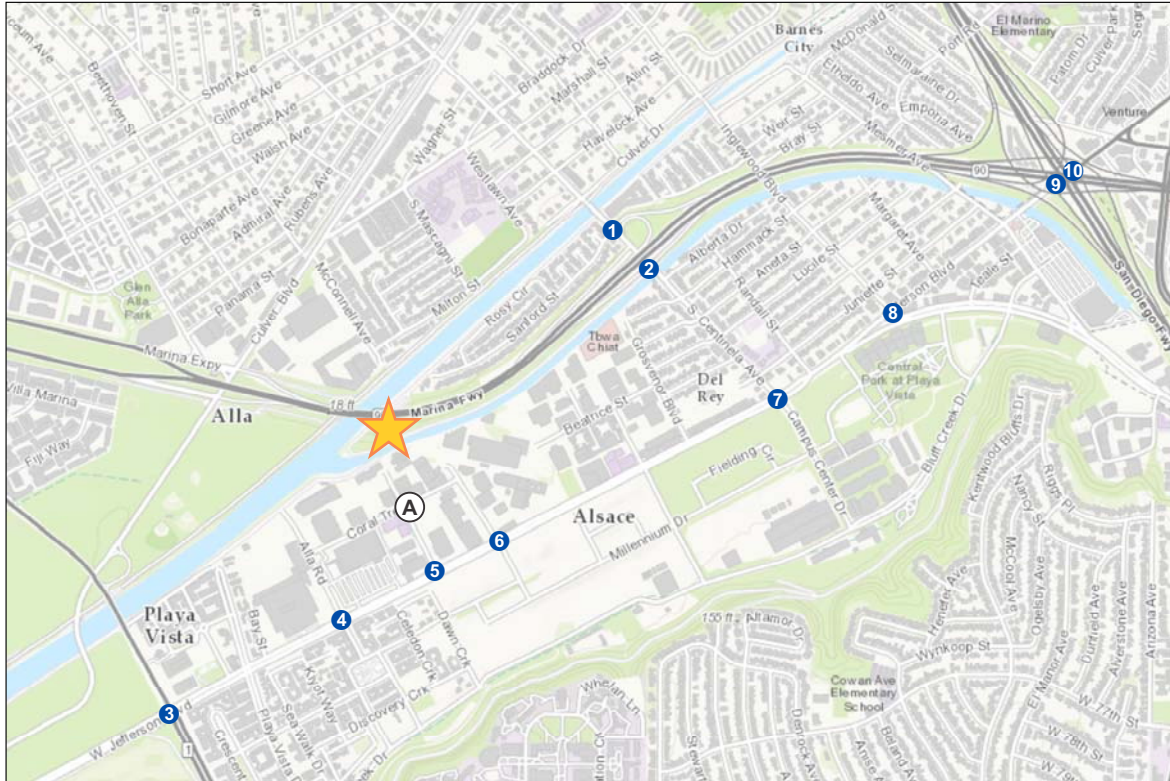


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LEGEND

- Project Site
- Study Intersection
- Unsignalized Study Intersection
- Intersection Turn Volumes

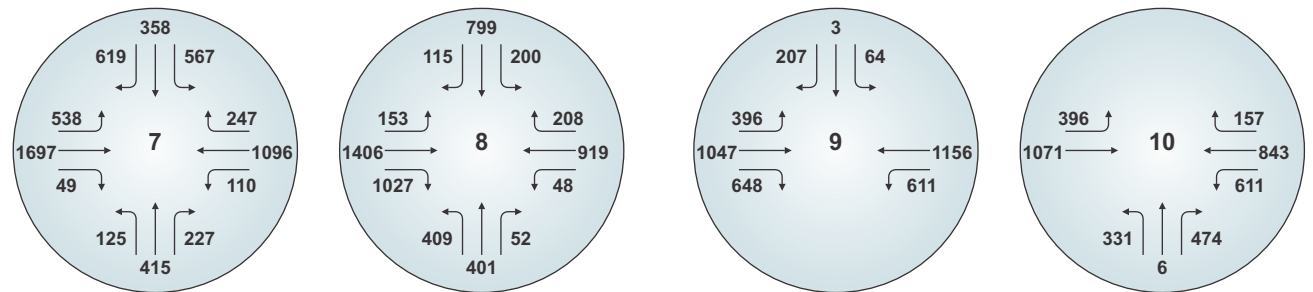




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LEGEND

- Project Site
- Study Intersection
- Unsignalized Study Intersection
- Intersection Turn Volumes



6. Future 2020 with-Project Conditions

This section documents future traffic conditions at the study intersections with the addition of Project-generated traffic. Traffic volumes for these conditions were derived by adding the net Project trips to the future without-Project volumes.

The future 2020 with-Project traffic volumes are illustrated on Figure 17 (a.m. peak hour) and Figure 18 (p.m. peak hour). The LADOT Critical Movement Analysis (CMA) calculation worksheets are provided in Appendix C of this report.

Table 9 summarizes the resulting V/C and LOS values at the study intersections.

**Table 9 – Study Intersection Operations –
Future (Year 2020) with Project Conditions**

Study Intersections		AM Peak		PM Peak	
		V/C	LOS	V/C	LOS
1	Centinela Avenue & SR-90 WB Off-Ramp	0.572	A	0.519	A
2	Centinela Avenue & SR-90 EB Ramps	0.633	B	0.529	A
3	Lincoln Boulevard & Jefferson Boulevard	0.959	E	0.780	C
4	Alla Road & Jefferson Boulevard	0.540	A	0.691	B
5	Beethoven Street & Jefferson Boulevard	0.452	A	0.539	A
6	McConnell Avenue & Jefferson Boulevard	0.421	A	0.426	A
7	Centinela Avenue / Campus Ctr. Drive & Jefferson Boulevard	0.995	E	0.725	C
8	Centinela Avenue / Inglewood Boulevard & Jefferson Boulevard	1.144	F	1.249	F
9	I-405 SB Ramps & Jefferson Boulevard	0.907	E	0.746	C
10	I-405 NB Ramps & Jefferson Boulevard	1.107	F	1.260	F

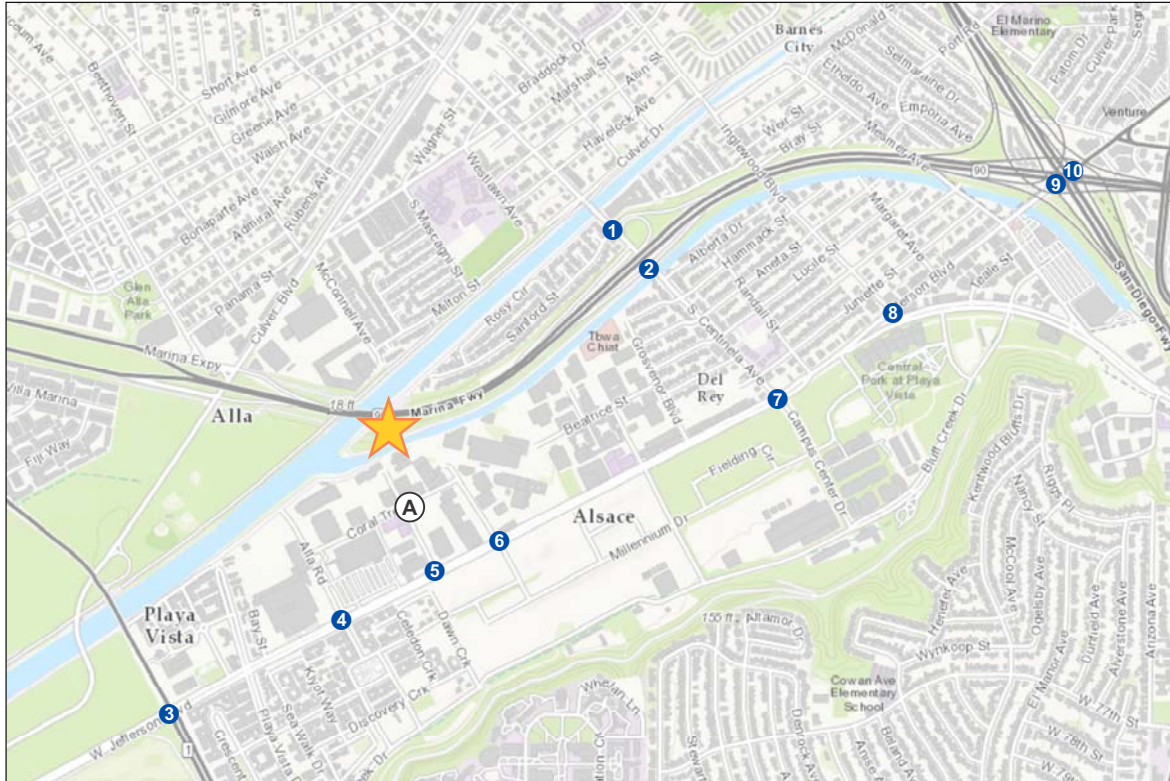
LOS = Level of Service

V/C = Volume-to-Capacity Ratio

Five out of the ten study intersections are projected to operate at LOS D or better under the future without Project conditions during the weekday a.m. and p.m. peak hours. Under the future with Project conditions, the following intersections would operate at LOS E or LOS F:

- Lincoln Boulevard and Jefferson Boulevard is projected to worsen within operations at LOS E during the a.m. peak hour.
- Centinela Avenue-Campus Center Drive and Jefferson Boulevard is projected to worsen within operations at LOS E during the a.m. peak hour.
- Centinela Avenue-Inglewood Boulevard and Jefferson Boulevard is projected to worsen within operations at LOS F during the a.m. and p.m. peak hours.
- Jefferson Boulevard and Freeway I-405 southbound on and off ramps is projected to worsen in operation from LOS D to LOS E during the a.m. peak hour.
- Jefferson Boulevard and Freeway I-405 northbound on and off ramps is projected to worsen within operations at LOS F during the a.m. and p.m. peak hours.

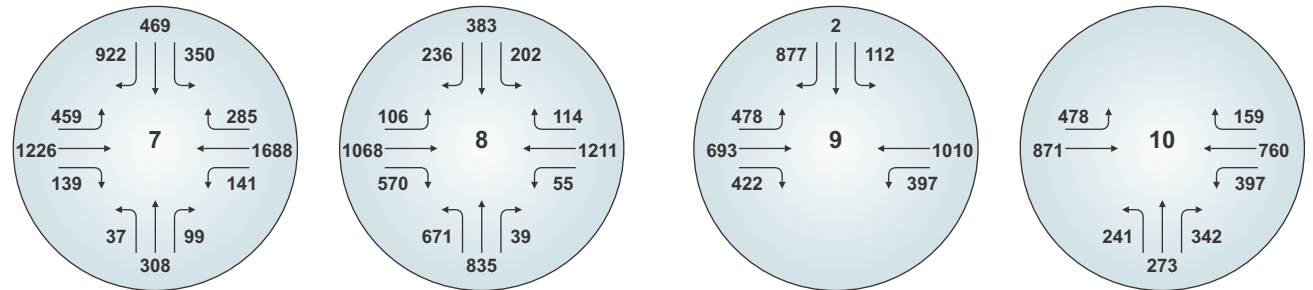
Determinations of significant traffic impacts created by Project traffic are discussed in the next report section.

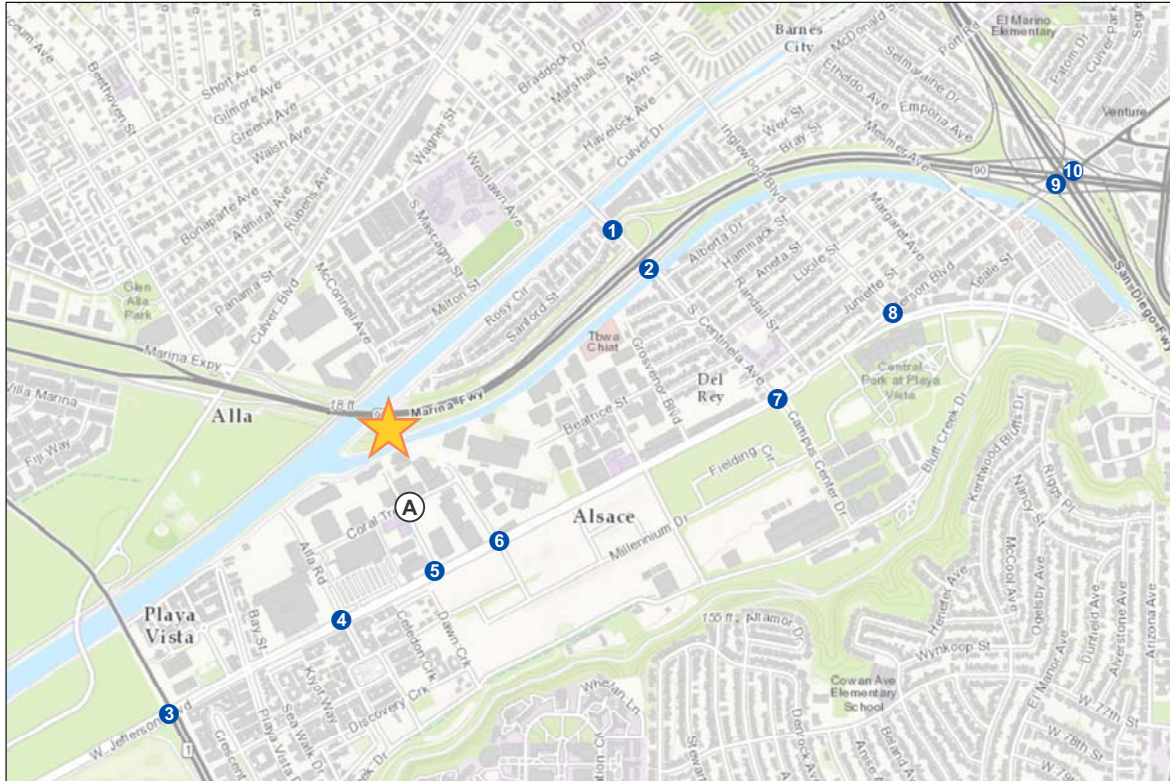


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LEGEND

- Project Site
- Study Intersection
- Unsignalized Study Intersection
- Intersection Turn Volumes

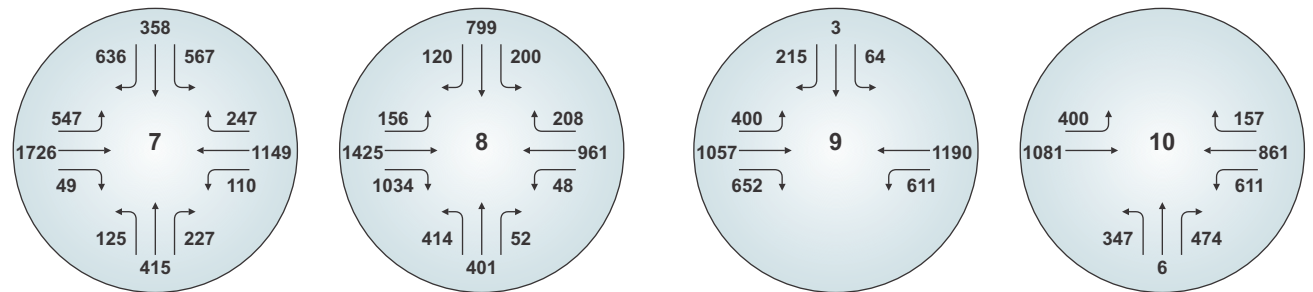




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LEGEND

- Project Site
- Study Intersection
- Unsignalized Study Intersection
- Intersection Turn Volumes



7. Project Traffic Impacts and Mitigation Measures

7.1 Determination of Traffic Impacts

Traffic impacts are identified if a proposed development will result in a significant change in traffic conditions at a study intersection. A significant impact is typically identified if project-related traffic will cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency. Impacts can also be significant if an intersection is already operating below an acceptable level of service and project related traffic will worsen conditions within the specified threshold range.

The City of Los Angeles Department of Transportation has established specific thresholds for project-related increases in the volume-to-capacity ratio (V/C) of signalized study intersections. The following increases in peak-hour V/C ratios are considered significant impacts:

Level of Service	Final V/C*	Project Related v/c increase
C	< 0.70 – 0.80	Equal to or greater than 0.040
D	< 0.80 – 0.90	Equal to or greater than 0.020
E and F	0.90 or more	Equal to or greater than 0.010

Note: Final V/C is the V/C ratio at an intersection, considering impacts from the project, ambient growth, trips from area/cumulative projects, but without proposed traffic impact mitigations.

7.2 Project Traffic Impacts – Existing with Project Conditions

A summary of the existing and existing with-Project V/C and LOS values is provided by Table 10. Traffic impacts created by the proposed Project are determined by comparing the existing conditions to the existing with-Project conditions.

Table 10 – Assessment of Project Impacts Based on Existing Conditions

Study Intersections		Peak Hour	Existing 2017 Conditions		Existing 2017 + Project		Change in V/C	Sig Impact?
			V/C	LOS	V/C	LOS		
1	Centinela Avenue & SR-90 WB Off-Ramp	AM	0.526	A	0.527	A	0.001	No
		PM	0.467	A	0.468	A	0.001	No
2	Centinela Avenue & SR-90 EB Ramps	AM	0.570	A	0.572	A	0.002	No
		PM	0.452	A	0.458	A	0.006	No
3	Lincoln Boulevard & Jefferson Boulevard	AM	0.899	D	0.905	E	0.006	No
		PM	0.685	B	0.689	B	0.004	No
4	Alla Road & Jefferson Boulevard	AM	0.484	A	0.491	A	0.007	No
		PM	0.603	B	0.607	B	0.004	No
5	Beethoven Street & Jefferson Boulevard	AM	0.345	A	0.386	A	0.041	No
		PM	0.403	A	0.463	A	0.060	No
6	McConnell Avenue & Jefferson Boulevard	AM	0.379	A	0.382	A	0.003	No
		PM	0.361	A	0.377	A	0.016	No
7	Centinela Avenue / Campus Ctr. Drive & Jefferson Boulevard	AM	0.885	D	0.891	D	0.006	No
		PM	0.604	B	0.627	B	0.023	No
8	Centinela Avenue / Inglewood Boulevard & Jefferson Boulevard	AM	0.992	E	1.003	F	0.011	Yes
		PM	1.105	F	1.111	F	0.006	No
9	I-405 SB Ramps & Jefferson Boulevard	AM	0.760	C	0.768	C	0.008	No
		PM	0.611	B	0.618	B	0.007	No
10	I-405 NB Ramps & Jefferson Boulevard	AM	1.037	F	1.043	F	0.006	No
		PM	1.181	F	1.185	F	0.004	No

LOS = Level of Service

V/C = Volume-to-Capacity Ratio

The proposed Project is anticipated to have significant traffic impact at the intersection of Centinela Avenue-Inglewood Boulevard and Jefferson Boulevard under the analyzed existing with-Project traffic conditions. Recommended mitigation measures are discussed in the next sub-section.

7.3 Project Traffic Impacts – Future 2020 with Project Conditions

Table II provides a summary of the future 2020 with-Project V/C and LOS values. Traffic impacts created by the Project are determined by comparing the future without-Project conditions to the future with-Project conditions.

Table II – Assessment of Project Impacts Based on Future Conditions (Year 2020)

Study Intersections		Peak Hour	Existing 2017 Conditions		Future 2020 No Project		Future 2020 With Project		Change in V/C	Sig Impact?
			V/C	LOS	V/C	LOS	V/C	LOS		
1	Centinela Avenue & SR-90 WB Off-Ramp	AM	0.526	A	0.572	A	0.572	A	0.000	No
		PM	0.467	A	0.515	A	0.519	A	0.004	No
2	Centinela Avenue & SR-90 EB Ramps	AM	0.570	A	0.631	B	0.633	B	0.002	No
		PM	0.452	A	0.523	A	0.529	A	0.006	No
3	Lincoln Boulevard & Jefferson Boulevard	AM	0.899	D	0.954	E	0.959	E	0.005	No
		PM	0.685	B	0.768	C	0.780	C	0.012	No
4	Alla Road & Jefferson Boulevard	AM	0.484	A	0.533	A	0.540	A	0.007	No
		PM	0.603	B	0.686	B	0.691	B	0.005	No
5	Beethoven Street & Jefferson Boulevard	AM	0.345	A	0.411	A	0.452	A	0.041	No
		PM	0.403	A	0.479	A	0.539	A	0.060	No
6	McConnell Avenue & Jefferson Boulevard	AM	0.379	A	0.417	A	0.421	A	0.004	No
		PM	0.361	A	0.410	A	0.426	A	0.016	No
7	Centinela Avenue / Campus Ctr. Drive & Jefferson Boulevard	AM	0.885	D	0.989	E	0.995	E	0.006	No
		PM	0.604	B	0.708	C	0.725	C	0.017	No
8	Centinela Avenue / Inglewood Boulevard & Jefferson Boulevard	AM	0.992	E	1.133	F	1.144	F	0.011	Yes
		PM	1.105	F	1.243	F	1.249	F	0.006	No
9	I-405 SB Ramps & Jefferson Boulevard	AM	0.760	C	0.899	D	0.907	E	0.008	No
		PM	0.611	B	0.738	C	0.746	C	0.008	No
10	I-405 NB Ramps & Jefferson Boulevard	AM	1.037	F	1.100	F	1.107	F	0.007	No
		PM	1.181	F	1.256	F	1.260	F	0.004	No

LOS = Level of Service

V/C = Volume-to-Capacity Ratio

The proposed Project is anticipated to have significant traffic impact at the intersection of Centinela Avenue-Inglewood Boulevard and Jefferson Boulevard under the analyzed future 2020 with project traffic conditions. Recommended mitigation measures are discussed in the next sub-section.

7.4 Recommended Mitigation Measures

The Project applicant has proposed to implement a Transportation Demand Management and Monitoring Program (TDMMP) to help reduce vehicle trips to and from the Project site. The details of the Program are provided below, to be developed in more detail and separately from this traffic report, in concert with LADOT, to provide potential conditions including monitoring of trips after Project opening.

Two characteristics of the project will reduce peak-hour trips, versus a typical residential or commercial/industrial project in the area:

- The proposed project will generate less peak trips, and will focus fewer trips in peak periods, than a project under the current approved zoning for the site.
- Area employment characteristics generally generate mid/late morning inbound trips and evening outbound trips, so commute patterns to/from site will not overlap with school and industrial site peaks.

Despite these positive characteristics, the project parking and traffic demand can be reduced further by specific measures. It is recommended that the TDMMP include the following elements:

- Implement a bike/pedestrian bridge across Ballona Creek that connects the project site to the existing Ballona Creek bike path, if feasible and if the State, County and or private Owner of connecting northern link not under control of the owner grants a connecting easement.
- Provide a dedicated shuttle service
- Provide an internal Transportation Management Coordination Program with on-site transportation coordinator;
- Design the project to ensure a bicycle, pedestrian and transit friendly environment;
- Provide rideshare program and support for project tenants;
- Allow for subsidized transit passes for eligible project tenants;
- Coordinate with DOT to determine if the site would be eligible for one or more of the services to be provided by the future Mobility Hubs program (secure bike parking, bike share kiosks, and car-share parking spaces);
- Provide on-site transit routing and schedule information;
- Provide a program to discount transit passes for residents possibly through negotiated bulk purchasing of passes with transit providers;
- Contribute a one-time fixed fee into the City's Bicycle Plan Trust Fund to implement bicycle improvements within the area of the proposed Project. Amount of the fee is to be determined in consultation with DOT and Council District 11 staff; and
- Provide a Guaranteed Ride Home Program.

The dedicated Project Shuttle Service should be provided with the following parameters:

- The shuttle will operate from 7:30 a.m. to 9:00 p.m. daily.
- On weekdays, the route will serve employment centers in the area and commercial areas along Jefferson Boulevard including Playa Vista.
- The weekend route will serve commercial areas and recreational areas.

It is assumed that these measures of the TDMMP will reduce the generated Project vehicle trips by at least 20 percent. In order to verify for LADOT that the 20% project trips reduction that is needed to attain full mitigation is being achieved, the project will need to provide a trip cap monitoring program. The trip cap threshold for both the a.m. and p.m. peak hours shall be 96 and 132 one-way vehicle trips, respectively.

The measurement of actual trips and monitoring shall be conducted using an automated detection and surveillance monitoring system, per conditions to be defined by LADOT. The monitoring program will need to continue until such time that the Project has shown, for five consecutive years, at a minimum of 85% occupancy, achievement of the peak hour trip volume requirements. Should the review show that the peak hour trip cap threshold has been exceeded, the project will be subject to a penalty program, to be defined by LADOT.

As shown in Table 12, a 20 percent reduction in trip generation is applied to the Project vehicle trip generation. The trip totals are reduced to approximately 1,255 weekday daily trips, including 96 trips during the a.m. peak hour and 132 trips during the p.m. peak hour with this adjustment.

**Table 12 – Project Trip Generation
With Transportation Demand Management (TDM) Plan**

Land Use	ITE Code	Intensity		Average Weekday	AM Peak Hour			PM Peak Hour [a]		
					In	Out	Total	In	Out	Total
Trip Generation Rates										
Apartments *	220	I	unit	6.65	20%	80%	0.51	65%	35%	0.70
Estimated Trips										
Apartments *	220	236	unit	1,569	24	96	120	107	58	165
Transportation Demand Mangement Credit										
20% reduction				-314	-5	-19	-24	-21	-12	-33
Net Project Trips				1,255	19	77	96	86	46	132

Source: ITE, 9th Edition

[a] PM peak hour trip rates obtained from the City of Los Angeles Coastal Transportation Corridor Specific Plan Appendix A.

* Local Serving Uses

The effects of the TDM Plan and the assumed 20 percent reduction in vehicle trips at the study intersection are summarized within Table 13.

Table 13 – Effects of Mitigation Measure on Study Intersection

Study Intersections		Peak Hour	Existing Conditions		Existing plus Project		Change in V/C	Sig Impact?	Existing w/ Project + Mitigation		Change in V/C	Sig Impact?
			V/C	LOS	V/C	LOS			V/C	LOS		
8	Centinela Avenue-Inglewood	AM	0.992	E	1.003	F	0.011	Yes	1.001	F	0.009	No
	Boulevard & Jefferson Boulevard	PM	1.105	F	1.111	F	0.006	No	1.110	F	0.005	No
Study Intersections		Peak Hour	Future Without Project		Future With Project		Change in V/C	Sig Impact?	Future w/ Project + Mitigation		Change in V/C	Sig Impact?
			V/C	LOS	V/C	LOS			V/C	LOS		
8	Centinela Avenue-Inglewood	AM	1.133	F	1.144	F	0.011	Yes	1.142	F	0.009	No
	Boulevard & Jefferson Boulevard	PM	1.243	F	1.249	F	0.006	No	1.248	F	0.005	No

LOS = Level of Service

V/C = Volume-to-Capacity Ratio

The reduction in vehicle trips generated by the Project due to implementation of the TDM Plan would fully mitigate the identified significant impacts. The LADOT Critical Movement Analysis (CMA) calculation worksheets for this post-mitigation analysis scenario are provided in Appendix D of this report.

7.5 Traffic Signal Warrant Analysis

A traffic signal warrant was also conducted at the intersection of Beethoven Street and Coral Tree Place, using intersection vehicle turning movement counts conducted on Tuesday, March 14, 2017. This was done to determine if traffic signal control is necessary at this location, now and/or with the addition of Project-generated vehicle traffic. Warrants defined by the California Edition of the Manual of Uniform Traffic Control Devices (MUTCD) were applied to this analysis.

The warrant analysis indicated that the minimum volume thresholds defined by the MUTCD were not exceeded in future post-Project conditions. Without the proposed Project, the volumes would be lower and the thresholds would also not be exceeded. As the future with-Project conditions have the highest traffic volumes among all the studied scenarios, the warrant would not be satisfied under the existing, the existing with-Project, or the future without-Project conditions. Installation of a traffic signal at this location is therefore not recommended.

The warrant worksheets are provided within Appendix E. The counts conducted at this location are provided in summary sheets within Appendix B to this document.

8. Congestion Management Plan Conformance

This section demonstrates the ways in which this traffic study was prepared to be in conformance with the procedures mandated by the County of Los Angeles Congestion Management Program (CMP).

The CMP was created statewide by Proposition III and was implemented locally by the Los Angeles County Metropolitan Transportation Authority (Metro). The CMP for Los Angeles County requires that the traffic impact of individual development projects of potentially regional significance be analyzed. A specific system of arterial roadways plus all freeways comprises the CMP system. Per CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis is conducted where:

- At CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where the proposed project will add 50 or more vehicle trips during either a.m. or p.m. weekday peak hours.
- At CMP mainline freeway-monitoring locations, where the project will add 150 or more trips, in either direction, during the either the a.m. or p.m. weekday peak hours.

The two nearest CMP arterial monitoring intersections (1.5-miles) are located at:

- Lincoln Boulevard & Manchester Avenue
- Lincoln Boulevard & Marina Highway

Based on the project trip generation and the distance of this location from the project site, it is not expected that 50 or more new trips per hour would be added at these CMP intersections. Therefore, no further analysis of potential CMP impacts is required.

The nearest freeway monitoring station is located on Interstate 405 east of Venice Boulevard, which is about 2.2-miles from the Project site. The Project is not expected to add more than 150 trips at this location.

9. Analysis Summary and Project Recommendations

9.1 Analysis Conclusions

The following are the conclusions made from the analysis within this report. Project and cumulative significant impacts were calculated by V/C thresholds at pre-Project level of service (LOS) values established by the LADOT guidelines for signalized intersections.

- The proposed 236 apartment units are projected to generate approximately 1,569 weekday daily trips, including 120 trips during the a.m. peak hour and 165 trips during the p.m. peak hour.
- Under existing 2017 and existing with-project conditions, eight out of the ten study intersections are operating at LOS value of D or better during both a.m. and p.m. peak hours. The intersections on Jefferson Boulevard at freeway I-405 NB on and off ramps and Centinela Avenue-Inglewood Boulevard are operating at poor levels of service, LOS E or F.
- Under future 2020 without the Project conditions, six out of the ten study intersections would operate at LOS D or better. The Intersections on Jefferson Boulevard at Lincoln Boulevard, Centinela Avenue-Campus Center Drive, Centinela Avenue-Inglewood Boulevard, and freeway I-405 NB on and off ramps would operate at poor level of service, LOS E or F
- Under future 2020 with the Project conditions, five out of the ten study intersections would operate at LOS D or better. The Intersections on Jefferson Boulevard at Lincoln Boulevard, Centinela Avenue-Campus Center Drive, Centinela Avenue-Inglewood Boulevard, freeway I-405 NB on and off ramps, and freeway I-405 SB on and off ramps would operate at poor level of service, LOS E or F

9.2. Existing with-Project Traffic Impacts

Under the existing analysis, which incorporated the proposed Project, significant traffic impacts would occur at the intersection of Jefferson Boulevard and Centinela Avenue-Inglewood Boulevard. .

9.3. Future with-Project Traffic Impacts

Under the future analysis, which incorporated the overall impacts of both related projects and the proposed Project, significant traffic impacts would occur at the intersection of Jefferson Boulevard and Centinela Avenue-Inglewood Boulevard.

9.4. Recommended Mitigation Measures

The Project applicant has proposed to implement a Transportation Demand Management (TDM) Plan to help reduce vehicle trips to and from the Project site. The details of the TDM Plan, to be developed in more detail but defined in basic form within this traffic report, would be developed in concert with LADOT to provide potential conditions including monitoring of trips after Project opening.

It is assumed that the recommended measures to be included in the TDM Plan will reduce the generated Project vehicle trips by at least 20 percent. The measures will include the establishment of a designated Transportation Demand Management (TDM) Plan manager for the Project site, and the provision of information on and the encouragement of the use of bicycling, transit, ridesharing, and other vehicle trip reducing and parking demand reducing measures. A dedicated project shuttle service will be provided that would serve employment centers in the area and commercial areas along Jefferson Boulevard, including and recreational areas.

9.5. Local Circulation - Beethoven Street and Coral Tree Place

The intersection of Beethoven Street and Coral Tree Place is the nearest controlled intersection to the proposed Project. It is a local neighborhood intersection with all-way stop-sign control.

Through filed work conducted by KOA, it was found that the visibility of signing and striping at and near to this intersection could potentially be improved. The suggested improvements include the following:

- Adding high visibility crosswalks on all legs of the intersection
- Placing larger stop signs at all approaches
- Installation of solar warning lights

Further study, and coordination with LADOT and the Bureau of Engineering, would be needed to implement these improvements.

A traffic signal warrant was also conducted at this location. This was done to determine if traffic signal control is necessary at this location, now and/or with the addition of Project-generated vehicle traffic. Warrants defined by the California Edition of the Manual of Uniform Traffic Control Devices (MUTCD) were applied to this analysis.

The warrant analysis indicated that the minimum volume thresholds defined by the MUTCD were not exceeded in future post-Project conditions. Installation of a traffic signal at this location is therefore not recommended.

APPENDIX A

Project Memorandum of Understanding with LADOT

TRAFFIC STUDY - MEMORANDUM OF UNDERSTANDING (MOU)
March 27, 2017

This MOU acknowledges that the traffic study for the following project will be prepared in accordance with the latest version of LADOT's Traffic Study Policies and Procedures:

Project Name: Del Rey Pointe – Traffic Impact Study

Project Address: 5000 Beethoven Street, Del Rey, California – Bounded by: Ballona Creek (N and W), Centinela Creek (S), Marina Freeway- SR-90 (E)

LADOT Case No.: CTC15-103068

Project Description: The proposed Project would provide 236 apartment units. A private traffic bridge would be constructed over the Centinela Creek Channel connecting to the cul-de-sac on Beethoven Street. The Project site plan is provided in Attachment A.

Geographic Distribution: N 40 % S 30 % E 25 % W 5 %

Attach graphic illustrating project trip distribution percentages at the studied intersections.

Provided in Attachment B.

Trip Generation Rate(s): ITE 9th Edition / Other ITE 9th Edition – Apartment Rate.

Attached is a trip generation table with a description of the proposed land uses, ITE rates, estimated morning and afternoon peak hour volumes (ins/outs/totals), proposed trip credits, etc. CTCSP PM Rates were used.

The trip generation table is provided in Attachment C.

	<u>IN</u>	<u>OUT</u>	<u>TOTAL</u>
AM Trips	<u>24</u>	<u>96</u>	<u>120</u>
PM Trips	<u>107</u>	<u>58</u>	<u>165</u>

Project Buildout Year: 2020

Ambient or CMP Growth Rate: 1.00 % Per Yr.

Related Projects: (to be researched by the consultant and approved by LADOT).

The initial list of the area projects and a reference map are provided in Attachment D. LADOT input into the initial provided list has been incorporated.

Subject to Freeway Impact Analysis Screening review: YES X NO

Analysis provided in Attachment E. CMP growth factor based on CMP RSA 16 rate of 0.28% per year was added for background growth. The I-405 freeway ramps at Jefferson Boulevard would generate 16 peak hour trips, which would not meet the Caltrans 2% impact threshold at LOS D. Based on the Caltrans ramp volumes, the SR-90 westbound off ramp at Centinela Avenue would operate at LOS D, with only two project trips added to the freeway, which would not meet the Caltrans 2% impact threshold. Based on this initial screening analysis, neither the mainline or ramp locations in the vicinity of the project site would be negatively affected by project trips.

Study Intersections

(Subject to LADOT revision after initial impact analysis)

1. Centinela Avenue / SR-90 WB Off-Ramp	7. McConnell Ave / Jefferson Boulevard
2. Centinela Avenue / SR-90 EB Ramps	8. Centinela Avenue-Campus Center Drive / Jefferson Boulevard
3. Coral Tree Place / Beethoven Street *	9. Centinela Avenue-Inglewood Boulevard / Jefferson Boulevard
4. Lincoln Boulevard / Jefferson Boulevard	10. I-405 SB Ramps / Jefferson Boulevard
5. Alla Road / Jefferson Boulevard	11. I-405 NB Ramps / Jefferson Boulevard
6. Beethoven Street / Jefferson Boulevard	

* Local neighborhood intersection with all-way stop-sign control. Intersection will not be analyzed for impacts under LADOT standards, but for general operations and queuing with and without the project.

New traffic counts will be conducted at all intersections as there are no recent historical counts.

Trip Credits: (Exact amount of credit subject to approval by LADOT)

	Yes	No
Transit Usage		X
Transportation Demand Management		X
Existing Active Land Use		X
Previous Land Use		X
Internal Trip		X
Pass-By Trip		X

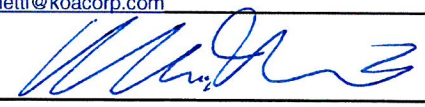
Consultant

Name Brian Marchetti, KOA Corporation

Address 1100 Corporate Ctr. Dr., Ste. 201, Monterey Park, CA 91754

Phone No. (323) 260-4703

E-Mail bmarchetti@koacorp.com

Approved by: 

Consultant's Representative

Date

Developer

Athena Novak, Marina Island, LLC

5300 Beethoven Street, 2nd Floor, Los Angeles, CA 90066

(818) 906-7449



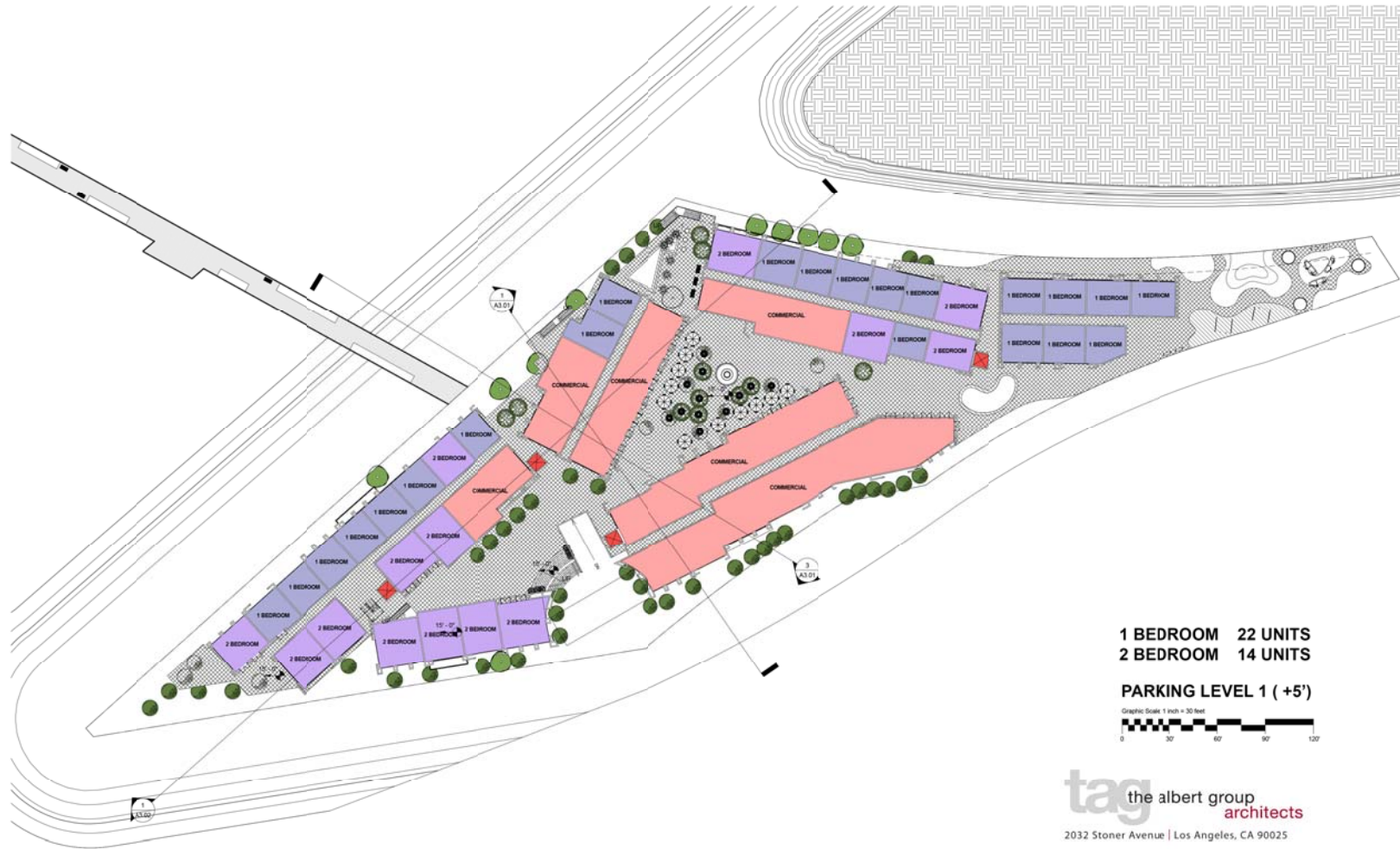
LADOT Representative

Date

4-10-17

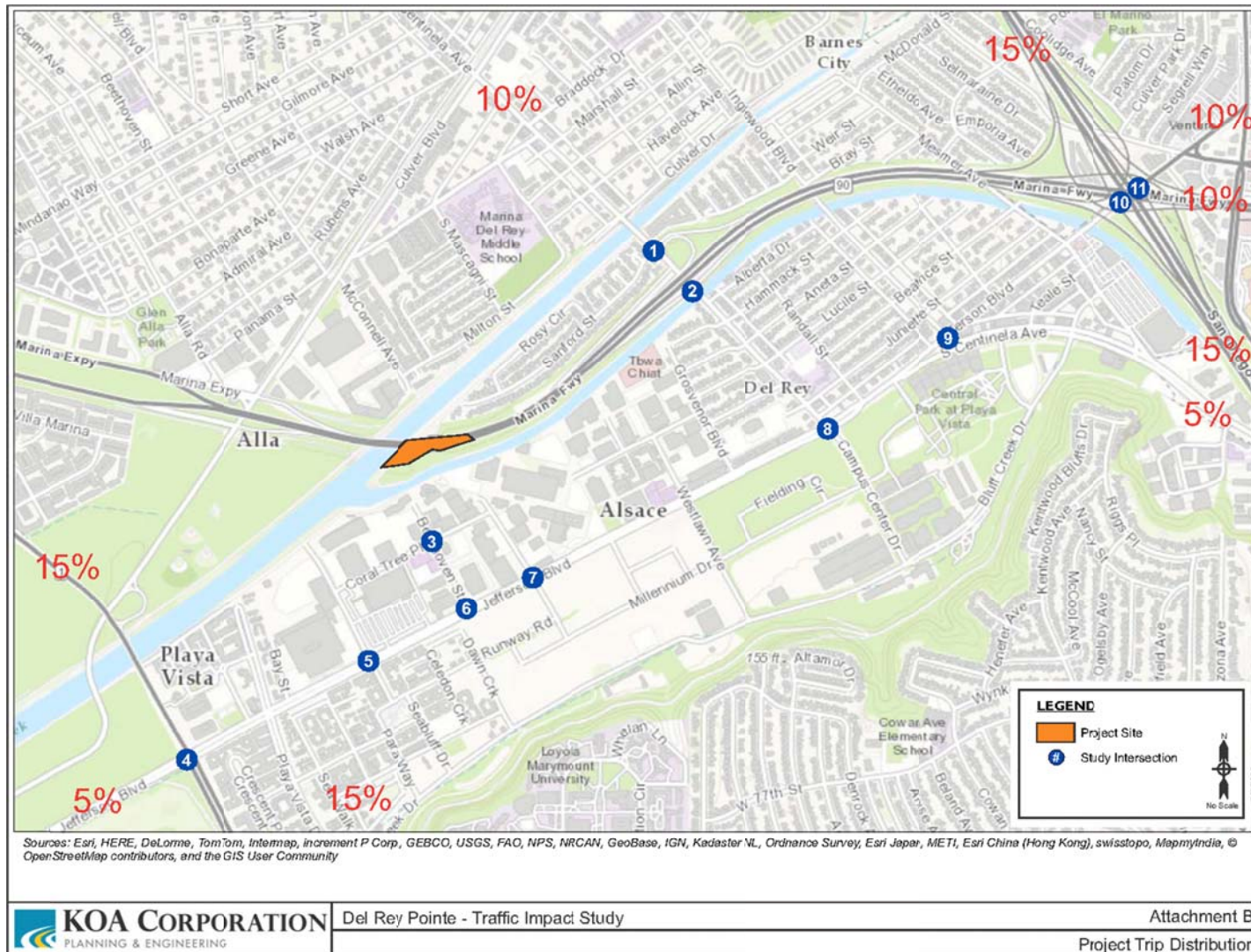
ATTACHMENT A

Project Site Plan



ATTACHMENT B

Project Trip Distribution



ATTACHMENT C

Project Trip Generation

Land Use	ITE Code	Intensity		Average Weekday	AM Peak Hour			PM Peak Hour [a]		
					In	Out	Total	In	Out	Total
Trip Generation Rates										
Apartments *	220	1	unit	6.65	20%	80%	0.51	65%	35%	0.70
Estimated Trips										
Apartments *	220	236	unit	1,569	24	96	120	107	58	165
Total				1,569	24	96	120	107	58	165

Source: ITE, 9th Edition

[a] PM peak hour trip rates obtained from the City of Los Angeles Coastal Transportation Corridor Specific Plan Appendix A.

* Local Serving Uses

ATTACHMENT D

Related Projects List

Map ID	Name	Location	Land Use	Intensity	Units	Daily Total	AM Peak Hour			PM Peak Hour		
							In	Out	Total	In	Out	Total
City of Los Angeles												
1	MDR Tower	4363 Lincoln Boulevard	Retail	3,178	k.s.f.	136	2	1	3	8	8	16
			Condominiums	158	d.u.	926	12	58	70	74	37	111
			Subtotal:			1,062	14	59	73	82	45	127
2	LMU Master Plan	1 LMU Drive	University Expansion	7,800	students	2,540	115	32	147	82	175	257
3	Mixed-Use: Residential/Office	4210 S Del Rey Avenue	Condominiums	136	d.u.	627	24	47	71	48	37	85
			Office	20,000	k.s.f.							
4	Village at Playa Vista Phase II	s/o Jefferson Boulevard/Westlawn Avenue	Condominiums	2,600	d.u.	24,220	577	1,049	1,626	1,275	1,027	2,302
			Office	175	k.s.f.							
			Retail	150	k.s.f.							
			Community Serving	40	k.s.f.							
5	Ballona Wetlands Restoration Project	Ballona Wetlands	Urban Ecology Center	46	k.s.f.	1,530	38	4	42	57	147	204
			Ecological Reserve	600	acre							
6	Hooman	5448 Mesmer	Other	113163	s.f.	2,694	139	44	183	90	176	266
7	Mixed-Use	4040 S Del Rey Ave	Mixed Use	195	units	1,839	-50	139	88	149	-28	121
			Mixed Use	235	units							
8	Teledyne Office Project	12964 W Panama St	Office	159,000	s.f.	777	72	9	81	20	71	91
9	New Multi-Story Office Building	12575 W Beatrice St	Office	199,500	s.f.	1,946	242	33	275	57	277	334
10	Expansion of Charter School	4471 Inglewood Blvd	School	800	Students	275	55	45	100	45	31	67
11	Mixed Use Project	4065 S Glencoe Ave	Office	35,206	s.f.	-191	67	38	105	2	99	101
			Retail	1,500	s.f.							
			Apartments	49	units							
			Other	14	bays							
			Industrial	5,050	s.f.							
			Mixed Use		other							
12	COU Warehouse to Office	4721 S Alla Rd	Office	118,352	s.f.	267	38	5	43	9	48	57
13	Apartment Bldg	13488 W Maxella Ave	Apartments	65	units	362	6	23	29	26	14	40
24	Ocean Charter School	12870 Panama St	School (K-8)	532	students	862	263	216	479	79	89	168
Los Angeles Subtotal						38,810	1,600	1,743	3,342	2,021	2,208	4,220

(continued on next page)

ATTACHMENT D

Related Projects List

Map ID	Name	Location	Land Use	Intensity	Units	Daily Total	AM Peak Hour			PM Peak Hour		
							In	Out	Total	In	Out	Total
City of Culver City												
14	Grandview Apartments	4025 Grand View Blvd	Apartments	36	d.u.	239	3	15	18	16	9	25
15	Washington Place Condos	12464 Washington Place	Condominiums	3	d.u.	17	0	1	1	1	1	2
16	Office Building	12038 Washington Boulevard	Office	2.685	k.s.f.	30	3	1	4	1	3	4
17	Pennylane Mixed Use Washington/Inglewood	11924 Washington Blvd	Restaurant	3.750	k.s.f.	477	22	18	40	23	16	39
			Specialty Retail	11.250	k.s.f.	499	9	6	15	13	17	30
			Apartments	98.000	units	652	10	40	50	45	24	69
			Subtotal:			1,914	47	80	129	99	70	170
18	Townhome Development	4118 Wade Street	Townhome	4	units	23	0	2	2	2	1	3
19	Office/Retail Building	13112-13114 Washington Blvd	Shopping Center	1.536	k.s.f.	66	1	0	1	3	3	6
			Apartments	2	d.u.	13	0	1	1	1	0	1
			Office	3.702	k.s.f.	41	5	1	6	1	5	6
			Subtotal:			120	6	2	8	5	8	13
20	Baldwin Site	12803 Washington Blvd	Apartments	37	d.u.	246	25	100	125	17	9	26
			Shopping Center	7.206	k.s.f.	308	4	3	7	13	14	27
			Subtotal:			554	29	103	132	30	23	53
21	Market Hall	12403 Washington Blvd	Supermarket	31.590	k.s.f.	3,230	67	40	107	153	147	299
22	Kayvon Mixed Use	12712-12718 Washington Boulevard	Shopping Center	3.308	k.s.f.	141	2	1	3	6	6	12
			Apartments	5	d.u.	33	1	2	3	2	2	4
			Subtotal:			175	2	3	6	8	8	16
Culver City Subtotal						6,301	158	246	408	315	269	584
Los Angeles County												
23	Professional Office Building	5465 Centinela Ave	Office	2.915	k.s.f.	32	44	6	50	13	62	75
NET TOTAL						45,143	1,802	1,995	3,800	2,349	2,539	4,879

d.u. = dwelling units, k.s.f. = 1,000 square feet of floor area

Trip Generation Rates Source: Institute of Transportation Engineers (ITE) "Trip Generation - 9th Edition".

ATTACHMENT E

Initial Freeway Impact Analysis Screening

Off-ramp

Location	Peak Hour	Project Trips	Freeway Off-Ramp Capacity [a]	with-Project Peak Hour Ramp Volumes / LOS	Caltrans 1% Criteria for Impact Analysis [b]	Caltrans 2% Criteria for Impact Analysis [c]	Off-Ramp Impact Analysis Required?
I-405 Freeway Southbound	AM	4	850	280 / A	9	17	NO
Off-Ramp at Jefferson Boulevard	PM	16	850	318 / A	9	17	NO
I-405 Freeway Northbound	AM	4	850	295 / A	9	17	NO
Off-Ramp at Jefferson Boulevard	PM	16	850	334 / A	9	17	NO
SR-90 Freeway Westbound	AM	2	850	685 / D	9	17	NO
Off-Ramp at Centinela Avenue	PM	11	850	588 / B	9	17	NO

[a] The freeway off-ramp capacity is 850 vehicles per hour per lane.

[b] A 1% or more increase to the capacity of a freeway off-ramp operating at LOS E or F would require a freeway impact analysis.

[c] A 2% or more increase to the capacity of a freeway off-ramp operating at LOS D would require a freeway impact analysis.

Mainline

Location	Peak Hour	Project Trips		Freeway Mainline Capacity [a]		Caltrans Criteria for Impact Analysis [b]		Freeway Impact Analysis Required?
		NB/WB	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	
I-405 Freeway, north of Jefferson Boulevard	AM	14	4	10,000	10,000	100	100	NO
	PM	9	16	10,000	10,000	100	100	NO
I-405 Freeway, south of Centinela Avenue	AM	4	14	10,000	10,000	100	100	NO
	PM	16	9	10,000	10,000	100	100	NO
SR-90 Freeway, east of Centinela Avenue	AM	2	10	6,000	6,000	60	60	NO
	PM	11	6	6,000	6,000	60	60	NO

NB = northbound, WB = westbound, SB = southbound, EB = eastbound

[a] The freeway capacity is 2,000 vehicles per hour per lane.

[b] A 1% or more increase to the freeway mainline capacity for a freeway segment operating at LOS E or F would require a freeway impact analysis.

APPENDIX B
Traffic Counts Data



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Centinela Ave

East/West SR 90 WB Off Ramp

Day: Tuesday **Date:** March 14, 2017 **Weather:** SUNNY

Hours: 7-10 & 3-6 **Chckrs:** NDS

School Day: YES **District:** **I/S CODE**

	N/B	S/B	E/B	W/B
DUAL-WHEELED	0	0	0	0
BIKES	0	0	0	0
BUSES	0	0	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	201	7.45	396	8.15	19	9.45	346	9.00
PM PK 15 MIN	257	17.15	414	17.15	14	15.00	200	16.30
AM PK HOUR	722	7.45	1440	8.00	60	7.45	1209	9.00
PM PK HOUR	906	17.00	1577	16.30	38	16.45	729	16.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	7	544	95	646
8-9	20	542	133	695
9-10	13	516	107	636
15-16	12	510	78	600
16-17	13	580	138	731
17-18	11	717	178	906
TOTAL	76	3409	729	4214

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	863	5	868
8-9	0	1435	5	1440
9-10	0	1176	0	1176
15-16	0	1445	0	1445
16-17	0	1524	0	1524
17-18	0	1499	0	1499
TOTAL	0	7942	10	7952

TOTAL

XING S/L

XING N/L

N-S	Ped	Sch	Ped	Sch
1514	0	0	0	0
2135	0	0	0	0
1812	0	0	0	0
2045	0	0	0	0
2255	0	0	0	0
2405	0	0	0	0
12166	0	0	0	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	22	0	36	58
8-9	10	0	46	56
9-10	17	0	37	54
15-16	15	0	21	36
16-17	9	0	21	30
17-18	11	0	27	38
TOTAL	84	0	188	272

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	333	7	603	943
8-9	443	13	565	1021
9-10	702	13	494	1209
15-16	208	10	359	577
16-17	220	15	440	675
17-18	219	12	473	704
TOTAL	2125	70	2934	5129

TOTAL

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
1001	0	0	0	0
1077	0	0	0	0
1263	0	0	0	0
613	0	0	0	0
705	0	0	0	0
742	0	0	0	0
5401	0	0	0	0

ITM Peak Hour Summary

Prepared by:

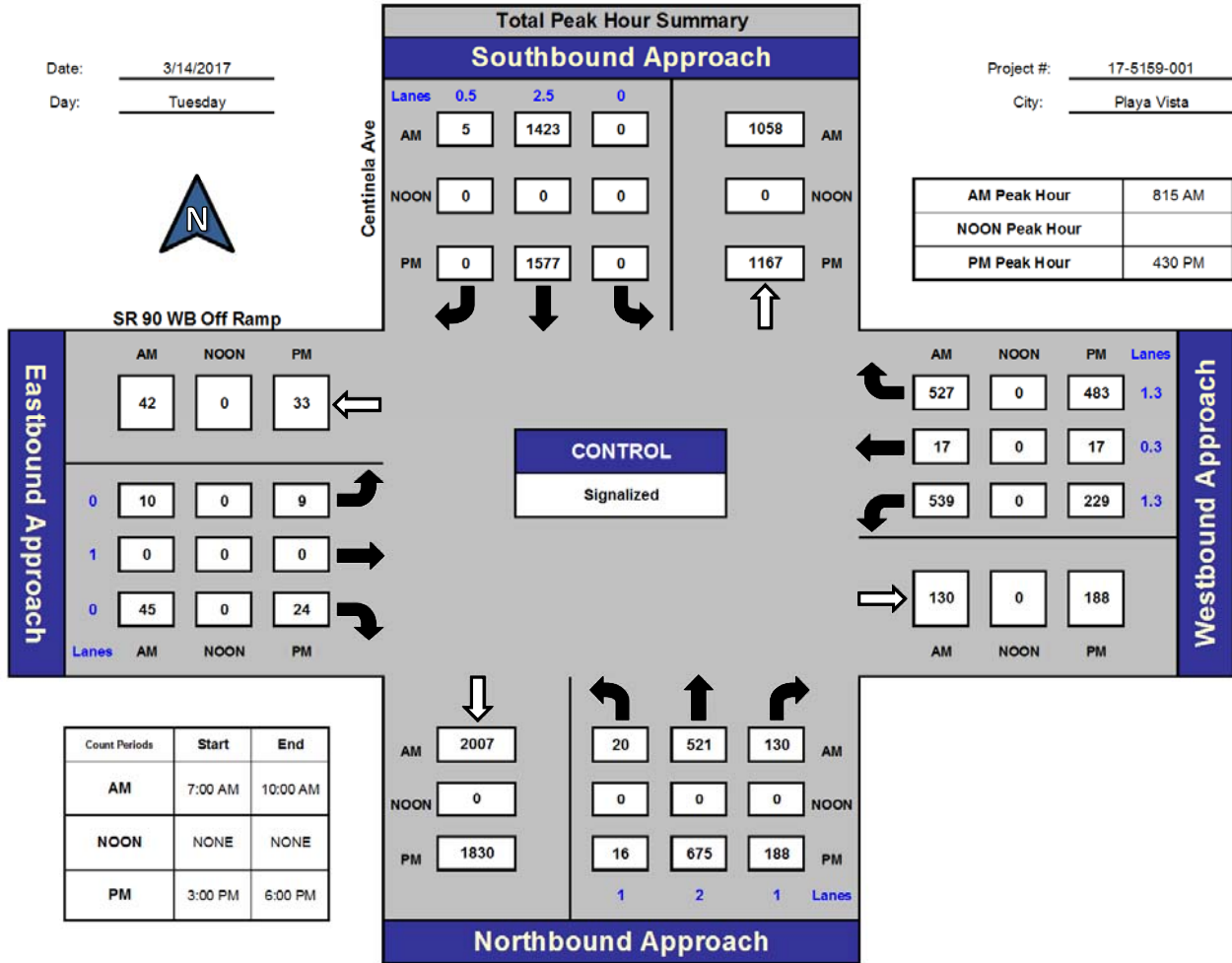


National Data & Surveying Services

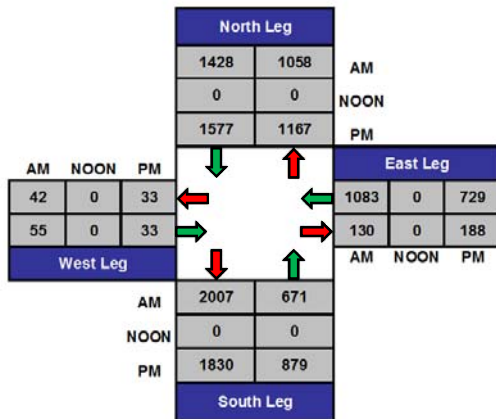
Centinela Ave and SR 90 WB Off Ramp, Playa Vista

Date: 3/14/2017
Day: Tuesday

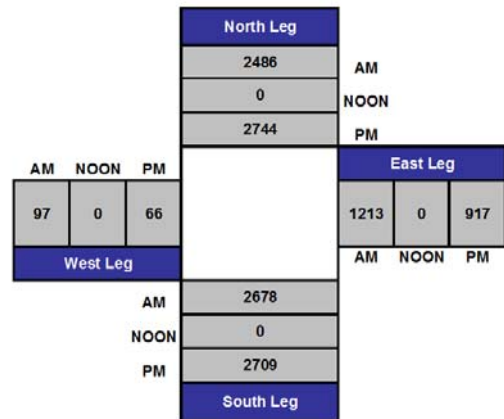
Project #: 17-5159-001
City: Playa Vista



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-001

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	Centinela Ave			Centinela Ave			SR 90 WB Off Ramp			SR 90 WB Off Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 0	ST 2.5	SR 0.5	EL 0	ET 1	ER 0	WL 1.3	WT 0.3	WR 1.3	TOTAL
7:00 AM	2	112	11	0	127	2	7	0	7	63	1	150	482
7:15 AM	0	146	16	0	192	1	6	0	6	81	4	130	582
7:30 AM	3	124	31	0	219	1	3	0	11	85	1	172	650
7:45 AM	2	162	37	0	325	1	6	0	12	104	1	151	801
8:00 AM	5	147	35	0	350	0	1	0	13	115	0	169	835
8:15 AM	3	126	34	0	393	3	1	0	9	108	3	119	799
8:30 AM	5	141	25	0	320	2	6	0	12	102	6	132	751
8:45 AM	7	128	39	0	372	0	2	0	12	118	4	145	827
9:00 AM	5	126	32	0	338	0	1	0	12	211	4	131	860
9:15 AM	2	123	33	0	319	0	3	0	8	155	2	103	748
9:30 AM	4	142	21	0	249	0	5	0	6	188	5	138	758
9:45 AM	2	125	21	0	270	0	8	0	11	148	2	122	709
TOTAL VOLUMES :	40	1602	335	0	3474	10	49	0	119	1478	33	1662	8802
APPROACH %'s :	2.02%	81.03%	16.94%	0.00%	99.71%	0.29%	29.17%	0.00%	70.83%	46.58%	1.04%	52.38%	
PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	20	521	130	0	1423	5	10	0	45	539	17	527	3237
PEAK HR FACTOR :	0.964			0.902			0.764			0.783			0.941

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-001

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	Centinela Ave			Centinela Ave			SR 90 WB Off Ramp			SR 90 WB Off Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 0	ST 2.5	SR 0.5	EL 0	ET 1	ER 0	WL 1.3	WT 0.3	WR 1.3	TOTAL
3:00 PM	3	120	17	0	325	0	5	0	9	52	5	97	633
3:15 PM	2	149	20	0	379	0	3	0	3	60	3	78	697
3:30 PM	6	119	16	0	340	0	4	0	4	54	1	88	632
3:45 PM	1	122	25	0	401	0	3	0	5	42	1	96	696
4:00 PM	2	122	25	0	357	0	3	0	7	65	5	100	686
4:15 PM	3	138	23	0	384	0	3	0	5	40	3	108	707
4:30 PM	2	163	37	0	374	0	1	0	3	68	3	129	780
4:45 PM	6	157	53	0	409	0	2	0	6	47	4	103	787
5:00 PM	4	156	44	0	380	0	2	0	11	50	4	142	793
5:15 PM	4	199	54	0	414	0	4	0	4	64	6	109	858
5:30 PM	1	169	37	0	339	0	1	0	8	72	1	124	752
5:45 PM	2	193	43	0	366	0	4	0	4	33	1	98	744
TOTAL VOLUMES :	36	1807	394	0	4468	0	35	0	69	647	37	1272	8765
APPROACH %'s :	1.61%	80.78%	17.61%	0.00%	100.00%	0.00%	33.65%	0.00%	66.35%	33.08%	1.89%	65.03%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	16	675	188	0	1577	0	9	0	24	229	17	483	3218
PEAK HR FACTOR :	0.855			0.952			0.635			0.911			0.938

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-001

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		Centinela Ave			Centinela Ave			SR 90 WB Off Ramp			SR 90 WB Off Ramp			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 1	SL 0	ST 2.5	SR 0.5	EL 0	ET 1	ER 0	WL 1.3	WT 0.3	WR 1.3	TOTAL
7:00 AM		2	112	11	0	127	2	7	0	7	63	1	150	482
7:15 AM		0	146	16	0	192	1	6	0	6	81	4	130	582
7:30 AM		3	124	31	0	219	1	3	0	11	85	1	172	650
7:45 AM		2	162	37	0	325	1	6	0	12	104	1	151	801
8:00 AM		5	147	35	0	350	0	1	0	13	115	0	169	835
8:15 AM		3	126	34	0	393	3	1	0	9	108	3	119	799
8:30 AM		5	141	25	0	320	2	6	0	12	102	6	132	751
8:45 AM		7	128	39	0	372	0	2	0	12	118	4	145	827
9:00 AM		5	126	32	0	338	0	1	0	12	211	4	131	860
9:15 AM		2	123	33	0	319	0	3	0	8	155	2	103	748
9:30 AM		4	142	21	0	249	0	5	0	6	188	5	138	758
9:45 AM		2	125	21	0	270	0	8	0	11	148	2	122	709
TOTAL VOLUMES :		40	1602	335	0	3474	10	49	0	119	1478	33	1662	8802
APPROACH %'s :		2.02%	81.03%	16.94%	0.00%	99.71%	0.29%	29.17%	0.00%	70.83%	46.58%	1.04%	52.38%	
PEAK HR START TIME :		815 AM												TOTAL
PEAK HR VOL :		20	521	130	0	1423	5	10	0	45	539	17	527	3237
PEAK HR FACTOR :		0.964			0.902			0.764			0.783			0.941

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-001

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		Centinela Ave			Centinela Ave			SR 90 WB Off Ramp			SR 90 WB Off Ramp			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 1	SL 0	ST 2.5	SR 0.5	EL 0	ET 1	ER 0	WL 1.3	WT 0.3	WR 1.3	TOTAL
3:00 PM		3	120	17	0	325	0	5	0	9	52	5	97	633
3:15 PM		2	149	20	0	379	0	3	0	3	60	3	78	697
3:30 PM		6	119	16	0	340	0	4	0	4	54	1	88	632
3:45 PM		1	122	25	0	401	0	3	0	5	42	1	96	696
4:00 PM		2	122	25	0	357	0	3	0	7	65	5	100	686
4:15 PM		3	138	23	0	384	0	3	0	5	40	3	108	707
4:30 PM		2	163	37	0	374	0	1	0	3	68	3	129	780
4:45 PM		6	157	53	0	409	0	2	0	6	47	4	103	787
5:00 PM		4	156	44	0	380	0	2	0	11	50	4	142	793
5:15 PM		4	199	54	0	414	0	4	0	4	64	6	109	858
5:30 PM		1	169	37	0	339	0	1	0	8	72	1	124	752
5:45 PM		2	193	43	0	366	0	4	0	4	33	1	98	744
TOTAL VOLUMES :		36	1807	394	0	4468	0	35	0	69	647	37	1272	8765
APPROACH %'s :		1.61%	80.78%	17.61%	0.00%	100.00%	0.00%	33.65%	0.00%	66.35%	33.08%	1.89%	65.03%	
PEAK HR START TIME :		430 PM												TOTAL
PEAK HR VOL :		16	675	188	0	1577	0	9	0	24	229	17	483	3218
PEAK HR FACTOR :		0.855			0.952			0.635			0.911			0.938

CONTROL : Signalized



Centinela Ave

SR 90 EB Ramps

School Day: YES District: I/S CODE

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	313	8.00	542	9.00	99	9.00	0	0.00
PM PK 15 MIN	314	17.45	482	17.15	70	17.30	0	0.00
AM PK HOUR	1154	7.30	1964	8.15	305	8.30	0	0.00
PM PK HOUR	1105	17.00	1803	16.30	234	17.00	0	0.00

XING N/L

Ped	Sch
0	0
0	0
0	0
0	0
0	0
0	0

0	0
---	---

XING E/L

[illegible]

ITM Peak Hour Summary

Prepared by:

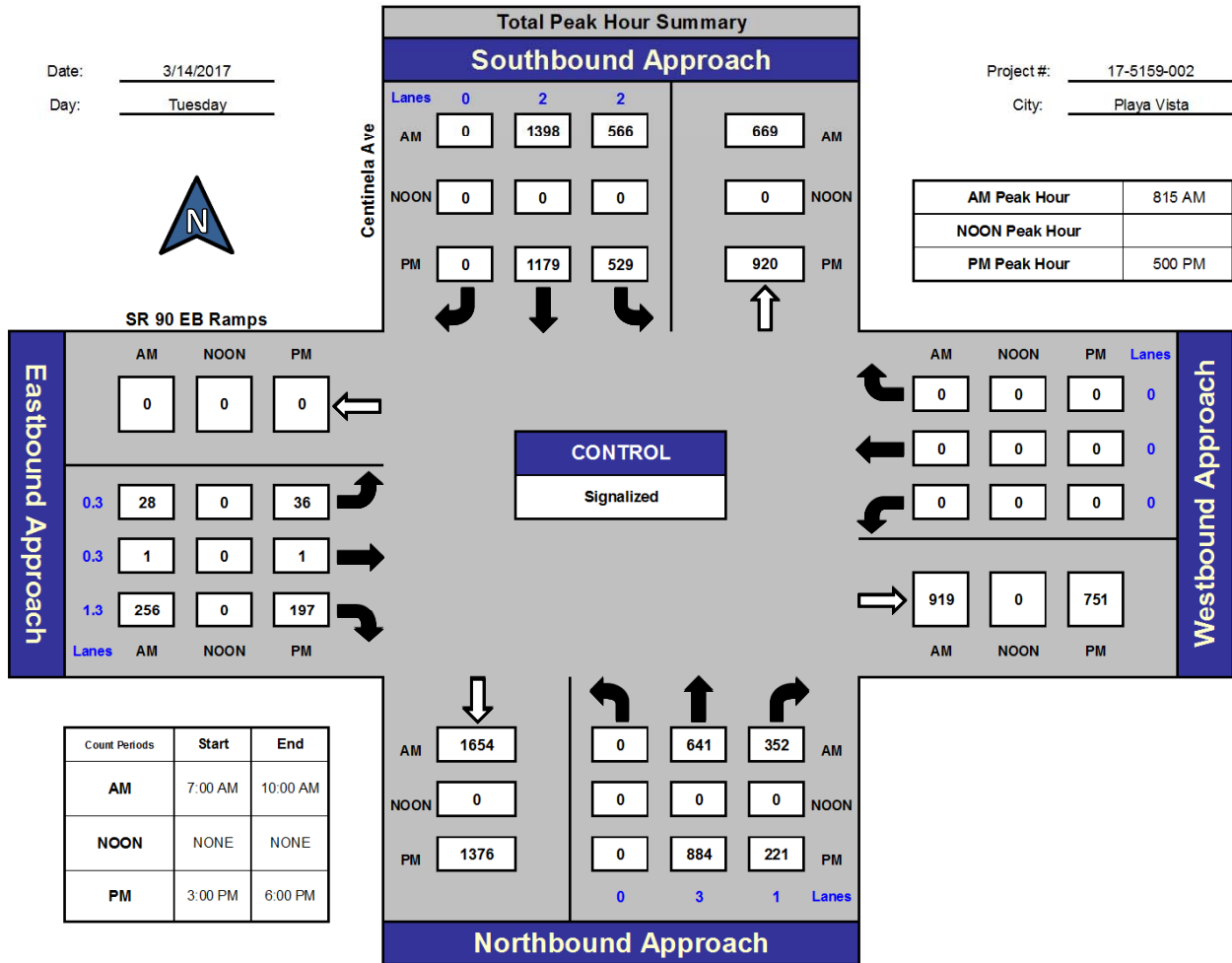


National Data & Surveying Services

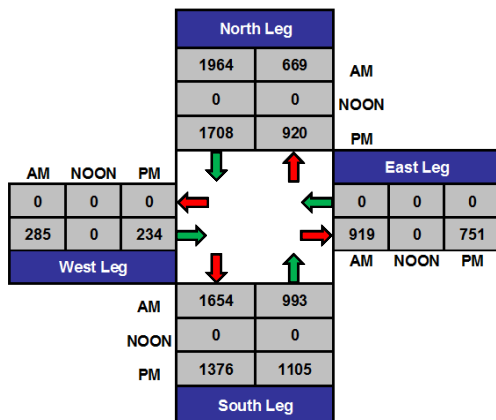
Centinela Ave and SR 90 EB Ramps, Playa Vista

Date: 3/14/2017
Day: Tuesday

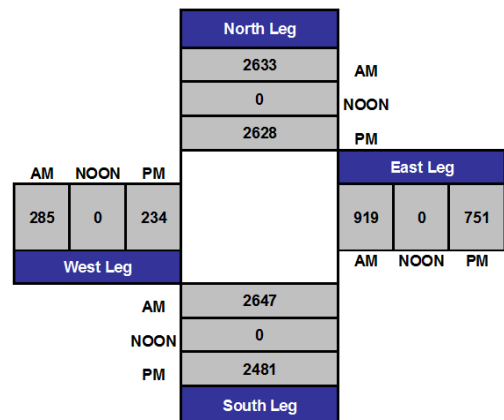
Project #: 17-5159-002
City: Playa Vista



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-002

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	Centinela Ave			Centinela Ave			SR 90 EB Ramps			SR 90 EB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 3	NR 1	SL 2	ST 2	SR 0	EL 0.3	ET 0.3	ER 1.3	WL 0	WT 0	WR 0	TOTAL
7:00 AM	0	127	57	73	124	0	1	0	15	0	0	0	397
7:15 AM	0	158	69	97	176	0	2	0	12	0	0	0	514
7:30 AM	0	162	103	108	194	0	4	0	19	0	0	0	590
7:45 AM	0	189	123	139	265	0	4	0	32	0	0	0	752
8:00 AM	0	180	133	199	289	0	7	0	47	0	0	0	855
8:15 AM	0	158	106	185	310	0	5	0	44	0	0	0	808
8:30 AM	0	170	83	150	289	0	5	0	51	0	0	0	748
8:45 AM	0	167	75	126	362	0	9	1	71	0	0	0	811
9:00 AM	0	146	88	105	437	0	9	0	90	0	0	0	875
9:15 AM	0	155	97	100	382	0	3	0	66	0	0	0	803
9:30 AM	0	160	51	89	343	0	5	1	44	0	0	0	693
9:45 AM	0	142	61	98	320	0	5	0	43	0	0	0	669
TOTAL VOLUMES :	0	1914	1046	1469	3491	0	59	2	534	0	0	0	8515
APPROACH %'s :	0.00%	64.66%	35.34%	29.62%	70.38%	0.00%	9.92%	0.34%	89.75%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	0	641	352	566	1398	0	28	1	256	0	0	0	3242
PEAK HR FACTOR :	0.940			0.906			0.720			0.000			0.926

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-002

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	Centinela Ave			Centinela Ave			SR 90 EB Ramps			SR 90 EB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 3	NR 1	SL 2	ST 2	SR 0	EL 0.3	ET 0.3	ER 1.3	WL 0	WT 0	WR 0	TOTAL
3:00 PM	0	142	84	170	214	0	3	0	30	0	0	0	643
3:15 PM	0	159	59	169	254	0	3	0	30	0	0	0	674
3:30 PM	0	137	57	176	225	0	8	0	27	0	0	0	630
3:45 PM	0	137	38	186	232	0	7	0	26	0	0	0	626
4:00 PM	0	142	37	158	271	0	4	1	34	0	0	0	647
4:15 PM	0	156	39	160	267	0	5	0	41	0	0	0	668
4:30 PM	0	202	35	163	269	0	6	0	37	0	0	0	712
4:45 PM	0	199	40	166	296	0	18	0	36	0	0	0	755
5:00 PM	0	203	53	163	264	0	5	0	47	0	0	0	735
5:15 PM	0	232	46	130	352	0	14	0	36	0	0	0	810
5:30 PM	0	206	51	123	290	0	8	0	62	0	0	0	740
5:45 PM	0	243	71	113	273	0	9	1	52	0	0	0	762
TOTAL VOLUMES :	0	2158	610	1877	3207	0	90	2	458	0	0	0	8402
APPROACH %'s :	0.00%	77.96%	22.04%	36.92%	63.08%	0.00%	16.36%	0.36%	83.27%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	884	221	529	1179	0	36	1	197	0	0	0	3047
PEAK HR FACTOR :	0.880			0.886			0.836			0.000			0.940

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-002

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		Centinela Ave			Centinela Ave			SR 90 EB Ramps			SR 90 EB Ramps			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 3	NR 1	SL 2	ST 2	SR 0	EL 0.3	ET 0.3	ER 1.3	WL 0	WT 0	WR 0	TOTAL
7:00 AM		0	127	57	73	124	0	1	0	15	0	0	0	397
7:15 AM		0	158	69	97	176	0	2	0	12	0	0	0	514
7:30 AM		0	162	103	108	194	0	4	0	19	0	0	0	590
7:45 AM		0	189	123	139	265	0	4	0	32	0	0	0	752
8:00 AM		0	180	133	199	289	0	7	0	47	0	0	0	855
8:15 AM		0	158	106	185	310	0	5	0	44	0	0	0	808
8:30 AM		0	170	83	150	289	0	5	0	51	0	0	0	748
8:45 AM		0	167	75	126	362	0	9	1	71	0	0	0	811
9:00 AM		0	146	88	105	437	0	9	0	90	0	0	0	875
9:15 AM		0	155	97	100	382	0	3	0	66	0	0	0	803
9:30 AM		0	160	51	89	343	0	5	1	44	0	0	0	693
9:45 AM		0	142	61	98	320	0	5	0	43	0	0	0	669
TOTAL VOLUMES :		NL 0	NT 1914	NR 1046	SL 1469	ST 3491	SR 0	EL 59	ET 2	ER 534	WL 0	WT 0	WR 0	TOTAL 8515
APPROACH %'s :		0.00%	64.66%	35.34%	29.62%	70.38%	0.00%	9.92%	0.34%	89.75%				
PEAK HR START TIME :		815 AM												TOTAL
PEAK HR VOL :		0	641	352	566	1398	0	28	1	256	0	0	0	3242
PEAK HR FACTOR :		0.940			0.906			0.720			0.000			0.926

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-002

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		Centinela Ave			Centinela Ave			SR 90 EB Ramps			SR 90 EB Ramps			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 3	NR 1	SL 2	ST 2	SR 0	EL 0.3	ET 0.3	ER 1.3	WL 0	WT 0	WR 0	TOTAL
3:00 PM		0	142	84	170	214	0	3	0	30	0	0	0	643
3:15 PM		0	159	59	169	254	0	3	0	30	0	0	0	674
3:30 PM		0	137	57	176	225	0	8	0	27	0	0	0	630
3:45 PM		0	137	38	186	232	0	7	0	26	0	0	0	626
4:00 PM		0	142	37	158	271	0	4	1	34	0	0	0	647
4:15 PM		0	156	39	160	267	0	5	0	41	0	0	0	668
4:30 PM		0	202	35	163	269	0	6	0	37	0	0	0	712
4:45 PM		0	199	40	166	296	0	18	0	36	0	0	0	755
5:00 PM		0	203	53	163	264	0	5	0	47	0	0	0	735
5:15 PM		0	232	46	130	352	0	14	0	36	0	0	0	810
5:30 PM		0	206	51	123	290	0	8	0	62	0	0	0	740
5:45 PM		0	243	71	113	273	0	9	1	52	0	0	0	762
TOTAL VOLUMES :		NL 0	NT 2158	NR 610	SL 1877	ST 3207	SR 0	EL 90	ET 2	ER 458	WL 0	WT 0	WR 0	TOTAL 8402
APPROACH %'s :		0.00%	77.96%	22.04%	36.92%	63.08%	0.00%	16.36%	0.36%	83.27%				
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		0	884	221	529	1179	0	36	1	197	0	0	0	3047
PEAK HR FACTOR :		0.880			0.886			0.836			0.000			0.940

CONTROL : Signalized



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Lincoln Blvd

East/West Jefferson Blvd

Day: Tuesday **Date:** March 14, 2017 **Weather:** SUNNY

Hours: 7-10 & 3-6 **Chekr:** NDS

School Day: YES **District:** **I/S CODE**

	N/B	S/B	E/B	W/B
DUAL-WHEELED	209	180	34	85
BIKES	36	47	13	21
BUSES	53	46	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	887	7.00	538	8.45	186	7.45	376	7.45
PM PK 15 MIN	475	17.15	787	17.00	117	15.30	491	17.30
AM PK HOUR	3288	7.00	1973	8.30	674	9.00	1433	7.45
PM PK HOUR	1831	16.30	3098	17.00	430	15.30	1755	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	8	3038	242	3288
8-9	15	2631	262	2908
9-10	17	2125	383	2525
15-16	35	1227	300	1562
16-17	38	1427	281	1746
17-18	32	1475	285	1792
TOTAL	145	11923	1753	13821

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	296	815	125	1236
8-9	554	1164	197	1915
9-10	573	962	217	1752
15-16	513	1485	402	2400
16-17	504	1806	556	2866
17-18	517	2047	534	3098
TOTAL	2957	8279	2031	13267

TOTAL

N-S
4524
4823
4277
3962
4612
4890
27088

XING S/L

Ped	Sch
11	1
3	0
12	0
5	4
27	0
10	0
68	5

XING N/L

Ped	Sch
3	0
5	0
3	0
7	0
2	1
8	0
28	1

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	228	196	62	486
8-9	163	271	74	508
9-10	188	410	76	674
15-16	80	214	132	426
16-17	89	174	107	370
17-18	103	198	98	399
TOTAL	851	1463	549	2863

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	248	87	728	1063
8-9	264	138	1006	1408
9-10	260	104	713	1077
15-16	392	228	693	1313
16-17	437	264	630	1331
17-18	551	372	832	1755
TOTAL	2152	1193	4602	7947

TOTAL

E-W
1549
1916
1751
1739
1701
2154
10810

XING W/L

Ped	Sch
4	0
4	0
4	0
3	0
3	1
9	0
27	1

XING E/L

Ped	Sch
2	0
3	0
5	0
5	5
17	0
8	0
40	5

ITM Peak Hour Summary

Prepared by:

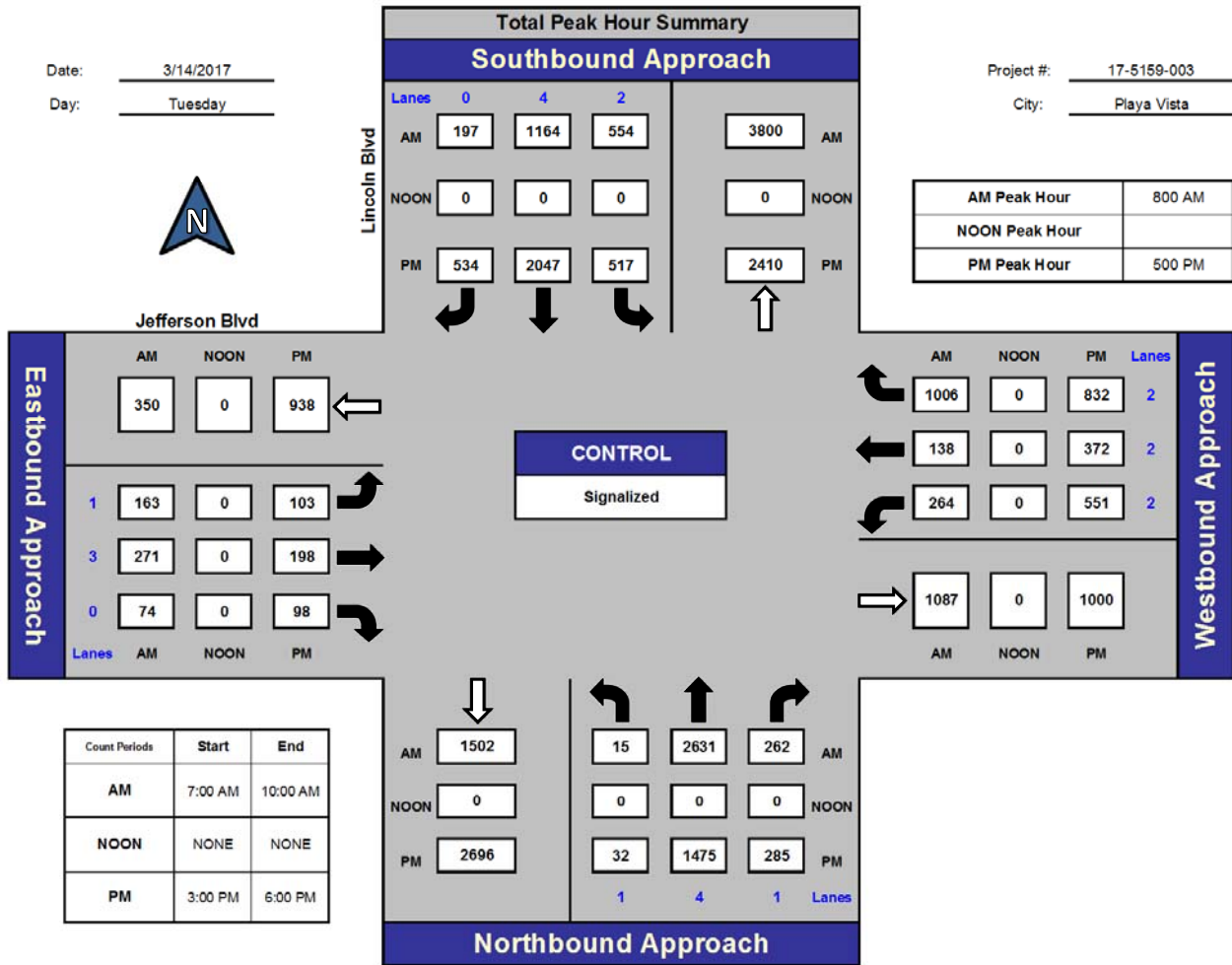


National Data & Surveying Services

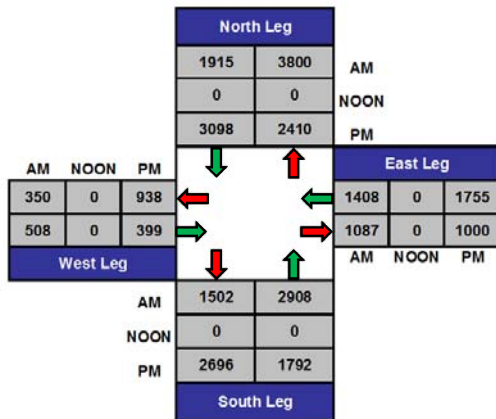
Lincoln Blvd and Jefferson Blvd, Playa Vista

Date: 3/14/2017
Day: Tuesday

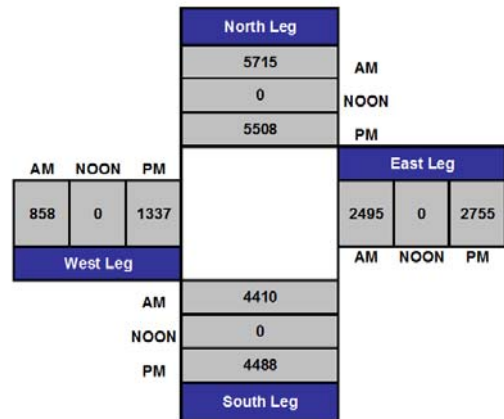
Project #: 17-5159-003
City: Playa Vista



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-003

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	Lincoln Blvd			Lincoln Blvd			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 2	ST 4	SR 0	EL 1	ET 3	ER 0	WL 2	WT 2	WR 2	TOTAL
7:00 AM	2	810	75	48	163	24	44	27	9	29	10	116	1357
7:15 AM	3	814	65	67	146	25	55	38	10	47	23	150	1443
7:30 AM	1	802	47	77	247	35	47	50	20	65	21	226	1638
7:45 AM	2	612	55	104	259	41	82	81	23	107	33	236	1635
8:00 AM	3	707	66	104	307	42	49	49	20	80	34	242	1703
8:15 AM	2	614	58	118	272	52	40	82	18	68	39	246	1609
8:30 AM	6	660	53	141	283	58	38	57	19	65	30	253	1663
8:45 AM	4	650	85	191	302	45	36	83	17	51	35	265	1764
9:00 AM	4	561	95	158	260	52	56	97	20	71	29	205	1608
9:15 AM	5	509	101	157	272	54	41	111	19	74	15	169	1527
9:30 AM	2	513	101	160	236	54	57	106	22	61	33	176	1521
9:45 AM	6	542	86	98	194	57	34	96	15	54	27	163	1372
TOTAL VOLUMES :	40	7794	887	1423	2941	539	579	877	212	772	329	2447	18840
APPROACH %'s :	0.46%	89.37%	10.17%	29.02%	59.98%	10.99%	34.71%	52.58%	12.71%	21.76%	9.27%	68.97%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	15	2631	262	554	1164	197	163	271	74	264	138	1006	6739
PEAK HR FACTOR :	0.937			0.890			0.907			0.989			0.955

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-003

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

PM													
NS/EW Streets:	Lincoln Blvd			Lincoln Blvd			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 2	ST 4	SR 0	EL 1	ET 3	ER 0	WL 2	WT 2	WR 2	TOTAL
3:00 PM	9	298	75	132	350	87	11	59	23	86	49	179	1358
3:15 PM	6	314	100	148	343	106	21	60	27	104	57	162	1448
3:30 PM	14	284	60	117	340	84	28	49	40	104	73	187	1380
3:45 PM	6	331	65	116	452	125	20	46	42	98	49	165	1515
4:00 PM	10	327	69	134	427	113	22	39	31	110	70	151	1503
4:15 PM	6	376	60	115	407	155	34	47	32	97	52	155	1536
4:30 PM	8	369	83	120	487	157	17	40	25	113	71	146	1636
4:45 PM	14	355	69	135	485	131	16	48	19	117	71	178	1638
5:00 PM	8	383	67	112	514	161	22	42	19	109	97	172	1706
5:15 PM	8	387	80	126	508	127	24	45	25	142	85	216	1773
5:30 PM	7	309	73	142	502	126	28	48	33	146	107	238	1759
5:45 PM	9	396	65	137	523	120	29	63	21	154	83	206	1806
TOTAL VOLUMES :	105	4129	866	1534	5338	1492	272	586	337	1380	864	2155	19058
APPROACH %'s :	2.06%	80.96%	16.98%	18.34%	63.82%	17.84%	22.76%	49.04%	28.20%	31.37%	19.64%	48.99%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	32	1475	285	517	2047	534	103	198	98	551	372	832	7044
PEAK HR FACTOR :	0.943			0.984			0.883			0.894			0.975

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-003

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		Lincoln Blvd			Lincoln Blvd			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 4	NR 1	SL 2	ST 4	SR 0	EL 1	ET 3	ER 0	WL 2	WT 2	WR 2	TOTAL
7:00 AM		2	797	72	47	160	24	42	27	9	28	10	116	1334
7:15 AM		3	800	62	66	144	25	55	38	10	44	23	147	1417
7:30 AM		1	782	45	77	243	34	47	50	19	65	20	223	1606
7:45 AM		2	597	55	103	254	41	82	79	23	107	33	235	1611
8:00 AM		3	696	64	103	304	42	49	49	20	80	33	238	1681
8:15 AM		2	601	56	117	269	51	40	81	18	65	38	241	1579
8:30 AM		6	651	49	138	278	58	38	55	19	64	29	253	1638
8:45 AM		4	638	81	189	298	45	36	83	16	50	35	261	1736
9:00 AM		4	543	92	157	254	47	55	96	20	69	27	202	1566
9:15 AM		5	495	98	157	266	51	40	109	19	73	15	167	1495
9:30 AM		2	505	98	159	233	53	55	105	22	59	32	170	1493
9:45 AM		6	526	85	98	189	56	33	94	15	54	26	159	1341
TOTAL VOLUMES :		NL 40	NT 7631	NR 857	SL 1411	ST 2892	SR 527	EL 572	ET 866	ER 210	WL 758	WT 321	WR 2412	TOTAL 18497
APPROACH %'s :		0.47%	89.48%	10.05%	29.21%	59.88%	10.91%	34.71%	52.55%	12.74%	21.71%	9.20%	69.09%	
PEAK HR START TIME :		800 AM												TOTAL
PEAK HR VOL :		15	2586	250	547	1149	196	163	268	73	259	135	993	6634
PEAK HR FACTOR :		0.934			0.889			0.906			0.988			0.955

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-003

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

PM

NS/EW Streets:		Lincoln Blvd			Lincoln Blvd			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 4	NR 1	SL 2	ST 4	SR 0	EL 1	ET 3	ER 0	WL 2	WT 2	WR 2	TOTAL
3:00 PM		9	290	74	129	339	85	11	59	23	85	49	179	1332
3:15 PM		6	308	98	146	340	103	21	59	26	103	57	157	1424
3:30 PM		14	280	60	116	330	84	28	49	40	103	73	185	1362
3:45 PM		6	329	64	116	445	122	19	46	42	96	49	163	1497
4:00 PM		10	320	68	133	415	110	21	39	31	107	70	149	1473
4:15 PM		6	373	56	114	398	150	33	47	32	94	52	155	1510
4:30 PM		8	364	82	118	476	155	16	40	25	113	71	143	1611
4:45 PM		14	354	68	133	472	126	14	48	19	117	71	177	1613
5:00 PM		8	376	66	108	509	156	21	42	19	109	96	172	1682
5:15 PM		8	382	79	126	499	124	22	45	25	142	85	216	1753
5:30 PM		6	306	73	142	491	126	26	48	33	146	107	237	1741
5:45 PM		9	392	65	137	519	119	29	62	21	154	83	206	1796
TOTAL VOLUMES :		104	4074	853	1518	5233	1460	261	584	336	1369	863	2139	18794
APPROACH %'s :		2.07%	80.98%	16.95%	18.49%	63.73%	17.78%	22.10%	49.45%	28.45%	31.32%	19.74%	48.94%	
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		31	1456	283	513	2018	525	98	197	98	551	371	831	6972
PEAK HR FACTOR :		0.943			0.986			0.877			0.894			0.970

CONTROL : Signalized

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 17-5159-003
N/S Street: Lincoln Blvd
E/W Street: Jefferson Blvd
DATE: 3/14/2017
CITY: Playa Vista

DAY: Tuesday

A M

Adult Pedestrians

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	1	1
7:15 AM	0	0	5	1	1	0	0	0
7:30 AM	0	1	0	0	0	0	0	1
7:45 AM	0	1	5	0	1	0	0	1
8:00 AM	3	0	0	0	1	0	1	0
8:15 AM	0	0	2	0	1	0	0	0
8:30 AM	2	0	0	0	1	0	3	0
8:45 AM	0	0	1	0	0	0	0	0
9:00 AM	0	1	2	0	0	0	0	1
9:15 AM	0	2	4	0	4	0	0	2
9:30 AM	0	0	2	1	1	0	1	0
9:45 AM	0	0	2	1	0	0	0	0
TOTALS	5	6	23	3	10	0	6	6

School-Aged Pedestrians

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
TOTALS	0	0	1	0	0	0	0	0

P M

Adult Pedestrians

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	5	0	0	0	1	0	0	0
3:15 PM	0	0	0	0	1	0	0	0
3:30 PM	1	1	3	1	2	0	2	1
3:45 PM	0	0	1	0	0	1	0	0
4:00 PM	0	1	9	1	7	0	0	1
4:15 PM	0	0	8	1	5	0	0	0
4:30 PM	0	0	0	0	0	0	0	1
4:45 PM	0	1	7	1	4	1	1	0
5:00 PM	0	1	4	2	2	0	0	2
5:15 PM	1	1	2	1	2	0	1	1
5:30 PM	3	2	0	0	3	0	3	2
5:45 PM	0	0	1	0	0	1	0	0
TOTALS	10	7	35	7	27	3	7	8

School-Aged Pedestrians

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	1	0	0	0
3:30 PM	0	0	3	0	3	0	0	0
3:45 PM	0	0	1	0	1	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	0	1	4	0	5	0	0	1

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-003

Day: Tuesday

City: Playa Vista

BIKES

Date: 3/14/2017

AM

NS/EW Streets:		Lincoln Blvd			Lincoln Blvd			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 4	NR 1	SL 2	ST 4	SR 0	EL 1	ET 3	ER 0	WL 2	WT 2	WR 2	TOTAL
7:00 AM		0	0	0	0	1	0	0	0	0	1	0	0	2
7:15 AM		0	0	0	0	1	0	0	0	0	1	0	2	4
7:30 AM		0	2	0	0	3	0	0	0	0	0	0	0	5
7:45 AM		0	1	0	0	2	0	0	2	0	0	0	0	5
8:00 AM		0	3	0	0	1	0	1	0	0	0	0	1	6
8:15 AM		0	1	0	0	0	0	1	0	0	0	0	0	2
8:30 AM		0	1	0	1	4	0	0	1	0	0	0	0	7
8:45 AM		0	2	0	2	4	0	1	2	0	0	0	2	13
9:00 AM		0	1	0	0	1	0	0	1	0	0	0	0	3
9:15 AM		0	0	0	2	0	0	0	0	0	0	0	0	2
9:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM		0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :		0	12	0	5	17	0	3	6	0	2	0	5	50
APPROACH %'s :		0.00%	100.00%	0.00%	22.73%	77.27%	0.00%	33.33%	66.67%	0.00%	28.57%	0.00%	71.43%	
PEAK HR START TIME :		800 AM												TOTAL
PEAK HR VOL :		0	7	0	3	9	0	3	3	0	0	0	3	28
PEAK HR FACTOR :		0.583			0.500			0.500			0.375			0.538

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-003

Day: Tuesday

City: Playa Vista

BIKES

Date: 3/14/2017

PM

NS/EW Streets:		Lincoln Blvd			Lincoln Blvd			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 4	NR 1	SL 2	ST 4	SR 0	EL 1	ET 3	ER 0	WL 2	WT 2	WR 2	TOTAL
3:00 PM		0	2	0	0	2	0	0	1	0	0	0	2	7
3:15 PM		0	3	0	1	2	0	0	1	0	1	0	0	8
3:30 PM		0	3	0	1	0	0	0	0	0	1	0	0	5
3:45 PM		0	1	0	0	1	0	2	0	0	0	0	0	4
4:00 PM		0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM		0	0	1	0	1	0	0	0	0	0	0	0	2
4:30 PM		0	2	2	0	2	0	0	0	0	0	0	2	8
4:45 PM		0	0	0	0	0	0	0	0	0	0	0	2	2
5:00 PM		0	2	0	1	3	0	0	0	0	0	1	1	8
5:15 PM		0	2	0	3	2	0	0	0	0	0	0	0	7
5:30 PM		0	4	0	1	1	0	0	0	0	0	1	0	7
5:45 PM		0	0	0	0	4	0	0	0	0	0	0	3	7
TOTAL VOLUMES :		NL 0	NT 21	NR 3	SL 7	ST 18	SR 0	EL 2	ET 2	ER 0	WL 2	WT 2	WR 10	TOTAL 67
APPROACH %'s :		0.00%	87.50%	12.50%	28.00%	72.00%	0.00%	50.00%	50.00%	0.00%	14.29%	14.29%	71.43%	
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		0	8	0	5	10	0	0	0	0	0	2	4	29
PEAK HR FACTOR :		0.500			0.750			0.000			0.500			0.906

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-003

Day: Tuesday

City: Playa Vista

BUSES

Date: 3/14/2017

AM

NS/EW Streets:		Lincoln Blvd			Lincoln Blvd			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 4	NR 1	SL 2	ST 4	SR 0	EL 1	ET 3	ER 0	WL 2	WT 2	WR 2	TOTAL
7:00 AM		0	4	0	0	2	0	0	0	0	0	0	0	6
7:15 AM		0	3	0	0	1	0	0	0	0	0	0	0	4
7:30 AM		0	0	0	0	2	0	0	0	0	0	0	0	2
7:45 AM		0	4	0	0	2	0	0	0	0	0	0	0	6
8:00 AM		0	2	0	0	1	0	0	0	0	0	0	0	3
8:15 AM		0	3	0	0	2	0	0	0	0	0	0	0	5
8:30 AM		0	3	0	0	2	0	0	0	0	0	0	0	5
8:45 AM		0	2	0	0	2	0	0	0	0	0	0	0	4
9:00 AM		0	3	0	0	1	0	0	0	0	0	0	0	4
9:15 AM		0	2	0	0	2	0	0	0	0	0	0	0	4
9:30 AM		0	1	0	0	2	0	0	0	0	0	0	0	3
9:45 AM		0	4	0	0	1	0	0	0	0	0	0	0	5
TOTAL VOLUMES :		0	31	0	0	20	0	0	0	0	0	0	0	51
APPROACH %'s :		0.00%	100.00%	0.00%	0.00%	100.00%	0.00%							
PEAK HR START TIME :		800 AM												TOTAL
PEAK HR VOL :		0	10	0	0	7	0	0	0	0	0	0	0	17
PEAK HR FACTOR :		0.833			0.875			0.000			0.000			0.850

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-003

Day: Tuesday

City: Playa Vista

HEAVY TRUCKS

Date: 3/14/2017

AM													
NS/EW Streets:	Lincoln Blvd			Lincoln Blvd			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 2	ST 4	SR 0	EL 1	ET 3	ER 0	WL 2	WT 2	WR 2	TOTAL
7:00 AM	0	9	3	1	1	0	2	0	0	1	0	0	17
7:15 AM	0	11	3	1	1	0	0	0	0	3	0	3	22
7:30 AM	0	20	2	0	2	1	0	0	1	0	1	3	30
7:45 AM	0	11	0	1	3	0	0	2	0	0	0	1	18
8:00 AM	0	9	2	1	2	0	0	0	0	0	1	4	19
8:15 AM	0	10	2	1	1	1	0	1	0	3	1	5	25
8:30 AM	0	6	4	3	3	0	0	2	0	1	1	0	20
8:45 AM	0	10	4	2	2	0	0	0	1	1	0	4	24
9:00 AM	0	15	3	1	5	5	1	1	0	2	2	3	38
9:15 AM	0	12	3	0	4	3	1	2	0	1	0	2	28
9:30 AM	0	7	3	1	1	1	2	1	0	2	1	6	25
9:45 AM	0	12	1	0	4	1	1	2	0	0	1	4	26
TOTAL VOLUMES :	0	132	30	12	29	12	7	11	2	14	8	35	292
APPROACH %'s :	0.00%	81.48%	18.52%	22.64%	54.72%	22.64%	35.00%	55.00%	10.00%	24.56%	14.04%	61.40%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	0	35	12	7	8	1	0	3	1	5	3	13	88
PEAK HR FACTOR :	0.839			0.667			0.500			0.583			0.880

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-003

Day: Tuesday

City: Playa Vista

BUSES

Date: 3/14/2017

PM

NS/EW Streets:		Lincoln Blvd			Lincoln Blvd			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 4	NR 1	SL 2	ST 4	SR 0	EL 1	ET 3	ER 0	WL 2	WT 2	WR 2	TOTAL
3:00 PM		0	2	0	0	3	0	0	0	0	0	0	0	5
3:15 PM		0	2	0	0	0	0	0	0	0	0	0	0	2
3:30 PM		0	2	0	0	3	0	0	0	0	0	0	0	5
3:45 PM		0	0	0	0	1	0	0	0	0	0	0	0	1
4:00 PM		0	3	0	0	3	0	0	0	0	0	0	0	6
4:15 PM		0	2	0	0	3	0	0	0	0	0	0	0	5
4:30 PM		0	2	0	0	0	0	0	0	0	0	0	0	2
4:45 PM		0	1	0	0	5	0	0	0	0	0	0	0	6
5:00 PM		0	2	0	0	2	0	0	0	0	0	0	0	4
5:15 PM		0	2	0	0	2	0	0	0	0	0	0	0	4
5:30 PM		0	1	0	0	4	0	0	0	0	0	0	0	5
5:45 PM		0	3	0	0	0	0	0	0	0	0	0	0	3
TOTAL VOLUMES :		0	22	0	0	26	0	0	0	0	0	0	0	48
APPROACH %'s :		0.00%	100.00%	0.00%	0.00%	100.00%	0.00%							
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		0	8	0	0	8	0	0	0	0	0	0	0	16
PEAK HR FACTOR :		0.667			0.500			0.000			0.000			0.800

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-003

Day: Tuesday

City: Playa Vista

HEAVY TRUCKS

Date: 3/14/2017

PM													
NS/EW Streets:	Lincoln Blvd			Lincoln Blvd			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 2	ST 4	SR 0	EL 1	ET 3	ER 0	WL 2	WT 2	WR 2	TOTAL
3:00 PM	0	6	1	3	8	2	0	0	0	1	0	0	21
3:15 PM	0	4	2	2	3	3	0	1	1	1	0	5	22
3:30 PM	0	2	0	1	7	0	0	0	0	1	0	2	13
3:45 PM	0	2	1	0	6	3	1	0	0	2	0	2	17
4:00 PM	0	4	1	1	9	3	1	0	0	3	0	2	24
4:15 PM	0	1	4	1	6	5	1	0	0	3	0	0	21
4:30 PM	0	3	1	2	11	2	1	0	0	0	0	3	23
4:45 PM	0	0	1	2	8	5	2	0	0	0	0	1	19
5:00 PM	0	5	1	4	3	5	1	0	0	0	1	0	20
5:15 PM	0	3	1	0	7	3	2	0	0	0	0	0	16
5:30 PM	1	2	0	0	7	0	2	0	0	0	0	1	13
5:45 PM	0	1	0	0	4	1	0	1	0	0	0	0	7
TOTAL VOLUMES :	1	33	13	16	79	32	11	2	1	11	1	16	216
APPROACH %'s :	2.13%	70.21%	27.66%	12.60%	62.20%	25.20%	78.57%	14.29%	7.14%	39.29%	3.57%	57.14%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	1	11	2	4	21	9	5	1	0	0	1	1	56
PEAK HR FACTOR :	0.583			0.708			0.750			0.500			0.700

CONTROL : Signalized



City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South Alla Rd

East/West Jefferson Blvd

Day: Thursday **Date:** February 16, 2017 **Weather:** SUNNY

Hours: 7-10 & 3-6 **Chekr:** NDS

School Day: YES **District:** **I/S CODE**

	N/B	S/B	E/B	W/B
DUAL-WHEELED	0	0	0	0
BIKES	0	0	0	0
BUSES	0	0	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	74	8.45	80	9.45	528	8.45	372	8.00
PM PK 15 MIN	37	16.45	164	17.45	317	17.00	545	17.30
AM PK HOUR	250	8.15	280	9.00	1778	8.30	1203	9.00
PM PK HOUR	134	16.45	608	17.00	1155	17.00	1944	17.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	57	25	84	166
8-9	79	65	101	245
9-10	72	51	81	204
15-16	43	8	53	104
16-17	54	12	51	117
17-18	68	9	49	126
TOTAL	373	170	419	962

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	79	2	68	149
8-9	135	8	84	227
9-10	155	9	116	280
15-16	181	6	170	357
16-17	205	16	241	462
17-18	247	20	341	608
TOTAL	1002	61	1020	2083

TOTAL

XING S/L

XING N/L

N-S	Ped	Sch	Ped	Sch
315	0	0	0	0
472	0	0	0	0
484	0	0	0	0
461	0	0	0	0
579	0	0	0	0
734	0	0	0	0
3045	0	0	0	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	212	892	21	1125
8-9	363	1342	30	1735
9-10	471	1172	31	1674
15-16	287	745	42	1074
16-17	166	762	68	996
17-18	157	917	81	1155
TOTAL	1656	5830	273	7759

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	60	680	169	909
8-9	111	818	204	1133
9-10	87	819	297	1203
15-16	148	1150	103	1401
16-17	162	1178	40	1380
17-18	195	1697	52	1944
TOTAL	763	6342	865	7970

TOTAL

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
2034	0	0	0	0
2868	0	0	0	0
2877	0	0	0	0
2475	0	0	0	0
2376	0	0	0	0
3099	0	0	0	0
15729	0	0	0	0

ITM Peak Hour Summary

Prepared by:

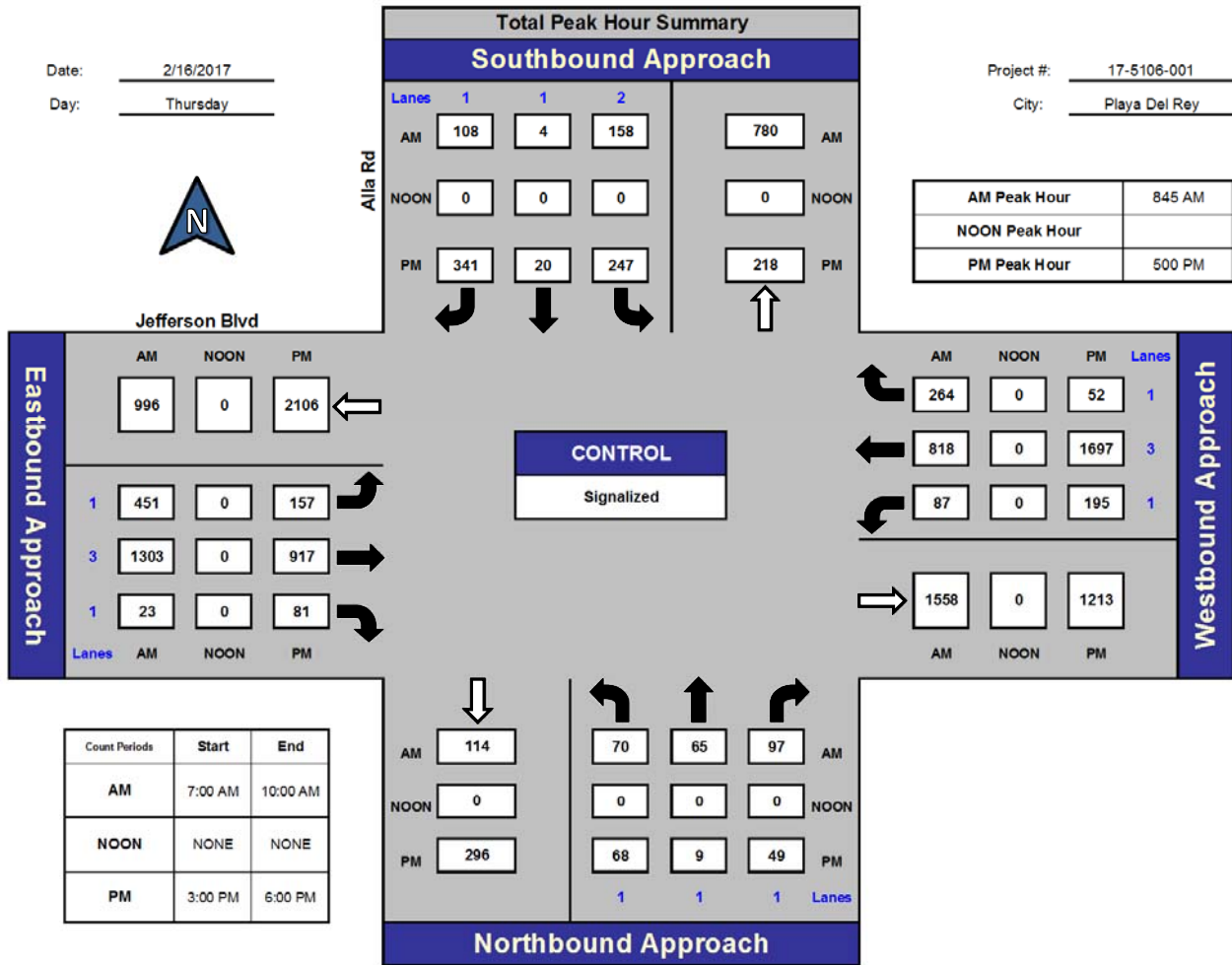


National Data & Surveying Services

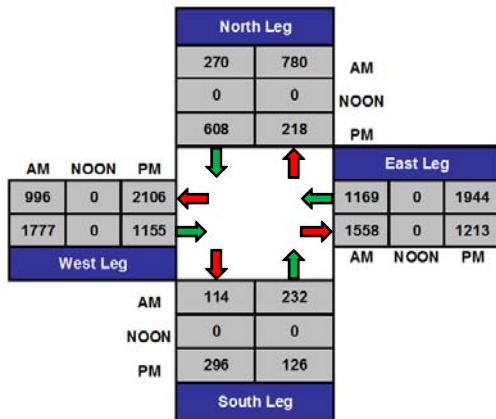
Alla Rd and Jefferson Blvd, Playa Del Rey

Date: 2/16/2017
Day: Thursday

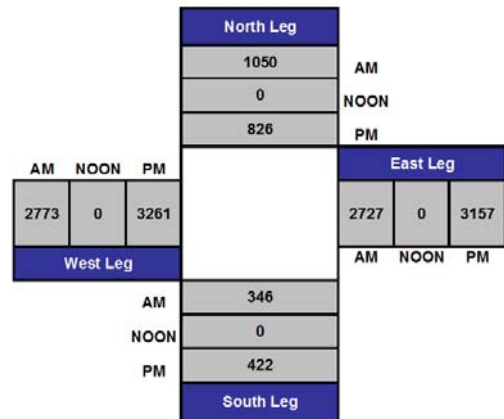
Project #: 17-5106-001
City: Playa Del Rey



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5106-001

Day: Thursday

City: Playa Del Rey

TOTALS

Date: 2/16/2017

AM													
NS/EW Streets:	Alla Rd			Alla Rd			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 1	SL 2	ST 1	SR 1	EL 1	ET 3	ER 1	WL 1	WT 3	WR 1	TOTAL
7:00 AM	10	1	15	17	0	21	43	166	4	10	134	16	437
7:15 AM	16	2	21	17	2	13	39	210	6	15	145	25	511
7:30 AM	14	4	23	16	0	16	41	232	7	14	190	39	596
7:45 AM	17	18	25	29	0	18	89	284	4	21	211	89	805
8:00 AM	13	18	25	29	1	24	97	320	7	39	266	67	906
8:15 AM	25	11	27	36	0	14	67	307	9	21	171	38	726
8:30 AM	22	12	18	33	4	16	79	313	8	30	189	35	759
8:45 AM	19	24	31	37	3	30	120	402	6	21	192	64	949
9:00 AM	19	13	29	42	0	25	106	355	4	22	223	56	894
9:15 AM	19	17	22	37	0	27	93	284	8	30	202	72	811
9:30 AM	13	11	15	42	1	26	132	262	5	14	201	72	794
9:45 AM	21	10	15	34	8	38	140	271	14	21	193	97	862
TOTAL VOLUMES :	208	141	266	369	19	268	1046	3406	82	258	2317	670	9050
APPROACH %'s :	33.82%	22.93%	43.25%	56.25%	2.90%	40.85%	23.07%	75.12%	1.81%	7.95%	71.40%	20.65%	
PEAK HR START TIME :	845 AM												TOTAL
PEAK HR VOL :	70	65	97	158	4	108	451	1303	23	87	818	264	3448
PEAK HR FACTOR :	0.784			0.964			0.841			0.961			0.908

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5106-001

Day: Thursday

City: Playa Del Rey

TOTALS

Date: 2/16/2017

AM													
NS/EW Streets:	Alla Rd			Alla Rd			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 1	SL 2	ST 1	SR 1	EL 1	ET 3	ER 1	WL 1	WT 3	WR 1	TOTAL
3:00 PM	8	3	17	53	2	50	84	180	8	34	292	36	767
3:15 PM	12	3	10	37	1	34	74	198	8	31	278	34	720
3:30 PM	14	2	11	41	2	45	87	167	10	37	297	18	731
3:45 PM	9	0	15	50	1	41	42	200	16	46	283	15	718
4:00 PM	11	3	8	41	3	53	44	157	10	32	256	11	629
4:15 PM	14	4	11	64	3	58	39	237	18	38	302	13	801
4:30 PM	14	2	13	60	9	68	50	179	19	46	306	9	775
4:45 PM	15	3	19	40	1	62	33	189	21	46	314	7	750
5:00 PM	18	2	15	55	3	104	40	261	16	47	402	6	969
5:15 PM	17	2	6	56	2	66	47	243	27	41	397	14	918
5:30 PM	16	2	19	69	9	80	42	219	12	59	470	16	1013
5:45 PM	17	3	9	67	6	91	28	194	26	48	428	16	933
TOTAL VOLUMES :	165	29	153	633	42	752	610	2424	191	505	4025	195	9724
APPROACH %'s :	47.55%	8.36%	44.09%	44.36%	2.94%	52.70%	18.91%	75.16%	5.92%	10.69%	85.19%	4.13%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	68	9	49	247	20	341	157	917	81	195	1697	52	3833
PEAK HR FACTOR :	0.851			0.927			0.911			0.892			0.946

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5106-001

Day: Thursday

City: Playa Del Rey

CARS

Date: 2/16/2017

AM

NS/EW Streets:		Alla Rd			Alla Rd			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 1	NR 1	SL 2	ST 1	SR 1	EL 1	ET 3	ER 1	WL 1	WT 3	WR 1	TOTAL
7:00 AM		10	1	15	17	0	21	43	166	4	10	134	16	437
7:15 AM		16	2	21	17	2	13	39	210	6	15	145	25	511
7:30 AM		14	4	23	16	0	16	41	232	7	14	190	39	596
7:45 AM		17	18	25	29	0	18	89	284	4	21	211	89	805
8:00 AM		13	18	25	29	1	24	97	320	7	39	266	67	906
8:15 AM		25	11	27	36	0	14	67	307	9	21	171	38	726
8:30 AM		22	12	18	33	4	16	79	313	8	30	189	35	759
8:45 AM		19	24	31	37	3	30	120	402	6	21	192	64	949
9:00 AM		19	13	29	42	0	25	106	355	4	22	223	56	894
9:15 AM		19	17	22	37	0	27	93	284	8	30	202	72	811
9:30 AM		13	11	15	42	1	26	132	262	5	14	201	72	794
9:45 AM		21	10	15	34	8	38	140	271	14	21	193	97	862
TOTAL VOLUMES :		208	141	266	369	19	268	1046	3406	82	258	2317	670	9050
APPROACH %'s :		33.82%	22.93%	43.25%	56.25%	2.90%	40.85%	23.07%	75.12%	1.81%	7.95%	71.40%	20.65%	
PEAK HR START TIME :		845 AM												TOTAL
PEAK HR VOL :		70	65	97	158	4	108	451	1303	23	87	818	264	3448
PEAK HR FACTOR :		0.784			0.964			0.841			0.961			0.908

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5106-001

Day: Thursday

City: Playa Del Rey

CARS

Date: 2/16/2017

AM

NS/EW Streets:		Alla Rd			Alla Rd			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 1	NR 1	SL 2	ST 1	SR 1	EL 1	ET 3	ER 1	WL 1	WT 3	WR 1	TOTAL
3:00 PM		8	3	17	53	2	50	84	180	8	34	292	36	767
3:15 PM		12	3	10	37	1	34	74	198	8	31	278	34	720
3:30 PM		14	2	11	41	2	45	87	167	10	37	297	18	731
3:45 PM		9	0	15	50	1	41	42	200	16	46	283	15	718
4:00 PM		11	3	8	41	3	53	44	157	10	32	256	11	629
4:15 PM		14	4	11	64	3	58	39	237	18	38	302	13	801
4:30 PM		14	2	13	60	9	68	50	179	19	46	306	9	775
4:45 PM		15	3	19	40	1	62	33	189	21	46	314	7	750
5:00 PM		18	2	15	55	3	104	40	261	16	47	402	6	969
5:15 PM		17	2	6	56	2	66	47	243	27	41	397	14	918
5:30 PM		16	2	19	69	9	80	42	219	12	59	470	16	1013
5:45 PM		17	3	9	67	6	91	28	194	26	48	428	16	933
TOTAL VOLUMES :		165	29	153	633	42	752	610	2424	191	505	4025	195	9724
APPROACH %'s :		47.55%	8.36%	44.09%	44.36%	2.94%	52.70%	18.91%	75.16%	5.92%	10.69%	85.19%	4.13%	
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		68	9	49	247	20	341	157	917	81	195	1697	52	3833
PEAK HR FACTOR :		0.851			0.927			0.911			0.892			0.946

CONTROL : Signalized



Beethoven St

Jefferson Blvd

School Day: YES District: I/S CODE

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	0	0.00	130	8.00	398	9.00	415	8.30
PM PK 15 MIN	0	0.00	112	17.15	277	17.45	424	17.30
AM PK HOUR	0	0.00	287	7.30	1482	8.15	1511	8.30
PM PK HOUR	0	0.00	367	17.00	1023	17.00	1585	17.00

XING N/L

Ped	Sch
0	0
0	0
0	0
0	0
0	0
0	0

XING E/L

[illegible]

ITM Peak Hour Summary

Prepared by:

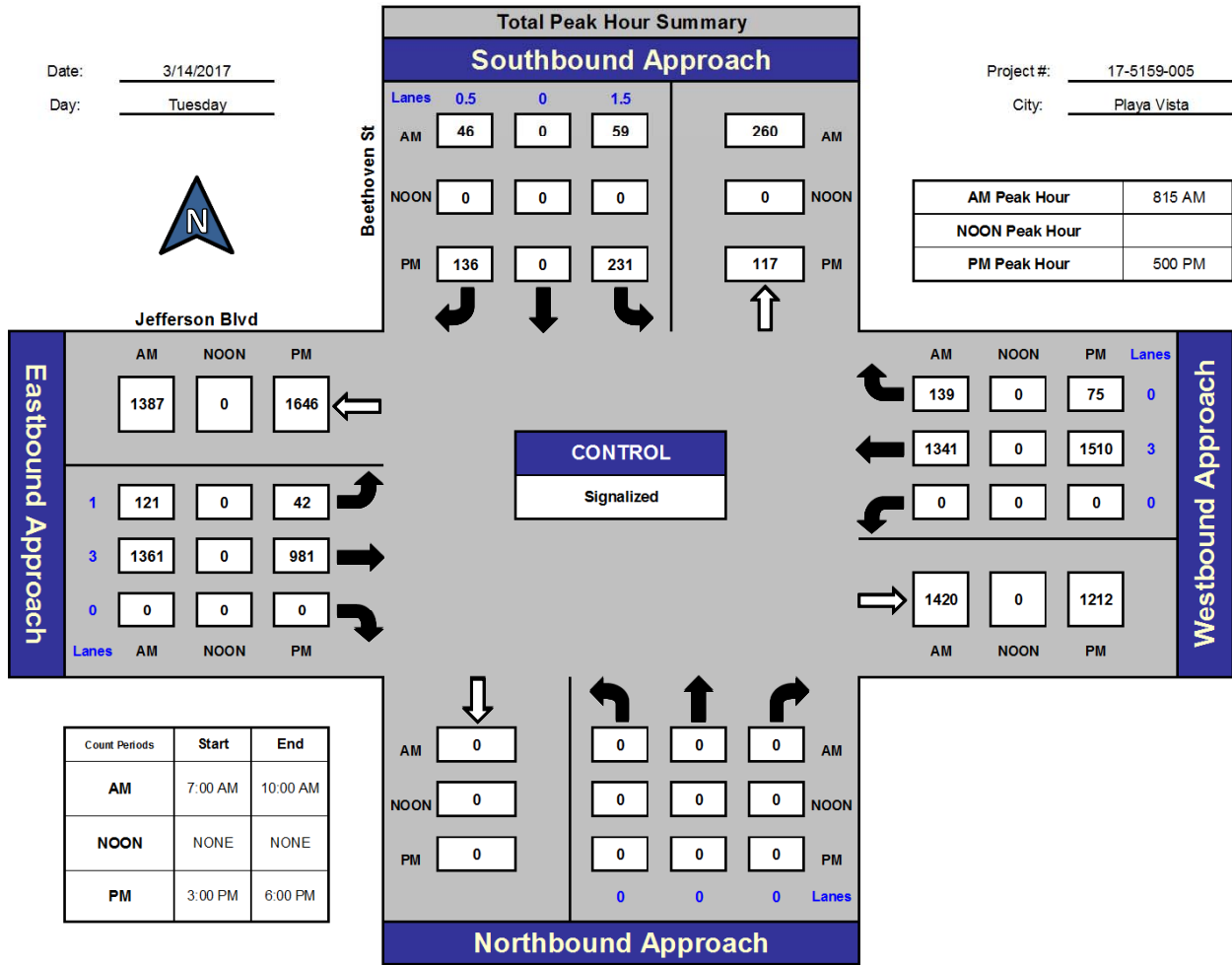


National Data & Surveying Services

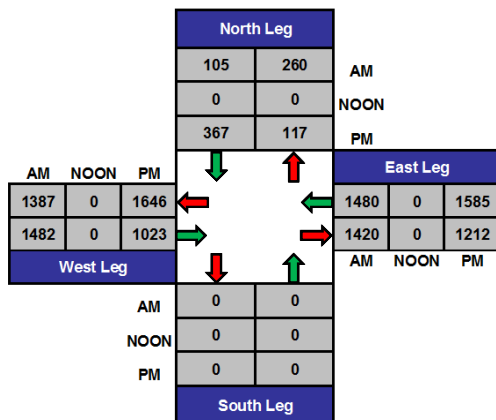
Beethoven St and Jefferson Blvd, Playa Vista

Date: 3/14/2017
Day: Tuesday

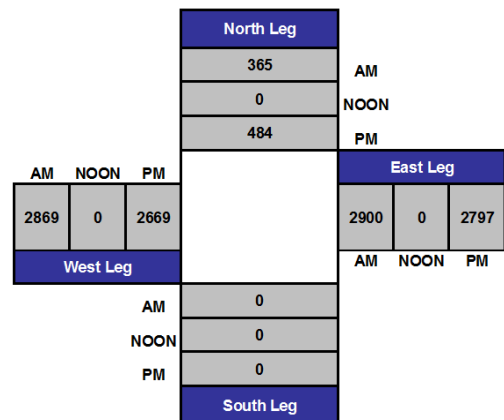
Project #: 17-5159-005
City: Playa Vista



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-005

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	Beethoven St			Beethoven St			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 0	NR 0	SL 1.5	ST 0	SR 0.5	EL 1	ET 3	ER 0	WL 0	WT 3	WR 0	TOTAL
7:00 AM	0	0	0	3	0	6	12	195	0	0	181	19	416
7:15 AM	0	0	0	5	0	5	15	234	0	0	175	31	465
7:30 AM	0	0	0	26	0	6	22	250	0	0	257	38	599
7:45 AM	0	0	0	38	0	30	29	259	0	0	304	23	683
8:00 AM	0	0	0	66	0	64	25	248	0	0	300	28	731
8:15 AM	0	0	0	34	0	23	30	324	0	0	295	27	733
8:30 AM	0	0	0	15	0	13	28	320	0	0	379	36	791
8:45 AM	0	0	0	3	0	2	31	351	0	0	360	34	781
9:00 AM	0	0	0	7	0	8	32	366	0	0	307	42	762
9:15 AM	0	0	0	10	0	6	31	319	0	0	315	38	719
9:30 AM	0	0	0	9	0	8	27	305	0	0	332	48	729
9:45 AM	0	0	0	8	0	7	28	241	0	0	266	53	603
TOTAL VOLUMES :	NL 0	NT 0	NR 0	SL 224	ST 0	SR 178	EL 310	ET 3412	ER 0	WL 0	WT 3471	WR 417	TOTAL 8012
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	55.72%	0.00%	44.28%	8.33%	91.67%	0.00%	0.00%	89.27%	10.73%	
PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	0	0	0	59	0	46	121	1361	0	0	1341	139	3067
PEAK HR FACTOR :	0.000			0.461			0.931			0.892			0.969

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-005

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	Beethoven St			Beethoven St			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 0	NR 0	SL 1.5	ST 0	SR 0.5	EL 1	ET 3	ER 0	WL 0	WT 3	WR 0	TOTAL
3:00 PM	0	0	0	51	0	36	10	217	0	1	307	22	644
3:15 PM	0	0	0	47	0	43	18	234	0	1	266	17	626
3:30 PM	0	0	0	42	0	48	23	201	0	0	316	28	658
3:45 PM	0	0	0	40	0	29	17	195	0	0	304	23	608
4:00 PM	0	0	0	40	0	17	8	230	0	0	294	17	606
4:15 PM	0	0	0	34	0	28	13	224	0	0	293	11	603
4:30 PM	0	0	0	35	0	26	8	224	0	1	324	14	632
4:45 PM	0	0	0	27	0	29	10	231	0	0	344	22	663
5:00 PM	0	0	0	58	0	31	7	233	0	0	318	21	668
5:15 PM	0	0	0	65	0	47	6	250	0	0	395	23	786
5:30 PM	0	0	0	65	0	29	18	232	0	0	408	16	768
5:45 PM	0	0	0	43	0	29	11	266	0	0	389	15	753
TOTAL VOLUMES :	NL 0	NT 0	NR 0	SL 547	ST 0	SR 392	EL 149	ET 2737	ER 0	WL 3	WT 3958	WR 229	TOTAL 8015
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	58.25%	0.00%	41.75%	5.16%	94.84%	0.00%	0.07%	94.46%	5.47%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	231	0	136	42	981	0	0	1510	75	2975
PEAK HR FACTOR :	0.000			0.819			0.923			0.935			0.946

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-005

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		Beethoven St			Beethoven St			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 0	NR 0	SL 1.5	ST 0	SR 0.5	EL 1	ET 3	ER 0	WL 0	WT 3	WR 0	TOTAL
7:00 AM		0	0	0	3	0	6	12	195	0	0	181	19	416
7:15 AM		0	0	0	5	0	5	15	234	0	0	175	31	465
7:30 AM		0	0	0	26	0	6	22	250	0	0	257	38	599
7:45 AM		0	0	0	38	0	30	29	259	0	0	304	23	683
8:00 AM		0	0	0	66	0	64	25	248	0	0	300	28	731
8:15 AM		0	0	0	34	0	23	30	324	0	0	295	27	733
8:30 AM		0	0	0	15	0	13	28	320	0	0	379	36	791
8:45 AM		0	0	0	3	0	2	31	351	0	0	360	34	781
9:00 AM		0	0	0	7	0	8	32	366	0	0	307	42	762
9:15 AM		0	0	0	10	0	6	31	319	0	0	315	38	719
9:30 AM		0	0	0	9	0	8	27	305	0	0	332	48	729
9:45 AM		0	0	0	8	0	7	28	241	0	0	266	53	603
TOTAL VOLUMES :		NL 0	NT 0	NR 0	SL 224	ST 0	SR 178	EL 310	ET 3412	ER 0	WL 0	WT 3471	WR 417	TOTAL 8012
APPROACH %'s :					55.72%	0.00%	44.28%	8.33%	91.67%	0.00%	0.00%	89.27%	10.73%	
PEAK HR START TIME :		815 AM												TOTAL
PEAK HR VOL :		0	0	0	59	0	46	121	1361	0	0	1341	139	3067
PEAK HR FACTOR :		0.000			0.461			0.931			0.892			0.969

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-005

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		Beethoven St			Beethoven St			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 0	NR 0	SL 1.5	ST 0	SR 0.5	EL 1	ET 3	ER 0	WL 0	WT 3	WR 0	TOTAL
3:00 PM		0	0	0	51	0	36	10	217	0	1	307	22	644
3:15 PM		0	0	0	47	0	43	18	234	0	1	266	17	626
3:30 PM		0	0	0	42	0	48	23	201	0	0	316	28	658
3:45 PM		0	0	0	40	0	29	17	195	0	0	304	23	608
4:00 PM		0	0	0	40	0	17	8	230	0	0	294	17	606
4:15 PM		0	0	0	34	0	28	13	224	0	0	293	11	603
4:30 PM		0	0	0	35	0	26	8	224	0	1	324	14	632
4:45 PM		0	0	0	27	0	29	10	231	0	0	344	22	663
5:00 PM		0	0	0	58	0	31	7	233	0	0	318	21	668
5:15 PM		0	0	0	65	0	47	6	250	0	0	395	23	786
5:30 PM		0	0	0	65	0	29	18	232	0	0	408	16	768
5:45 PM		0	0	0	43	0	29	11	266	0	0	389	15	753
TOTAL VOLUMES :		NL 0	NT 0	NR 0	SL 547	ST 0	SR 392	EL 149	ET 2737	ER 0	WL 3	WT 3958	WR 229	TOTAL 8015
APPROACH %'s :					58.25%	0.00%	41.75%	5.16%	94.84%	0.00%	0.07%	94.46%	5.47%	
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		0	0	0	231	0	136	42	981	0	0	1510	75	2975
PEAK HR FACTOR :		0.000			0.819			0.923			0.935			0.946

CONTROL : Signalized



Mc Connell Ave

Jefferson Blvd

School Day: YES District: I/S CODE

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	99	8.30	97	7.30	419	8.45	442	7.45
PM PK 15 MIN	67	15.15	65	17.00	325	17.30	502	17.30
AM PK HOUR	348	8.00	257	7.00	1472	8.15	1623	9.00
PM PK HOUR	217	15.00	203	16.30	1197	16.45	1827	17.00

XING N/L

Ped	Sch
0	0
0	0
0	0
0	0
0	0
0	0

XING E/L

[illegible]

ITM Peak Hour Summary

Prepared by:

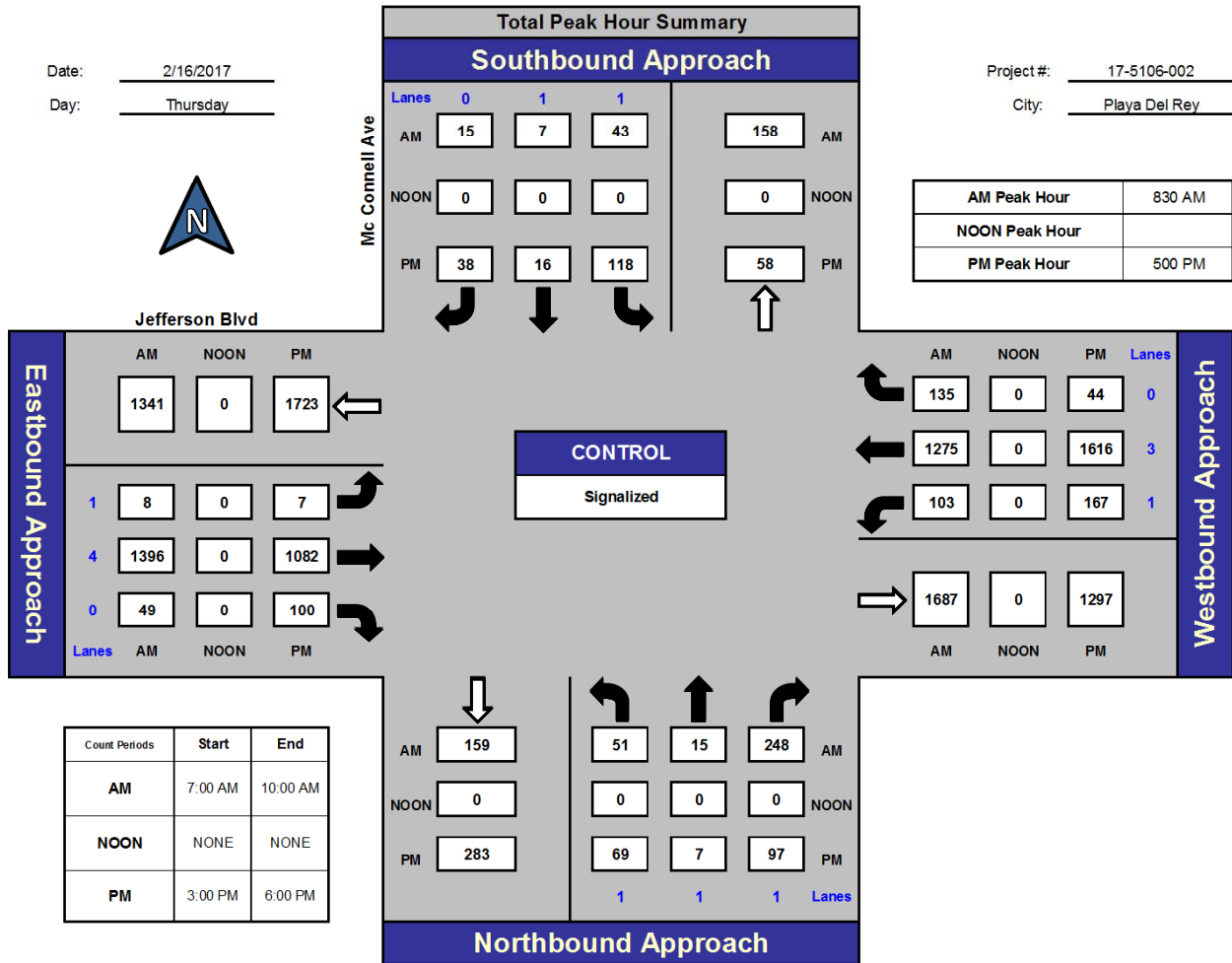


National Data & Surveying Services

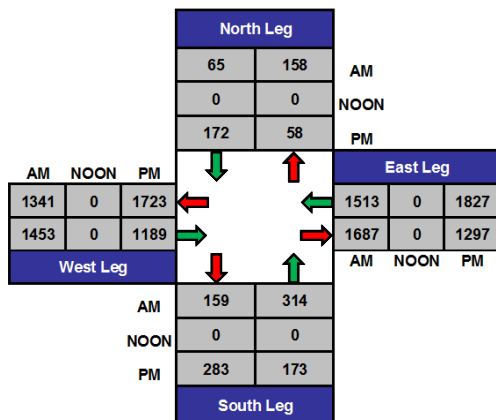
Mc Connell Ave and Jefferson Blvd, Playa Del Rey

Date: 2/16/2017
Day: Thursday

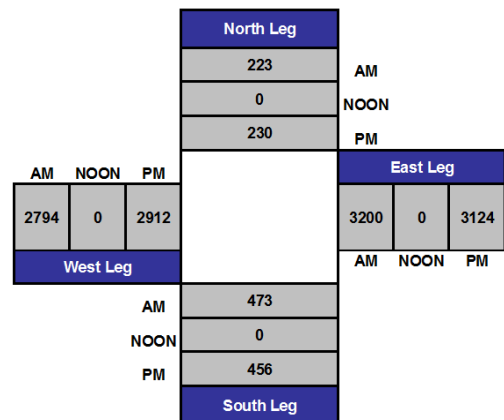
Project #: 17-5106-002
City: Playa Del Rey



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5106-002

Day: Thursday

City: Playa Del Rey

TOTALS

Date: 2/16/2017

AM													
NS/EW Streets:	Mc Connell Ave			Mc Connell Ave			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 1	ET 4	ER 0	WL 1	WT 3	WR 0	TOTAL
7:00 AM	17	4	30	23	2	5	4	169	1	16	192	56	519
7:15 AM	9	13	34	52	3	22	14	188	13	16	209	78	651
7:30 AM	15	21	33	69	10	18	17	239	5	10	274	100	811
7:45 AM	13	7	42	35	2	16	10	279	8	18	351	73	854
8:00 AM	14	3	57	18	3	3	9	329	10	18	278	46	788
8:15 AM	16	6	64	9	3	2	7	331	8	19	272	29	766
8:30 AM	13	5	81	12	1	3	2	337	10	24	282	34	804
8:45 AM	14	4	71	7	0	8	0	403	16	38	345	32	938
9:00 AM	12	4	51	11	3	3	5	339	14	18	325	33	818
9:15 AM	12	2	45	13	3	1	1	317	9	23	323	36	785
9:30 AM	9	4	43	15	0	5	7	273	12	21	375	34	798
9:45 AM	13	0	31	15	0	7	4	262	14	27	375	33	781
TOTAL VOLUMES :	157	73	582	279	30	93	80	3466	120	248	3601	584	9313
APPROACH %'s :	19.33%	8.99%	71.67%	69.40%	7.46%	23.13%	2.18%	94.54%	3.27%	5.59%	81.23%	13.17%	
PEAK HR START TIME :	830 AM												TOTAL
PEAK HR VOL :	51	15	248	43	7	15	8	1396	49	103	1275	135	3345
PEAK HR FACTOR :	0.793			0.956			0.867			0.911			0.892

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5106-002

Day: Thursday

City: Playa Del Rey

TOTALS

Date: 2/16/2017

AM

NS/EW Streets:		Mc Connell Ave			Mc Connell Ave			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 1	ET 4	ER 0	WL 1	WT 3	WR 0	TOTAL
3:00 PM		16	3	34	49	4	8	2	255	19	41	239	33	703
3:15 PM		24	0	43	25	0	3	3	288	19	28	271	30	734
3:30 PM		20	2	32	31	3	0	1	223	16	28	273	25	654
3:45 PM		18	1	24	20	3	5	9	217	27	22	298	14	658
4:00 PM		21	1	27	28	3	2	3	240	12	28	255	18	638
4:15 PM		25	1	41	27	5	5	5	280	15	30	296	19	749
4:30 PM		10	2	35	52	2	7	4	244	32	40	303	16	747
4:45 PM		19	1	31	27	1	7	6	239	20	43	300	23	717
5:00 PM		15	3	26	45	7	13	1	296	25	34	370	10	845
5:15 PM		17	1	30	30	3	9	2	255	28	35	381	13	804
5:30 PM		16	2	21	18	3	6	1	304	20	39	446	17	893
5:45 PM		21	1	20	25	3	10	3	227	27	59	419	4	819
TOTAL VOLUMES :		NL 222	NT 18	NR 364	SL 377	ST 37	SR 75	EL 40	ET 3068	ER 260	WL 427	WT 3851	WR 222	TOTAL 8961
APPROACH %'s :		36.75%	2.98%	60.26%	77.10%	7.57%	15.34%	1.19%	91.09%	7.72%	9.49%	85.58%	4.93%	
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		69	7	97	118	16	38	7	1082	100	167	1616	44	3361
PEAK HR FACTOR :		0.901			0.662			0.915			0.910			0.941

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5106-002

Day: Thursday

City: Playa Del Rey

CARS

Date: 2/16/2017

AM

NS/EW Streets:		Mc Connell Ave			Mc Connell Ave			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 1	ET 4	ER 0	WL 1	WT 3	WR 0	TOTAL
7:00 AM		17	4	30	23	2	5	4	169	1	16	192	56	519
7:15 AM		9	13	34	52	3	22	14	188	13	16	209	78	651
7:30 AM		15	21	33	69	10	18	17	239	5	10	274	100	811
7:45 AM		13	7	42	35	2	16	10	279	8	18	351	73	854
8:00 AM		14	3	57	18	3	3	9	329	10	18	278	46	788
8:15 AM		16	6	64	9	3	2	7	331	8	19	272	29	766
8:30 AM		13	5	81	12	1	3	2	337	10	24	282	34	804
8:45 AM		14	4	71	7	0	8	0	403	16	38	345	32	938
9:00 AM		12	4	51	11	3	3	5	339	14	18	325	33	818
9:15 AM		12	2	45	13	3	1	1	317	9	23	323	36	785
9:30 AM		9	4	43	15	0	5	7	273	12	21	375	34	798
9:45 AM		13	0	31	15	0	7	4	262	14	27	375	33	781
TOTAL VOLUMES :		NL 157	NT 73	NR 582	SL 279	ST 30	SR 93	EL 80	ET 3466	ER 120	WL 248	WT 3601	WR 584	TOTAL 9313
APPROACH %'s :		19.33%	8.99%	71.67%	69.40%	7.46%	23.13%	2.18%	94.54%	3.27%	5.59%	81.23%	13.17%	
PEAK HR START TIME :		830 AM												TOTAL
PEAK HR VOL :		51	15	248	43	7	15	8	1396	49	103	1275	135	3345
PEAK HR FACTOR :		0.793			0.956			0.867			0.911			0.892

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5106-002

Day: Thursday

City: Playa Del Rey

CARS

Date: 2/16/2017

AM

NS/EW Streets:		Mc Connell Ave			Mc Connell Ave			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 1	ET 4	ER 0	WL 1	WT 3	WR 0	TOTAL
3:00 PM		16	3	34	49	4	8	2	255	19	41	239	33	703
3:15 PM		24	0	43	25	0	3	3	288	19	28	271	30	734
3:30 PM		20	2	32	31	3	0	1	223	16	28	273	25	654
3:45 PM		18	1	24	20	3	5	9	217	27	22	298	14	658
4:00 PM		21	1	27	28	3	2	3	240	12	28	255	18	638
4:15 PM		25	1	41	27	5	5	5	280	15	30	296	19	749
4:30 PM		10	2	35	52	2	7	4	244	32	40	303	16	747
4:45 PM		19	1	31	27	1	7	6	239	20	43	300	23	717
5:00 PM		15	3	26	45	7	13	1	296	25	34	370	10	845
5:15 PM		17	1	30	30	3	9	2	255	28	35	381	13	804
5:30 PM		16	2	21	18	3	6	1	304	20	39	446	17	893
5:45 PM		21	1	20	25	3	10	3	227	27	59	419	4	819
TOTAL VOLUMES :		222	18	364	377	37	75	40	3068	260	427	3851	222	8961
APPROACH %'s :		36.75%	2.98%	60.26%	77.10%	7.57%	15.34%	1.19%	91.09%	7.72%	9.49%	85.58%	4.93%	
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		69	7	97	118	16	38	7	1082	100	167	1616	44	3361
PEAK HR FACTOR :		0.901			0.662			0.915			0.910			0.941

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:

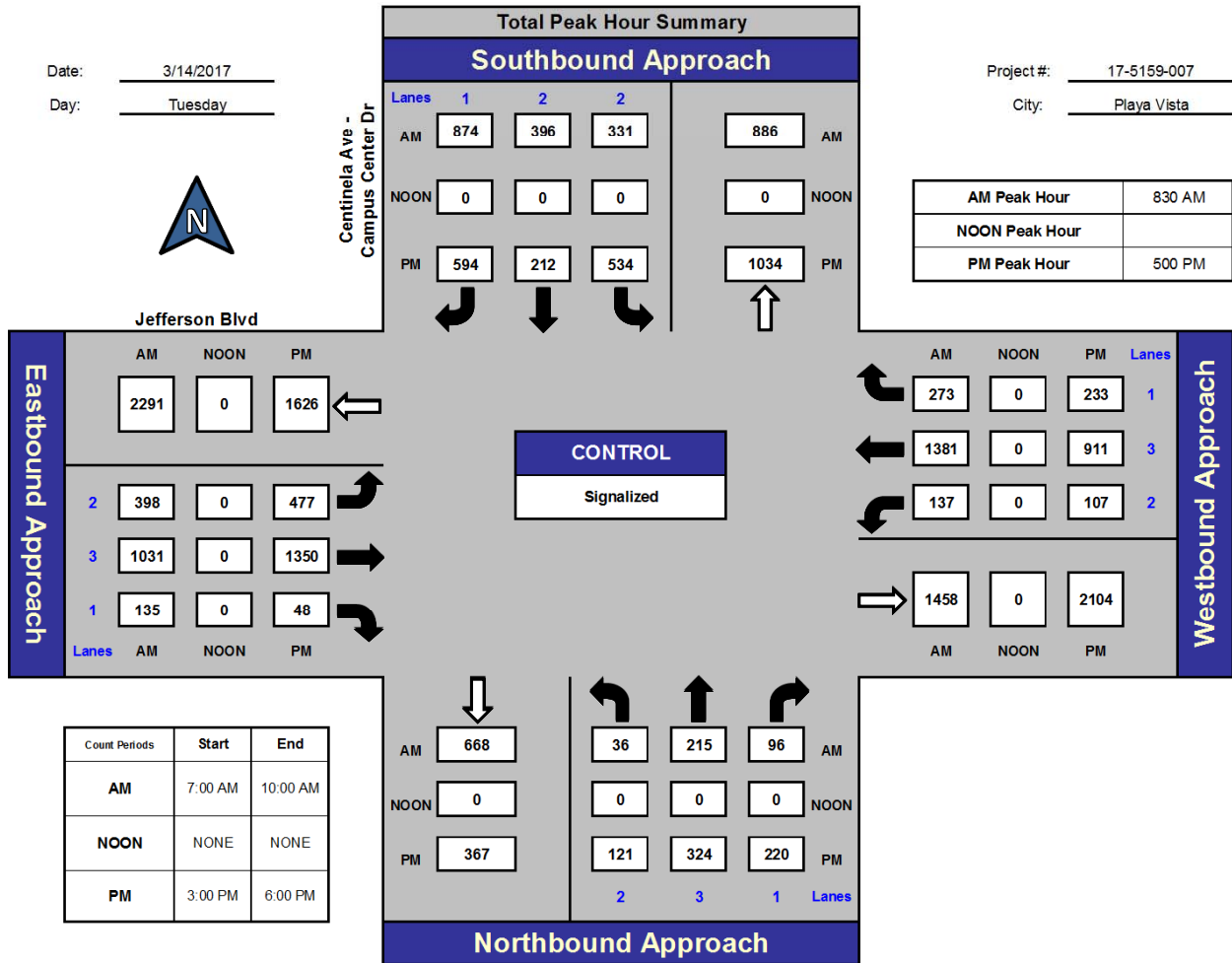


National Data & Surveying Services

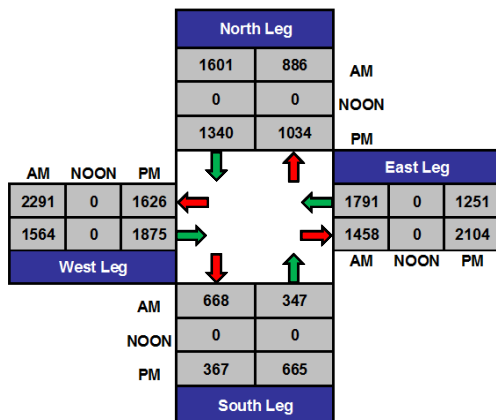
Centinela Ave - Campus Center Dr and Jefferson Blvd , Playa Vista

Date: 3/14/2017
Day: Tuesday

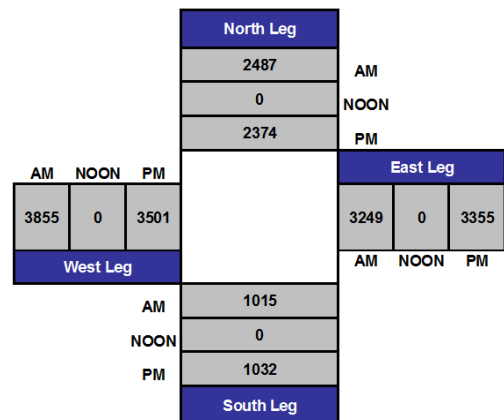
Project #: 17-5159-007
City: Playa Vista



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-007

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	Centinela Ave - Campus Center Dr			Centinela Ave - Campus Center Dr			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 1	SL 2	ST 2	SR 1	EL 2	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL
7:00 AM	1	16	27	29	12	80	75	179	7	21	223	69	739
7:15 AM	6	30	31	36	31	107	87	189	8	16	218	87	846
7:30 AM	6	33	33	53	19	108	114	259	8	11	295	88	1027
7:45 AM	7	57	36	84	34	146	111	251	15	19	224	78	1062
8:00 AM	5	55	31	77	36	158	132	279	19	23	297	65	1177
8:15 AM	11	58	24	96	49	202	120	269	23	25	269	54	1200
8:30 AM	6	45	21	70	58	166	112	277	29	33	314	80	1211
8:45 AM	9	54	21	94	104	205	91	264	46	31	312	61	1292
9:00 AM	11	52	37	83	119	250	110	265	29	35	396	69	1456
9:15 AM	10	64	17	84	115	253	85	225	31	38	359	63	1344
9:30 AM	10	25	28	51	78	195	89	207	24	29	356	68	1160
9:45 AM	7	38	32	73	66	197	82	163	15	34	250	56	1013
TOTAL VOLUMES :	89	527	338	830	721	2067	1208	2827	254	315	3513	838	13527
APPROACH %'s :	9.33%	55.24%	35.43%	22.94%	19.93%	57.13%	28.17%	65.91%	5.92%	6.75%	75.29%	17.96%	
PEAK HR START TIME :	830 AM												TOTAL
PEAK HR VOL :	36	215	96	331	396	874	398	1031	135	137	1381	273	5303
PEAK HR FACTOR :	0.868			0.886			0.935			0.896			0.911

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-007

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	Centinela Ave - Campus Center Dr			Centinela Ave - Campus Center Dr			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 1	SL 2	ST 2	SR 1	EL 2	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL
3:00 PM	7	34	52	87	30	111	108	333	11	23	248	69	1113
3:15 PM	15	49	48	106	29	125	88	282	7	19	190	60	1018
3:30 PM	13	28	22	89	38	116	90	331	5	26	237	46	1041
3:45 PM	12	29	31	110	39	118	71	276	3	27	216	55	987
4:00 PM	10	35	37	118	36	127	61	348	10	22	208	65	1077
4:15 PM	11	31	32	134	32	113	76	263	8	25	222	67	1014
4:30 PM	13	49	38	120	41	126	108	310	12	24	246	62	1149
4:45 PM	17	61	42	128	41	149	85	263	11	24	215	54	1090
5:00 PM	21	79	51	109	39	128	103	354	10	24	250	74	1242
5:15 PM	36	87	73	168	62	167	100	314	14	24	207	54	1306
5:30 PM	27	61	59	122	48	160	123	402	9	27	240	52	1330
5:45 PM	37	97	37	135	63	139	151	280	15	32	214	53	1253
TOTAL VOLUMES :	219	640	522	1426	498	1579	1164	3756	115	297	2693	711	13620
APPROACH %'s :	15.86%	46.34%	37.80%	40.71%	14.22%	45.08%	23.12%	74.60%	2.28%	8.02%	72.76%	19.21%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	121	324	220	534	212	594	477	1350	48	107	911	233	5131
PEAK HR FACTOR :	0.848			0.844			0.878			0.899			0.964

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-007

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		Centinela Ave - Campus Center Dr			Centinela Ave - Campus Center Dr			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 2	NT 3	NR 1	SL 2	ST 2	SR 1	EL 2	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL
7:00 AM		1	16	27	29	12	80	75	179	7	21	223	69	739
7:15 AM		6	30	31	36	31	107	87	189	8	16	218	87	846
7:30 AM		6	33	33	53	19	108	114	259	8	11	295	88	1027
7:45 AM		7	57	36	84	34	146	111	251	15	19	224	78	1062
8:00 AM		5	55	31	77	36	158	132	279	19	23	297	65	1177
8:15 AM		11	58	24	96	49	202	120	269	23	25	269	54	1200
8:30 AM		6	45	21	70	58	166	112	277	29	33	314	80	1211
8:45 AM		9	54	21	94	104	205	91	264	46	31	312	61	1292
9:00 AM		11	52	37	83	119	250	110	265	29	35	396	69	1456
9:15 AM		10	64	17	84	115	253	85	225	31	38	359	63	1344
9:30 AM		10	25	28	51	78	195	89	207	24	29	356	68	1160
9:45 AM		7	38	32	73	66	197	82	163	15	34	250	56	1013
TOTAL VOLUMES :		89	527	338	830	721	2067	1208	2827	254	315	3513	838	13527
APPROACH %'s :		9.33%	55.24%	35.43%	22.94%	19.93%	57.13%	28.17%	65.91%	5.92%	6.75%	75.29%	17.96%	
PEAK HR START TIME :		830 AM												TOTAL
PEAK HR VOL :		36	215	96	331	396	874	398	1031	135	137	1381	273	5303
PEAK HR FACTOR :		0.868			0.886			0.935			0.896			0.911

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-007

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		Centinela Ave - Campus Center Dr			Centinela Ave - Campus Center Dr			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 2	NT 3	NR 1	SL 2	ST 2	SR 1	EL 2	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL
3:00 PM		7	34	52	87	30	111	108	333	11	23	248	69	1113
3:15 PM		15	49	48	106	29	125	88	282	7	19	190	60	1018
3:30 PM		13	28	22	89	38	116	90	331	5	26	237	46	1041
3:45 PM		12	29	31	110	39	118	71	276	3	27	216	55	987
4:00 PM		10	35	37	118	36	127	61	348	10	22	208	65	1077
4:15 PM		11	31	32	134	32	113	76	263	8	25	222	67	1014
4:30 PM		13	49	38	120	41	126	108	310	12	24	246	62	1149
4:45 PM		17	61	42	128	41	149	85	263	11	24	215	54	1090
5:00 PM		21	79	51	109	39	128	103	354	10	24	250	74	1242
5:15 PM		36	87	73	168	62	167	100	314	14	24	207	54	1306
5:30 PM		27	61	59	122	48	160	123	402	9	27	240	52	1330
5:45 PM		37	97	37	135	63	139	151	280	15	32	214	53	1253
TOTAL VOLUMES :		219	640	522	1426	498	1579	1164	3756	115	297	2693	711	13620
APPROACH %'s :		15.86%	46.34%	37.80%	40.71%	14.22%	45.08%	23.12%	74.60%	2.28%	8.02%	72.76%	19.21%	
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		121	324	220	534	212	594	477	1350	48	107	911	233	5131
PEAK HR FACTOR :		0.848			0.844			0.878			0.899			0.964

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:

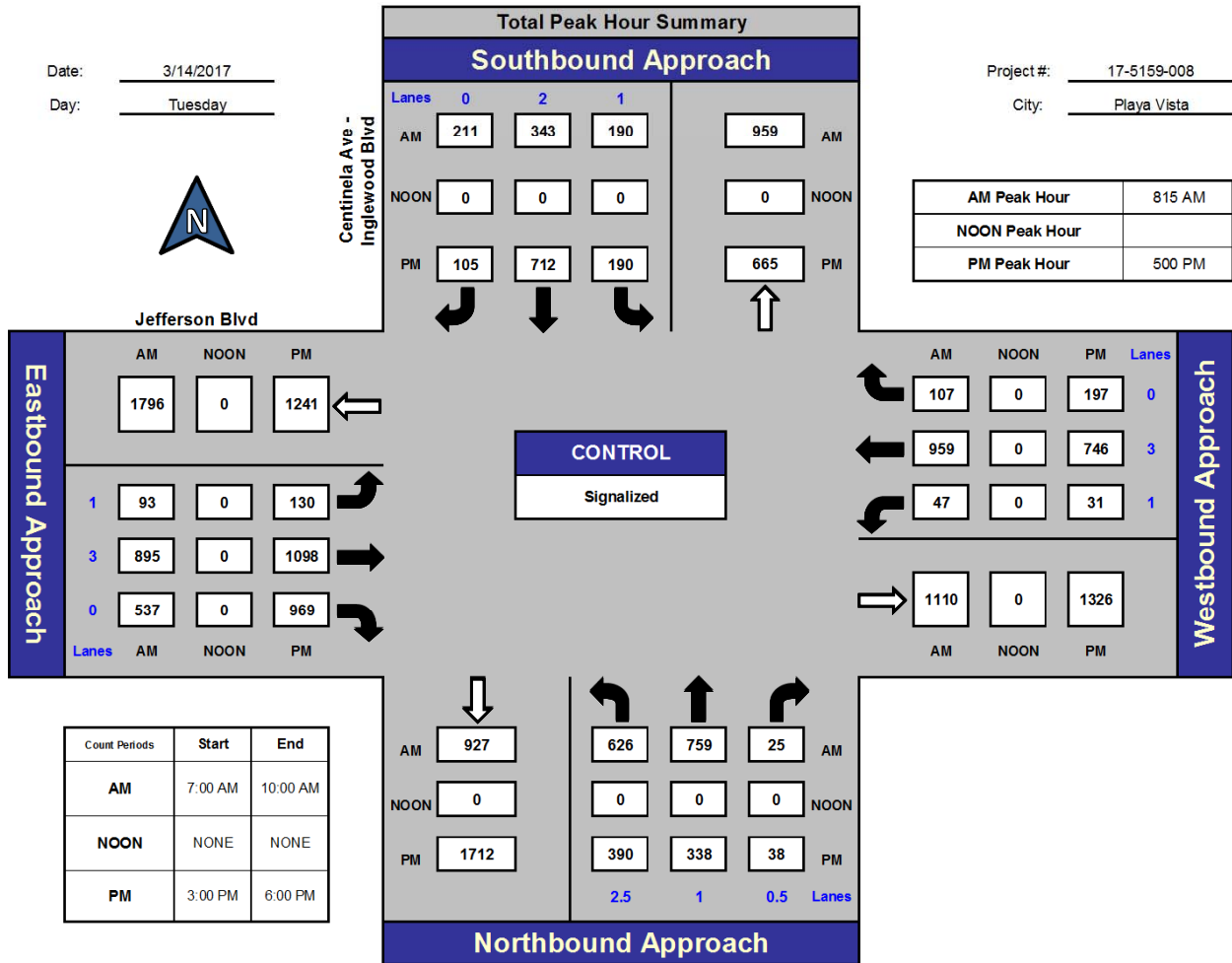


National Data & Surveying Services

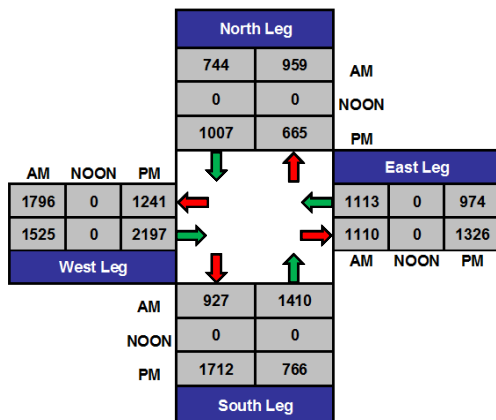
Centinela Ave - Inglewood Blvd and Jefferson Blvd, Playa Vista

Date: 3/14/2017
Day: Tuesday

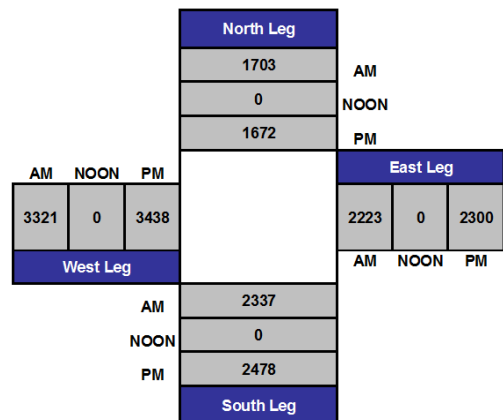
Project #: 17-5159-008
City: Playa Vista



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-008

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	Centinela Ave - Inglewood Blvd			Centinela Ave - Inglewood Blvd			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2.5	NT 1	NR 0.5	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
7:00 AM	126	146	2	18	25	17	15	138	66	9	184	29	775
7:15 AM	158	192	1	20	28	20	30	165	68	4	183	23	892
7:30 AM	165	192	4	27	48	31	30	192	99	6	211	38	1043
7:45 AM	166	184	2	39	71	32	26	246	116	9	186	26	1103
8:00 AM	159	140	4	55	77	41	29	207	126	10	204	39	1091
8:15 AM	143	172	8	68	84	45	27	251	132	10	209	32	1181
8:30 AM	167	175	3	33	92	41	22	210	120	8	215	30	1116
8:45 AM	144	197	2	38	83	62	23	215	151	20	265	31	1231
9:00 AM	172	215	12	51	84	63	21	219	134	9	270	14	1264
9:15 AM	185	145	11	41	77	53	20	197	117	10	290	16	1162
9:30 AM	157	123	11	35	58	46	17	189	98	7	259	25	1025
9:45 AM	127	89	5	25	41	29	14	172	103	11	238	19	873
TOTAL VOLUMES :	1869	1970	65	450	768	480	274	2401	1330	113	2714	322	12756
APPROACH %'s :	47.87%	50.46%	1.66%	26.50%	45.23%	28.27%	6.84%	59.95%	33.21%	3.59%	86.19%	10.23%	
PEAK HR START TIME :	815 AM												
PEAK HR VOL :	626	759	25	190	343	211	93	895	537	47	959	107	4792
PEAK HR FACTOR :	0.883			0.939			0.930			0.881			0.948

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-008

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM

NS/EW Streets:		Centinela Ave - Inglewood Blvd			Centinela Ave - Inglewood Blvd			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 2.5	NT 1	NR 0.5	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
3:00 PM		121	50	6	42	116	34	24	255	171	7	167	47	1040
3:15 PM		90	58	4	61	124	32	19	266	183	5	186	35	1063
3:30 PM		93	61	4	69	122	20	30	246	172	6	173	34	1030
3:45 PM		88	64	12	56	135	30	29	234	197	3	200	37	1085
4:00 PM		85	57	11	60	154	31	21	268	208	0	149	43	1087
4:15 PM		108	76	8	59	145	30	27	218	223	7	203	37	1141
4:30 PM		91	70	7	83	163	46	29	224	219	5	164	28	1129
4:45 PM		114	79	6	63	158	35	33	239	206	2	175	49	1159
5:00 PM		111	89	18	52	163	21	25	255	242	4	196	39	1215
5:15 PM		89	75	6	50	202	22	39	286	262	5	190	53	1279
5:30 PM		96	84	8	49	174	33	39	308	235	13	169	66	1274
5:45 PM		94	90	6	39	173	29	27	249	230	9	191	39	1176
TOTAL VOLUMES :		NL 1180	NT 853	NR 96	SL 683	ST 1829	SR 363	EL 342	ET 3048	ER 2548	WL 66	WT 2163	WR 507	TOTAL 13678
APPROACH %'s :		55.43%	40.07%	4.51%	23.76%	63.62%	12.63%	5.76%	51.33%	42.91%	2.41%	79.06%	18.53%	
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		390	338	38	190	712	105	130	1098	969	31	746	197	4944
PEAK HR FACTOR :		0.878			0.919			0.936			0.982			0.966

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-008

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		Centinela Ave - Inglewood Blvd			Centinela Ave - Inglewood Blvd			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 2.5	NT 1	NR 0.5	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
7:00 AM		126	146	2	18	25	17	15	138	66	9	184	29	775
7:15 AM		158	192	1	20	28	20	30	165	68	4	183	23	892
7:30 AM		165	192	4	27	48	31	30	192	99	6	211	38	1043
7:45 AM		166	184	2	39	71	32	26	246	116	9	186	26	1103
8:00 AM		159	140	4	55	77	41	29	207	126	10	204	39	1091
8:15 AM		143	172	8	68	84	45	27	251	132	10	209	32	1181
8:30 AM		167	175	3	33	92	41	22	210	120	8	215	30	1116
8:45 AM		144	197	2	38	83	62	23	215	151	20	265	31	1231
9:00 AM		172	215	12	51	84	63	21	219	134	9	270	14	1264
9:15 AM		185	145	11	41	77	53	20	197	117	10	290	16	1162
9:30 AM		157	123	11	35	58	46	17	189	98	7	259	25	1025
9:45 AM		127	89	5	25	41	29	14	172	103	11	238	19	873
TOTAL VOLUMES :		1869	1970	65	450	768	480	274	2401	1330	113	2714	322	12756
APPROACH %'s :		47.87%	50.46%	1.66%	26.50%	45.23%	28.27%	6.84%	59.95%	33.21%	3.59%	86.19%	10.23%	
PEAK HR START TIME :		815 AM												TOTAL
PEAK HR VOL :		626	759	25	190	343	211	93	895	537	47	959	107	4792
PEAK HR FACTOR :		0.883			0.939			0.930			0.881			0.948

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-008

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		Centinela Ave - Inglewood Blvd			Centinela Ave - Inglewood Blvd			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 2.5	NT 1	NR 0.5	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
3:00 PM		121	50	6	42	116	34	24	255	171	7	167	47	1040
3:15 PM		90	58	4	61	124	32	19	266	183	5	186	35	1063
3:30 PM		93	61	4	69	122	20	30	246	172	6	173	34	1030
3:45 PM		88	64	12	56	135	30	29	234	197	3	200	37	1085
4:00 PM		85	57	11	60	154	31	21	268	208	0	149	43	1087
4:15 PM		108	76	8	59	145	30	27	218	223	7	203	37	1141
4:30 PM		91	70	7	83	163	46	29	224	219	5	164	28	1129
4:45 PM		114	79	6	63	158	35	33	239	206	2	175	49	1159
5:00 PM		111	89	18	52	163	21	25	255	242	4	196	39	1215
5:15 PM		89	75	6	50	202	22	39	286	262	5	190	53	1279
5:30 PM		96	84	8	49	174	33	39	308	235	13	169	66	1274
5:45 PM		94	90	6	39	173	29	27	249	230	9	191	39	1176
TOTAL VOLUMES :		1180	853	96	683	1829	363	342	3048	2548	66	2163	507	13678
APPROACH %'s :		55.43%	40.07%	4.51%	23.76%	63.62%	12.63%	5.76%	51.33%	42.91%	2.41%	79.06%	18.53%	
PEAK HR START TIME :		500 PM												TOTAL
PEAK HR VOL :		390	338	38	190	712	105	130	1098	969	31	746	197	4944
PEAK HR FACTOR :		0.878			0.919			0.936			0.982			0.966

CONTROL : Signalized



I-405 SB Ramps

Jefferson Blvd

School Day: YES District: I/S CODE

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	0	0.00	265	9.00	424	8.00	366	8.45
PM PK 15 MIN	0	0.00	82	15.00	451	17.30	429	17.15
AM PK HOUR	0	0.00	902	8.30	1563	7.45	1278	8.30
PM PK HOUR	0	0.00	314	15.00	1670	16.45	1627	16.45

XING N/L

Ped	Sch
0	0
0	0
0	0
0	0
0	0
0	0

XING E/L

[illegible]

ITM Peak Hour Summary

Prepared by:

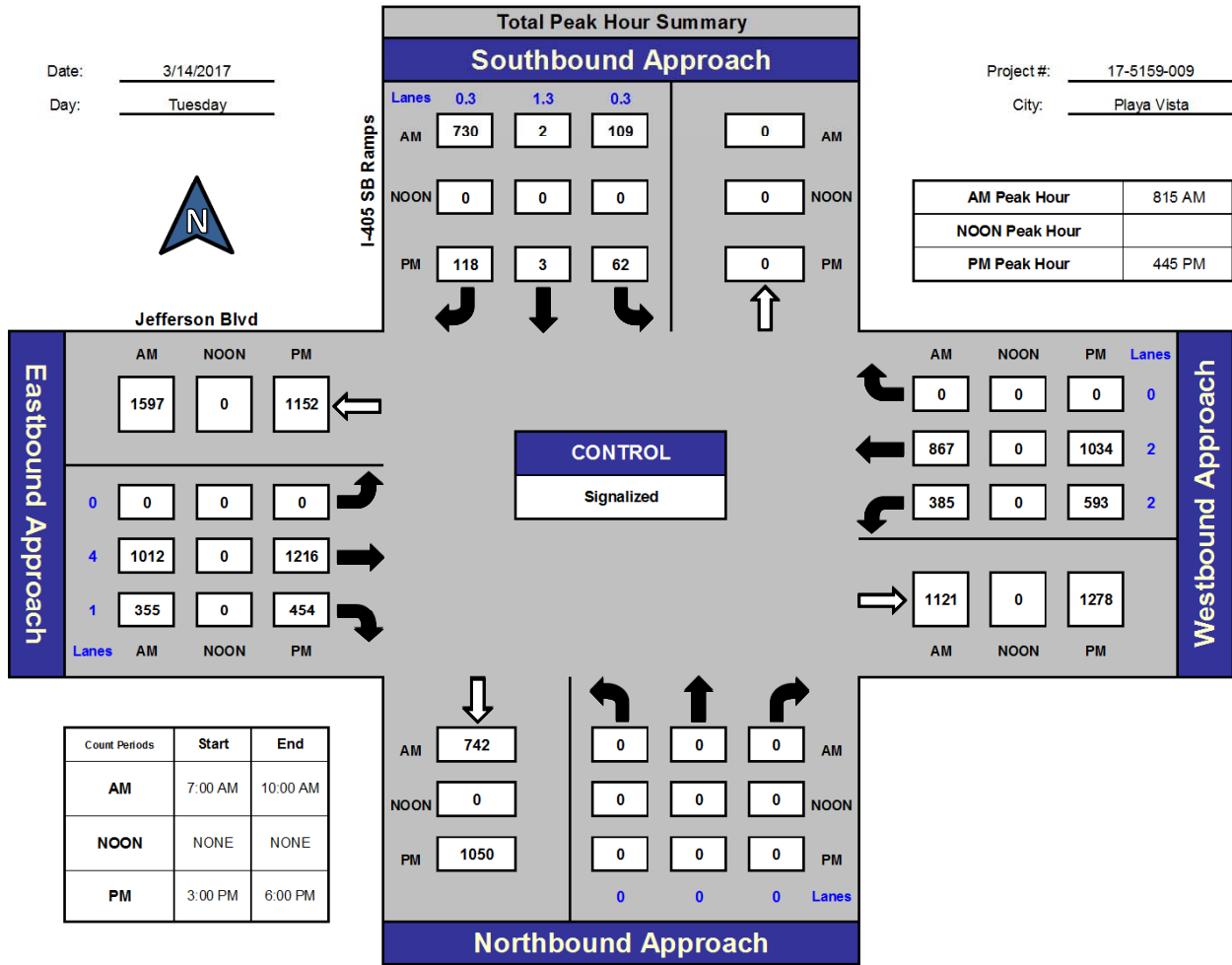


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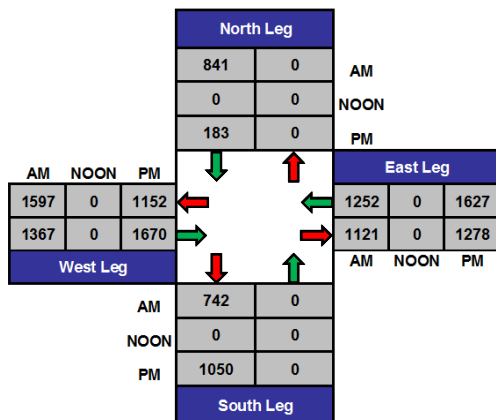
I-405 SB Ramps and Jefferson Blvd, Playa Vista

Date: 3/14/2017
Day: Tuesday

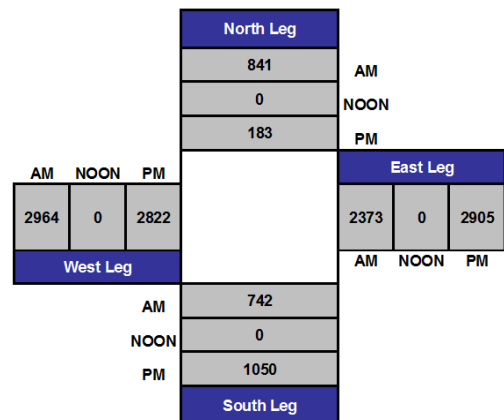
Project #: 17-5159-009
City: Playa Vista



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-009

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	I-405 SB Ramps			I-405 SB Ramps			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 0	NR 0	SL 0.3	ST 1.3	SR 0.3	EL 0	ET 4	ER 1	WL 2	WT 2	WR 0	TOTAL
7:00 AM	0	0	0	23	0	116	0	174	61	57	157	0	588
7:15 AM	0	0	0	24	0	120	0	182	85	72	159	0	642
7:30 AM	0	0	0	25	0	115	0	210	96	75	188	0	709
7:45 AM	0	0	0	21	0	94	0	264	101	83	186	0	749
8:00 AM	0	0	0	8	0	129	0	316	108	115	198	0	874
8:15 AM	0	0	0	23	2	155	0	297	111	117	184	0	889
8:30 AM	0	0	0	33	0	147	0	291	75	89	188	0	823
8:45 AM	0	0	0	23	0	193	0	216	71	109	257	0	869
9:00 AM	0	0	0	30	0	235	0	208	98	70	238	0	879
9:15 AM	0	0	0	24	0	217	0	233	85	78	249	0	886
9:30 AM	0	0	0	21	1	145	0	186	69	54	158	0	634
9:45 AM	0	0	0	20	0	161	0	209	44	61	194	0	689
TOTAL VOLUMES :	NL 0	NT 0	NR 0	SL 275	ST 3	SR 1827	EL 0	ET 2786	ER 1004	WL 980	WT 2356	WR 0	TOTAL 9231
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	13.06%	0.14%	86.79%	0.00%	73.51%	26.49%	29.38%	70.62%	0.00%	
PEAK HR START TIME :	815 AM												TOTAL
PEAK HR VOL :	0	0	0	109	2	730	0	1012	355	385	867	0	3460
PEAK HR FACTOR :	0.000			0.793			0.838			0.855			0.973

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-009

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM

NS/EW Streets:		I-405 SB Ramps			I-405 SB Ramps			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 0	NR 0	SL 0.3	ST 1.3	SR 0.3	EL 0	ET 4	ER 1	WL 2	WT 2	WR 0	TOTAL
3:00 PM		0	0	0	27	0	55	0	294	111	124	218	0	829
3:15 PM		0	0	0	28	0	49	0	302	113	161	227	0	880
3:30 PM		0	0	0	22	0	56	0	267	115	140	219	0	819
3:45 PM		0	0	0	20	1	56	0	290	109	120	228	0	824
4:00 PM		0	0	0	20	0	49	0	303	120	116	209	0	817
4:15 PM		0	0	0	17	1	43	0	252	88	117	228	0	746
4:30 PM		0	0	0	19	2	41	0	253	113	132	218	0	778
4:45 PM		0	0	0	14	2	21	0	278	120	141	241	0	817
5:00 PM		0	0	0	15	0	30	0	292	113	142	245	0	837
5:15 PM		0	0	0	17	1	42	0	288	128	158	271	0	905
5:30 PM		0	0	0	16	0	25	0	358	93	152	277	0	921
5:45 PM		0	0	0	11	0	24	0	267	47	123	255	0	727
TOTAL VOLUMES :		NL 0	NT 0	NR 0	SL 226	ST 7	SR 491	EL 0	ET 3444	ER 1270	WL 1626	WT 2836	WR 0	TOTAL 9900
APPROACH %'s :		#DIV/0!	#DIV/0!	#DIV/0!	31.22%	0.97%	67.82%	0.00%	73.06%	26.94%	36.44%	63.56%	0.00%	
PEAK HR START TIME :		445 PM												TOTAL
PEAK HR VOL :		0	0	0	62	3	118	0	1216	454	593	1034	0	3480
PEAK HR FACTOR :		0.000			0.763			0.926			0.948			0.945

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-009

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		I-405 SB Ramps			I-405 SB Ramps			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 0	NR 0	SL 0.3	ST 1.3	SR 0.3	EL 0	ET 4	ER 1	WL 2	WT 2	WR 0	TOTAL
7:00 AM		0	0	0	23	0	116	0	174	61	57	157	0	588
7:15 AM		0	0	0	24	0	120	0	182	85	72	159	0	642
7:30 AM		0	0	0	25	0	115	0	210	96	75	188	0	709
7:45 AM		0	0	0	21	0	94	0	264	101	83	186	0	749
8:00 AM		0	0	0	8	0	129	0	316	108	115	198	0	874
8:15 AM		0	0	0	23	2	155	0	297	111	117	184	0	889
8:30 AM		0	0	0	33	0	147	0	291	75	89	188	0	823
8:45 AM		0	0	0	23	0	193	0	216	71	109	257	0	869
9:00 AM		0	0	0	30	0	235	0	208	98	70	238	0	879
9:15 AM		0	0	0	24	0	217	0	233	85	78	249	0	886
9:30 AM		0	0	0	21	1	145	0	186	69	54	158	0	634
9:45 AM		0	0	0	20	0	161	0	209	44	61	194	0	689
TOTAL VOLUMES :		NL 0	NT 0	NR 0	SL 275	ST 3	SR 1827	EL 0	ET 2786	ER 1004	WL 980	WT 2356	WR 0	TOTAL 9231
APPROACH %'s :					13.06%	0.14%	86.79%	0.00%	73.51%	26.49%	29.38%	70.62%	0.00%	
PEAK HR START TIME :		815 AM												TOTAL
PEAK HR VOL :		0	0	0	109	2	730	0	1012	355	385	867	0	3460
PEAK HR FACTOR :		0.000			0.793			0.838			0.855			0.973

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-009

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		I-405 SB Ramps			I-405 SB Ramps			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 0	NR 0	SL 0.3	ST 1.3	SR 0.3	EL 0	ET 4	ER 1	WL 2	WT 2	WR 0	TOTAL
3:00 PM		0	0	0	27	0	55	0	294	111	124	218	0	829
3:15 PM		0	0	0	28	0	49	0	302	113	161	227	0	880
3:30 PM		0	0	0	22	0	56	0	267	115	140	219	0	819
3:45 PM		0	0	0	20	1	56	0	290	109	120	228	0	824
4:00 PM		0	0	0	20	0	49	0	303	120	116	209	0	817
4:15 PM		0	0	0	17	1	43	0	252	88	117	228	0	746
4:30 PM		0	0	0	19	2	41	0	253	113	132	218	0	778
4:45 PM		0	0	0	14	2	21	0	278	120	141	241	0	817
5:00 PM		0	0	0	15	0	30	0	292	113	142	245	0	837
5:15 PM		0	0	0	17	1	42	0	288	128	158	271	0	905
5:30 PM		0	0	0	16	0	25	0	358	93	152	277	0	921
5:45 PM		0	0	0	11	0	24	0	267	47	123	255	0	727
TOTAL VOLUMES :		NL 0	NT 0	NR 0	SL 226	ST 7	SR 491	EL 0	ET 3444	ER 1270	WL 1626	WT 2836	WR 0	TOTAL 9900
APPROACH %'s :					31.22%	0.97%	67.82%	0.00%	73.06%	26.94%	36.44%	63.56%	0.00%	
PEAK HR START TIME :		445 PM												TOTAL
PEAK HR VOL :		0	0	0	62	3	118	0	1216	454	593	1034	0	3480
PEAK HR FACTOR :		0.000			0.763			0.926			0.948			0.945

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:

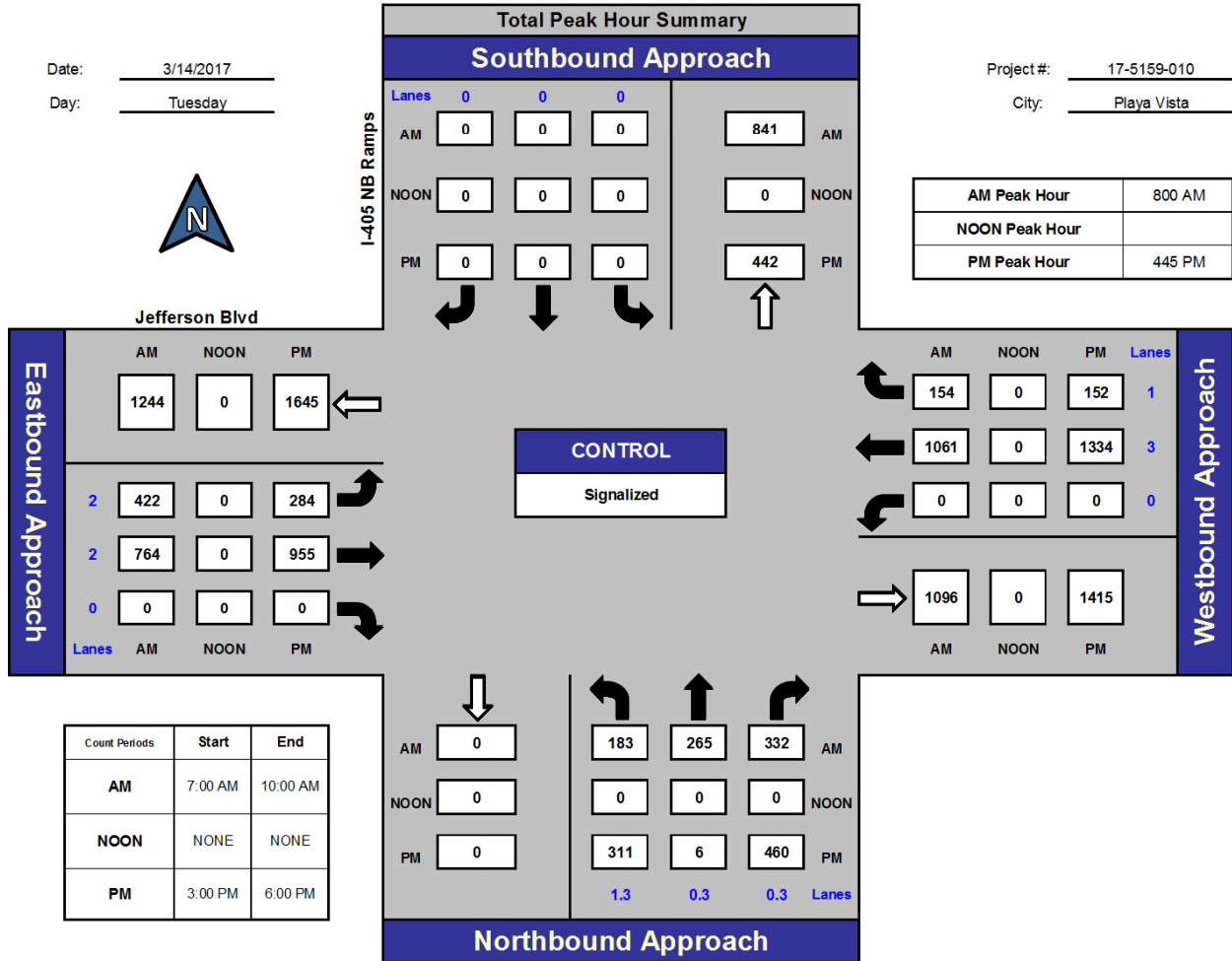


National Data & Surveying Services

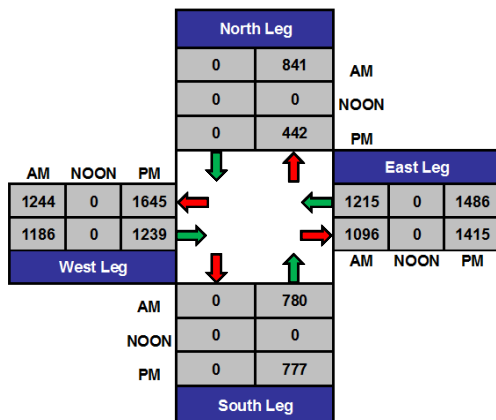
I-405 NB Ramps and Jefferson Blvd , Playa Vista

Date: 3/14/2017
Day: Tuesday

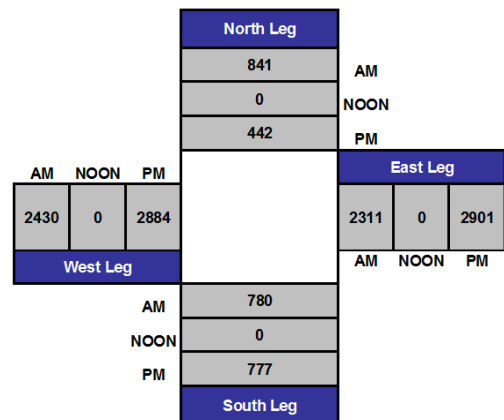
Project #: 17-5159-010
City: Playa Vista



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-010

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	I-405 NB Ramps			I-405 NB Ramps			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1.3	NT 0.3	NR 0.3	SL 0	ST 0	SR 0	EL 2	ET 2	ER 0	WL 0	WT 3	WR 1	TOTAL
7:00 AM	51	68	65	0	0	0	82	108	0	0	163	34	571
7:15 AM	42	85	73	0	0	0	76	127	0	0	188	32	623
7:30 AM	63	72	67	0	0	0	88	146	0	0	198	42	676
7:45 AM	44	55	94	0	0	0	97	186	0	0	225	47	748
8:00 AM	48	58	60	0	0	0	145	169	0	0	254	33	767
8:15 AM	38	77	88	0	0	0	99	197	0	0	270	39	808
8:30 AM	48	73	88	0	0	0	108	225	0	0	227	45	814
8:45 AM	49	57	96	0	0	0	70	173	0	0	310	37	792
9:00 AM	55	67	55	0	0	0	87	182	0	0	242	39	727
9:15 AM	62	71	54	0	0	0	79	161	0	0	261	34	722
9:30 AM	40	69	61	0	0	0	76	153	0	0	205	41	645
9:45 AM	55	57	60	0	0	0	75	166	0	0	203	30	646
TOTAL VOLUMES :	595	809	861	0	0	0	1082	1993	0	0	2746	453	8539
APPROACH %'s :	26.27%	35.72%	38.01%	#DIV/0!	#DIV/0!	#DIV/0!	35.19%	64.81%	0.00%	0.00%	85.84%	14.16%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	183	265	332	0	0	0	422	764	0	0	1061	154	3181
PEAK HR FACTOR :	0.933			0.000			0.890			0.875			0.977

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-010

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	I-405 NB Ramps			I-405 NB Ramps			Jefferson Blvd			Jefferson Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1.3	NT 0.3	NR 0.3	SL 0	ST 0	SR 0	EL 2	ET 2	ER 0	WL 0	WT 3	WR 1	TOTAL
3:00 PM	63	6	88	0	0	0	99	209	0	0	276	46	787
3:15 PM	61	9	98	0	0	0	81	247	0	0	318	46	860
3:30 PM	59	4	70	0	0	0	70	220	0	0	287	33	743
3:45 PM	58	0	58	0	0	0	81	228	0	0	291	21	737
4:00 PM	58	0	92	0	0	0	72	254	0	0	265	29	770
4:15 PM	65	0	90	0	0	0	50	216	0	0	276	27	724
4:30 PM	63	1	119	0	0	0	52	235	0	0	279	33	782
4:45 PM	73	3	145	0	0	0	56	229	0	0	327	38	871
5:00 PM	74	1	104	0	0	0	67	226	0	0	313	40	825
5:15 PM	83	2	95	0	0	0	76	227	0	0	351	41	875
5:30 PM	81	0	116	0	0	0	85	273	0	0	343	33	931
5:45 PM	67	0	80	0	0	0	69	239	0	0	322	29	806
TOTAL VOLUMES :	805	26	1155	0	0	0	858	2803	0	0	3648	416	9711
APPROACH %'s :	40.53%	1.31%	58.16%	#DIV/0!	#DIV/0!	#DIV/0!	23.44%	76.56%	0.00%	0.00%	89.76%	10.24%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	311	6	460	0	0	0	284	955	0	0	1334	152	3502
PEAK HR FACTOR :	0.879			0.000			0.865			0.948			0.940

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-010

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		I-405 NB Ramps			I-405 NB Ramps			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		1.3	0.3	0.3	0	0	0	2	2	0	0	3	1	
7:00 AM		51	68	65	0	0	0	82	108	0	0	163	34	571
7:15 AM		42	85	73	0	0	0	76	127	0	0	188	32	623
7:30 AM		63	72	67	0	0	0	88	146	0	0	198	42	676
7:45 AM		44	55	94	0	0	0	97	186	0	0	225	47	748
8:00 AM		48	58	60	0	0	0	145	169	0	0	254	33	767
8:15 AM		38	77	88	0	0	0	99	197	0	0	270	39	808
8:30 AM		48	73	88	0	0	0	108	225	0	0	227	45	814
8:45 AM		49	57	96	0	0	0	70	173	0	0	310	37	792
9:00 AM		55	67	55	0	0	0	87	182	0	0	242	39	727
9:15 AM		62	71	54	0	0	0	79	161	0	0	261	34	722
9:30 AM		40	69	61	0	0	0	76	153	0	0	205	41	645
9:45 AM		55	57	60	0	0	0	75	166	0	0	203	30	646
TOTAL VOLUMES :		NL 595	NT 809	NR 861	SL 0	ST 0	SR 0	EL 1082	ET 1993	ER 0	WL 0	WT 2746	WR 453	TOTAL 8539
APPROACH %'s :		26.27%	35.72%	38.01%				35.19%	64.81%	0.00%	0.00%	85.84%	14.16%	
PEAK HR START TIME :		800 AM												TOTAL
PEAK HR VOL :		183	265	332	0	0	0	422	764	0	0	1061	154	3181
PEAK HR FACTOR :		0.933			0.000			0.890			0.875			0.977

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-010

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		I-405 NB Ramps			I-405 NB Ramps			Jefferson Blvd			Jefferson Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		1.3	0.3	0.3	0	0	0	2	2	0	0	3	1	
3:00 PM		63	6	88	0	0	0	99	209	0	0	276	46	787
3:15 PM		61	9	98	0	0	0	81	247	0	0	318	46	860
3:30 PM		59	4	70	0	0	0	70	220	0	0	287	33	743
3:45 PM		58	0	58	0	0	0	81	228	0	0	291	21	737
4:00 PM		58	0	92	0	0	0	72	254	0	0	265	29	770
4:15 PM		65	0	90	0	0	0	50	216	0	0	276	27	724
4:30 PM		63	1	119	0	0	0	52	235	0	0	279	33	782
4:45 PM		73	3	145	0	0	0	56	229	0	0	327	38	871
5:00 PM		74	1	104	0	0	0	67	226	0	0	313	40	825
5:15 PM		83	2	95	0	0	0	76	227	0	0	351	41	875
5:30 PM		81	0	116	0	0	0	85	273	0	0	343	33	931
5:45 PM		67	0	80	0	0	0	69	239	0	0	322	29	806
TOTAL VOLUMES :		NL 805	NT 26	NR 1155	SL 0	ST 0	SR 0	EL 858	ET 2803	ER 0	WL 0	WT 3648	WR 416	TOTAL 9711
APPROACH %'s :		40.53%	1.31%	58.16%				23.44%	76.56%	0.00%	0.00%	89.76%	10.24%	
PEAK HR START TIME :		445 PM												TOTAL
PEAK HR VOL :		311	6	460	0	0	0	284	955	0	0	1334	152	3502
PEAK HR FACTOR :		0.879			0.000			0.865			0.948			0.940

CONTROL : Signalized



Beethoven St

Coral Tree Pl

School Day: YES District: I/S CODE

	<u>N/B</u>	<u>TIME</u>	<u>S/B</u>	<u>TIME</u>	<u>E/B</u>	<u>TIME</u>	<u>W/B</u>	<u>TIME</u>
AM PK 15 MIN	48	8.00	11	8.30	24	9.00	29	9.00
PM PK 15 MIN	21	15.30	44	17.00	25	17.30	14	15.00
AM PK HOUR	166	7.15	33	8.00	73	9.00	98	9.00
PM PK HOUR	71	15.15	127	16.30	75	17.00	48	15.00

XING N/L

Ped	Sch
0	0
0	0
0	0
0	0
0	0
0	0

0	0
---	---

XING E/L

Ped	Sch
0	0
0	0
0	0
0	0
0	0
0	0
0	0

ITM Peak Hour Summary

Prepared by:

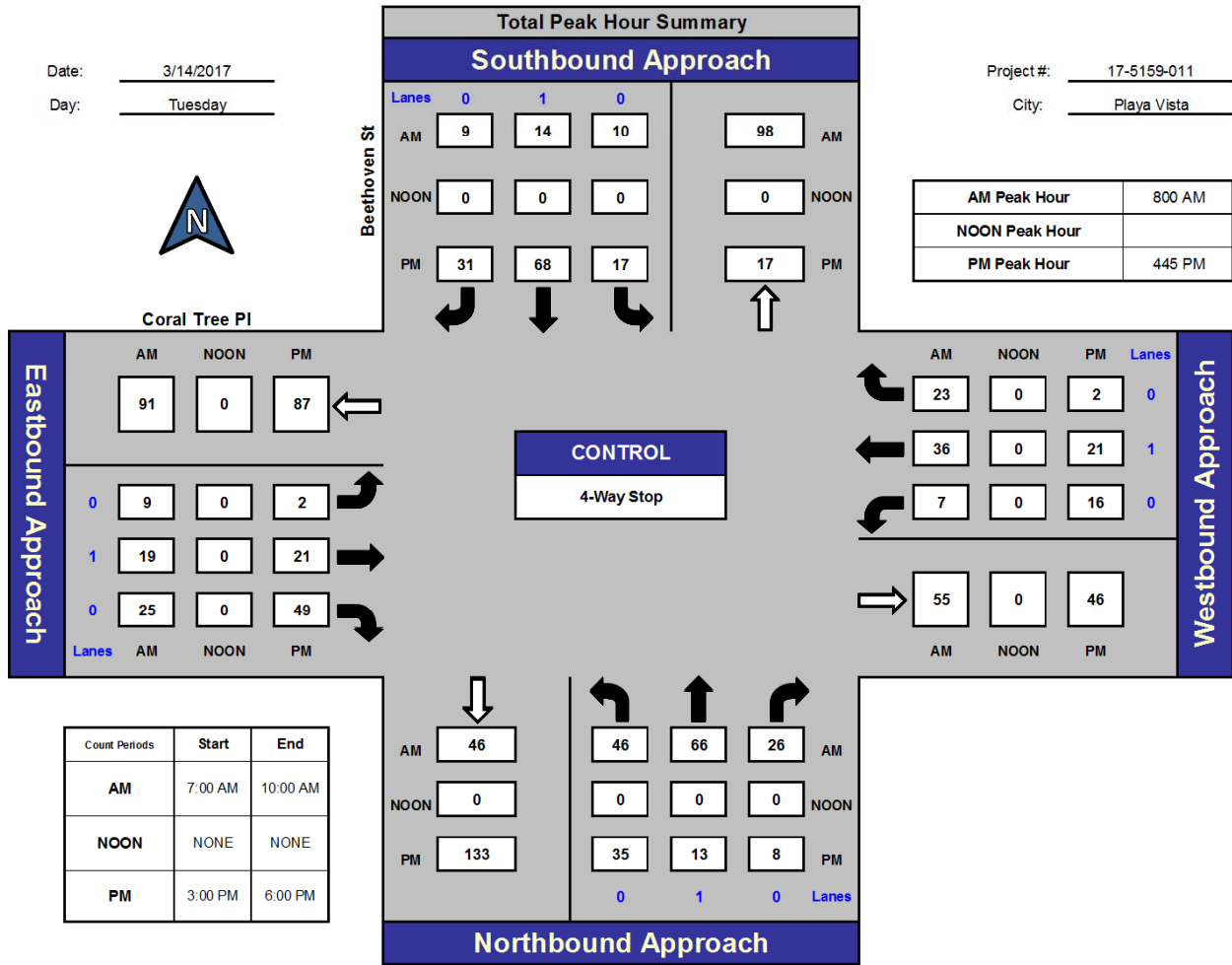


National Data & Surveying Services

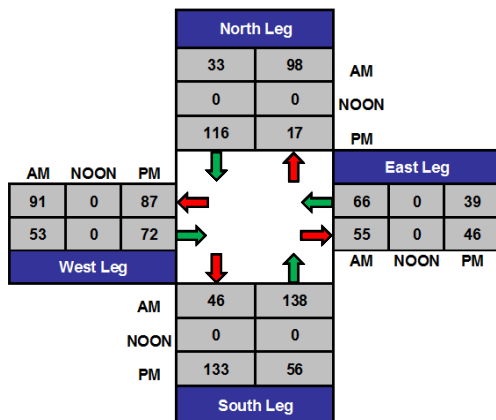
Beethoven St and Coral Tree Pl, Playa Vista

Date: 3/14/2017
Day: Tuesday

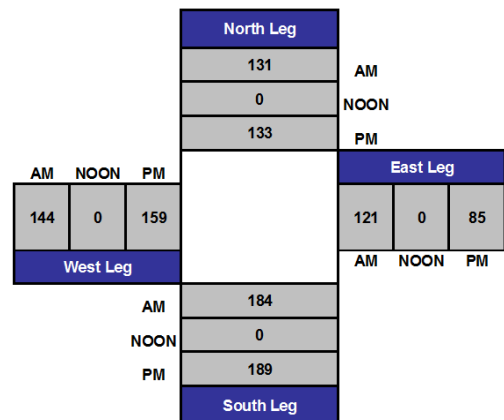
Project #: 17-5159-011
City: Playa Vista



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-011

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	Beethoven St			Beethoven St			Coral Tree Pl			Coral Tree Pl			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	5	13	5	0	5	0	1	7	3	5	1	1	46
7:15 AM	14	7	14	4	2	2	0	7	2	1	2	3	58
7:30 AM	11	17	18	2	2	0	2	4	4	3	9	0	72
7:45 AM	8	13	16	0	3	0	2	3	3	3	2	1	54
8:00 AM	14	21	13	3	3	2	4	6	8	0	8	7	89
8:15 AM	9	16	6	3	2	1	3	8	4	3	16	2	73
8:30 AM	12	20	4	3	3	5	1	4	6	1	6	9	74
8:45 AM	11	9	3	1	6	1	1	1	7	3	6	5	54
9:00 AM	10	10	4	0	2	0	8	7	9	5	20	4	79
9:15 AM	6	8	0	0	1	0	2	6	3	0	14	3	43
9:30 AM	14	6	2	2	2	4	6	6	8	2	23	4	79
9:45 AM	17	9	4	1	1	3	4	6	8	1	19	3	76
TOTAL VOLUMES :	131	149	89	19	32	18	34	65	65	27	126	42	797
APPROACH %'s :	35.50%	40.38%	24.12%	27.54%	46.38%	26.09%	20.73%	39.63%	39.63%	13.85%	64.62%	21.54%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	46	66	26	10	14	9	9	19	25	7	36	23	290
PEAK HR FACTOR :	0.719			0.750			0.736			0.786			0.815

CONTROL : 4-Way Stop

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-011

Day: Tuesday

City: Playa Vista

TOTALS

Date: 3/14/2017

AM													
NS/EW Streets:	Beethoven St			Beethoven St			Coral Tree Pl			Coral Tree Pl			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
3:00 PM	5	6	2	0	16	3	2	5	9	7	5	2	62
3:15 PM	7	4	5	4	10	3	2	3	9	7	4	1	59
3:30 PM	15	2	4	4	9	2	1	8	7	1	4	6	63
3:45 PM	9	5	4	3	6	1	2	2	9	4	7	0	52
4:00 PM	10	3	3	0	13	4	0	1	6	3	4	0	47
4:15 PM	3	3	1	3	8	2	1	2	9	5	5	1	43
4:30 PM	6	2	4	9	21	3	1	4	5	4	6	1	66
4:45 PM	6	3	0	4	14	5	1	3	5	3	3	0	47
5:00 PM	9	6	1	8	23	13	0	4	11	1	9	0	85
5:15 PM	11	1	4	3	16	8	1	5	17	7	4	1	78
5:30 PM	9	3	3	2	15	5	0	9	16	5	5	1	73
5:45 PM	8	2	0	1	11	3	0	3	9	2	5	0	44
TOTAL VOLUMES :	98	40	31	41	162	52	11	49	112	49	61	13	719
APPROACH %'s :	57.99%	23.67%	18.34%	16.08%	63.53%	20.39%	6.40%	28.49%	65.12%	39.84%	49.59%	10.57%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	35	13	8	17	68	31	2	21	49	16	21	2	283
PEAK HR FACTOR :	0.875			0.659			0.720			0.813			0.832

CONTROL : 4-Way Stop

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-011

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		Beethoven St			Beethoven St			Coral Tree Pl			Coral Tree Pl			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM		5	13	5	0	5	0	1	7	3	5	1	1	46
7:15 AM		14	7	14	4	2	2	0	7	2	1	2	3	58
7:30 AM		11	17	18	2	2	0	2	4	4	3	9	0	72
7:45 AM		8	13	16	0	3	0	2	3	3	3	2	1	54
8:00 AM		14	21	13	3	3	2	4	6	8	0	8	7	89
8:15 AM		9	16	6	3	2	1	3	8	4	3	16	2	73
8:30 AM		12	20	4	3	3	5	1	4	6	1	6	9	74
8:45 AM		11	9	3	1	6	1	1	1	7	3	6	5	54
9:00 AM		10	10	4	0	2	0	8	7	9	5	20	4	79
9:15 AM		6	8	0	0	1	0	2	6	3	0	14	3	43
9:30 AM		14	6	2	2	2	4	6	6	8	2	23	4	79
9:45 AM		17	9	4	1	1	3	4	6	8	1	19	3	76
TOTAL VOLUMES :		131	149	89	19	32	18	34	65	65	27	126	42	797
APPROACH %'s :		35.50%	40.38%	24.12%	27.54%	46.38%	26.09%	20.73%	39.63%	39.63%	13.85%	64.62%	21.54%	
PEAK HR START TIME :		800 AM												TOTAL
PEAK HR VOL :		46	66	26	10	14	9	9	19	25	7	36	23	290
PEAK HR FACTOR :		0.719			0.750			0.736			0.786			0.815

CONTROL : 4-Way Stop

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5159-011

Day: Tuesday

City: Playa Vista

CARS

Date: 3/14/2017

AM

NS/EW Streets:		Beethoven St			Beethoven St			Coral Tree Pl			Coral Tree Pl			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
3:00 PM		5	6	2	0	16	3	2	5	9	7	5	2	62
3:15 PM		7	4	5	4	10	3	2	3	9	7	4	1	59
3:30 PM		15	2	4	4	9	2	1	8	7	1	4	6	63
3:45 PM		9	5	4	3	6	1	2	2	9	4	7	0	52
4:00 PM		10	3	3	0	13	4	0	1	6	3	4	0	47
4:15 PM		3	3	1	3	8	2	1	2	9	5	5	1	43
4:30 PM		6	2	4	9	21	3	1	4	5	4	6	1	66
4:45 PM		6	3	0	4	14	5	1	3	5	3	3	0	47
5:00 PM		9	6	1	8	23	13	0	4	11	1	9	0	85
5:15 PM		11	1	4	3	16	8	1	5	17	7	4	1	78
5:30 PM		9	3	3	2	15	5	0	9	16	5	5	1	73
5:45 PM		8	2	0	1	11	3	0	3	9	2	5	0	44
TOTAL VOLUMES :		NL 98	NT 40	NR 31	SL 41	ST 162	SR 52	EL 11	ET 49	ER 112	WL 49	WT 61	WR 13	TOTAL 719
APPROACH %'s :		57.99%	23.67%	18.34%	16.08%	63.53%	20.39%	6.40%	28.49%	65.12%	39.84%	49.59%	10.57%	
PEAK HR START TIME :		445 PM												TOTAL
PEAK HR VOL :		35	13	8	17	68	31	2	21	49	16	21	2	283
PEAK HR FACTOR :		0.875			0.659			0.720			0.813			0.832

CONTROL : 4-Way Stop

APPENDIX C
LADOT CMA Calculation Worksheets

Level of Service Worksheet (Circular 212 Method)



I/S #:		North-South Street: Centinela Avenue			Year of Count: 2017			Ambient Growth: (%): 1				Conducted by: KOA Corp				Date: 8/31/17			
1		East-West Street: SR-90 WB Off-Ramp			Projection Year: 2020			Peak Hour: AM				Reviewed by: IDH				Project: Del Rey Pointe			
No. of Phases		3			3			3				3				3			
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2			2			2				2				2			
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 1 SB-- 0 EB-- 0 WB-- 0			NB-- 1 SB-- 0 EB-- 0 WB-- 0			NB-- 1 SB-- 0 EB-- 0 WB-- 0				NB-- 1 SB-- 0 EB-- 0 WB-- 0				NB-- 1 SB-- 0 EB-- 0 WB-- 0			
ATSAC-1 or ATSAC+ATCS-2?		2			2			2				2				2			
Override Capacity		0			0			0				0				0			
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	20	1	20	0	20	20	0	21	1	21	0	21	1	21	0	21	1	21
	Left-Through		0							0				0				0	
	Through	521	2	261	5	526	263	64	601	2	301	5	606	2	303	0	606	2	303
	Through-Right		0							0				0				0	
	Right	130	1	0	0	130	0	0	134	1	0	0	134	1	0	0	134	1	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	1423	2	476	1	1424	476	64	1530	2	512	1	1531	2	512	0	1531	2	512
	Through-Right		1							1				1				1	
	Right	5	0	5	0	5	5	0	5	0	5	0	5	0	5	0	5	0	5
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	10	1	10	0	10	10	0	10	1	10	0	10	1	10	0	10	1	10
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	45	1	35	0	45	35	0	46	1	36	0	46	1	36	0	46	1	36
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	539	1	361	3	542	362	47	602	1	388	3	605	1	389	0	605	1	389
	Left-Through		0							0				0				0	
	Through	17	0	361	0	17	362	0	18	0	388	0	18	0	389	0	18	0	389
	Through-Right		0							0				0				0	
	Right	527	1	0	0	527	0	0	543	1	0	0	543	1	0	0	543	1	0
	Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 496 East-West: 396 SUM: 892			North-South: 496 East-West: 397 SUM: 893			North-South: 533 East-West: 424 SUM: 957				North-South: 533 East-West: 425 SUM: 958				North-South: 533 East-West: 425 SUM: 958			
VOLUME/CAPACITY (V/C) RATIO:		0.626			0.627			0.672				0.672				0.672			
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.526			0.527			0.572				0.572				0.572			
LEVEL OF SERVICE (LOS):		A			A			A				A				A			

REMARKS:

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: **0.001**
Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: **0.000** Δv/c after mitigation: **0.000**
Significant impacted? **NO** Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Centinela Avenue		Year of Count:		2017		Ambient Growth: (%):		1		Conducted by:		KOA Corp		Date:		8/31/17	
	1	East-West Street:		SR-90 WB Off-Ramp		Projection Year:		2020		Peak Hour:		PM		Reviewed by:		IDH		Project:		Del Rey Pointe
No. of Phases					3				3						3				3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					2				2						2				2	
Right Turns: FREE-1, NRTOR-2 or OLA-3?			NB-- 1 SB-- 0		0		NB-- 1 SB-- 0		0		NB-- 1 SB-- 0		NB-- 1 SB-- 0		0		NB-- 1 SB-- 0		0	
ATSAC-1 or ATSAC+ATCS-2?			EB-- 0 WB-- 2		2		EB-- 0 WB-- 2		2		EB-- 0 WB-- 2		EB-- 0 WB-- 2		2		EB-- 0 WB-- 2		2	
Override Capacity					0				0						0				0	
MOVEMENT			EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
			Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	16	1	16	0	16	16	0	16	1	16	0	16	1	16	0	16	1	16	
	Left-Through		0							0				0				0		
	Through	675	2	338	3	678	339	90	785	2	393	3	788	2	394	0	788	2	394	
	Through-Right		0							0				0				0		
	Right	188	1	0	0	188	0	0	194	1	0	0	194	1	0	0	194	1	0	
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0			
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0							0				0				0		
	Through	1577	2	526	5	1582	527	79	1704	2	568	5	1709	2	570	0	1709	2	570	
	Through-Right		1							1				1				1		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0			
EASTBOUND	Left	9	1	9	0	9	9	0	9	1	9	0	9	1	9	0	9	1	9	
	Left-Through		0							0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0							0				0				0		
	Right	24	1	16	0	24	16	0	25	1	17	0	25	1	17	0	25	1	17	
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0			
WESTBOUND	Left	229	1	229	11	240	240	75	311	1	276	11	322	1	279	0	322	1	279	
	Left-Through		0							0				0				0		
	Through	17	0	250	0	17	250	0	18	0	276	0	18	0	279	0	18	0	279	
	Through-Right		0							0				0				0		
	Right	483	1	0	0	483	0	0	498	1	0	0	498	1	0	0	498	1	0	
	Left-Through-Right		1							1				1				1		
Left-Right		0							0				0				0			
CRITICAL VOLUMES			North-South: 542 East-West: 266 SUM: 808		North-South: 543 East-West: 266 SUM: 809		North-South: 584 East-West: 293 SUM: 877		North-South: 586 East-West: 296 SUM: 882		North-South: 586 East-West: 296 SUM: 882		North-South: 586 East-West: 296 SUM: 882							
VOLUME/CAPACITY (V/C) RATIO:			0.567		0.568		0.615		0.619		0.619		0.619							
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.467		0.468		0.515		0.519		0.519		0.519							
LEVEL OF SERVICE (LOS):			A		A		A		A		A		A							

REMARKS:

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: **0.001**
Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: **0.004** Δv/c after mitigation: **0.004**
Significant impacted? **NO** Fully mitigated? **N/A**

I/S #:	North-South Street:		Centinela Avenue		Year of Count:		2017		Ambient Growth: (%):		1		Conducted by:		KOA Corp		Date:		8/31/17		
	2	East-West Street:		SR-90 EB Ramps		Projection Year:		2020		Peak Hour:		AM		Reviewed by:		IDH		Project:		Del Rey Pointe	
		No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				3		3		3		3		3		3		3		3	
		Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0	
		ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2		2		2	
		Override Capacity		0		0		0		0		0		0		0		0		0	
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0				
	Through	641	3	214	5	646	215	63	723	3	241	5	728	3	243	0	728	3	243		
	Through-Right		0						0				0				0				
	Right	352	1	352	10	362	362	60	423	1	423	10	433	1	433	0	433	1	433		
	Left-Through-Right		0						0				0				0				
Left-Right		0						0				0				0					
SOUTHBOUND	Left	566	2	311	0	566	311	0	583	2	321	0	583	2	321	0	583	2	321		
	Left-Through		0						0				0				0				
	Through	1398	2	699	4	1402	701	111	1551	2	776	4	1555	2	778	0	1555	2	778		
	Through-Right		0						0				0				0				
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through-Right		0						0				0				0				
Left-Right		0						0				0				0					
EASTBOUND	Left	28	0	28	0	28	28	1	30	0	30	0	30	0	30	0	30	0	30		
	Left-Through		0						0				0				0				
	Through	1	0	29	0	1	29	0	1	0	31	0	1	0	31	0	1	0	31		
	Through-Right		0						0				0				0				
	Right	256	1	256	0	256	256	2	266	1	266	0	266	1	266	0	266	1	266		
	Left-Through-Right		1						1				1				1				
Left-Right		0						0				0				0					
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through		0						0				0				0				
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through-Right		0						0				0				0				
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through-Right		0						0				0				0				
Left-Right		0						0				0				0					
CRITICAL VOLUMES		North-South: 699 East-West: 256 SUM: 955		North-South: 701 East-West: 256 SUM: 957		North-South: 776 East-West: 266 SUM: 1042		North-South: 778 East-West: 266 SUM: 1044		North-South: 778 East-West: 266 SUM: 1044		North-South: 778 East-West: 266 SUM: 1044									
VOLUME/CAPACITY (V/C) RATIO: V/C LESS ATSAC/ATCS ADJUSTMENT: LEVEL OF SERVICE (LOS):		0.670 0.570 A		0.672 0.572 A		0.731 0.631 B		0.733 0.633 B													

REMARKS:

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.002

Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: 0.002

Significant impacted? **NO**

$\Delta v/c$ after mitigation: 0.002

Fully mitigated?	N/A
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Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Centinela Avenue	Year of Count:	2017	Ambient Growth: (%):	1	Conducted by:	KOA Corp	Date:	8/31/17									
2	East-West Street:	SR-90 EB Ramps	Projection Year:	2020	Peak Hour:	PM	Reviewed by:	IDH	Project:	Del Rey Pointe									
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0										
Override Capacity		2	2		2		2		2										
		0	0		0		0		0										
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through																		
	Through	884	3	295	3	887	296	93	1004	3	335	3	1007	3	336	0	1007	3	336
	Through-Right																		
	Right	221	1	221	6	227	227	78	306	1	306	6	312	1	312	0	312	1	312
SOUTHBOUND	Left-Through-Right																		
	Left-Right																		
	Left	529	2	291	0	529	291	0	545	2	300	0	545	2	300	0	545	2	300
	Left-Through																		
	Through	1179	2	590	17	1196	598	152	1367	2	684	17	1384	2	692	0	1384	2	692
EASTBOUND	Through-Right																		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right																		
	Left-Right																		
	Left	36	0	36	0	36	36	0	37	0	37	0	37	0	37	0	37	0	37
WESTBOUND	Left-Through																		
	Through	1	0	37	0	1	37	0	1	0	38	0	1	0	38	0	1	0	38
	Through-Right																		
	Right	197	1	197	0	197	197	1	204	1	204	0	204	1	204	0	204	1	204
	Left-Through-Right																		
CRITICAL VOLUMES	Left-Right																		
	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through																		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUME/CAPACITY (V/C) RATIO:			0.552			0.558			0.623				0.629				0.629		
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.452			0.458			0.523				0.529					0.529
	LEVEL OF SERVICE (LOS):			A			A			A				A					A

REMARKS:

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: **0.006**
Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: **0.006** Δv/c after mitigation: **0.006**
Significant impacted? **NO** Fully mitigated? **N/A**

I/S #:	North-South Street:		Lincoln Boulevard			Year of Count:		2017		Ambient Growth: (%):		1		Conducted by:		KOA Corp		Date:		8/31/17	
	3	East-West Street:		Jefferson Boulevard			Projection Year:		2020		Peak Hour:		AM		Reviewed by:		IDH		Project: Del Rey Pointe		
No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3?						4			4			4			4			4			
Right Turns: FREE-1, NRTOR-2 or OLA-3?			NB-- 3 SB-- 3 EB-- 0 WB-- 3			NB-- 3 SB-- 3 EB-- 0 WB-- 3			NB-- 3 SB-- 3 EB-- 0 WB-- 3			NB-- 3 SB-- 3 EB-- 0 WB-- 3			NB-- 3 SB-- 3 EB-- 0 WB-- 3			NB-- 3 SB-- 3 EB-- 0 WB-- 3			
ATSAC-1 or ATSAC+ATCS-2?						2			2			2			2			2			
Override Capacity						0			0			0			0			0			
MOVEMENT			EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
			Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	15	1	15	0	15	15	1	16	1	16	0	16	1	16	0	16	1	16		
	Left-Through		0					0		0			0				0				
	Through	2631	4	658	0	2631	658	4	2715	4	679	0	2715	4	679	0	2715	4	679		
	Through-Right		0					0		0			0				0				
	Right	262	1	117	4	266	113	52	322	1	169	4	326	1	165	0	326	1	165		
	Left-Through-Right		0					0		0			0				0				
Left-Right		0					0		0			0				0					
SOUTHBOUND	Left	554	2	305	4	558	307	68	639	2	351	4	643	2	354	0	643	2	354		
	Left-Through		0					0		0			0				0				
	Through	1164	3	340	0	1164	340	10	1209	3	353	0	1209	3	353	0	1209	3	353		
	Through-Right		1					1		1			1				1				
	Right	197	0	197	0	197	197	0	203	0	203	0	203	0	203	0	203	0	203		
	Left-Through-Right		0					0		0			0				0				
Left-Right		0					0		0			0				0					
EASTBOUND	Left	163	1	163	0	163	163	0	168	1	168	0	168	1	168	0	168	1	168		
	Left-Through		0					0		0			0				0				
	Through	271	2	115	1	272	115	99	378	2	151	1	379	2	152	0	379	2	152		
	Through-Right		1					1		1			1				1				
	Right	74	0	74	0	74	74	0	76	0	76	0	76	0	76	0	76	0	76		
	Left-Through-Right		0					0		0			0				0				
Left-Right		0					0		0			0				0					
WESTBOUND	Left	264	2	145	14	278	153	7	279	2	153	14	293	2	161	0	293	2	161		
	Left-Through		0					0		0			0				0				
	Through	138	2	69	5	143	72	73	215	2	108	5	220	2	110	0	220	2	110		
	Through-Right		0					0		0			0				0				
	Right	1006	2	248	14	1020	254	58	1094	2	251	14	1108	2	255	0	1108	2	255		
	Left-Through-Right		0					0		0			0				0				
Left-Right		0					0		0			0				0					
CRITICAL VOLUMES			North-South: 963 East-West: 411 SUM: 1374			North-South: 965 East-West: 417 SUM: 1382			North-South: 1030 East-West: 419 SUM: 1449				North-South: 1033 East-West: 423 SUM: 1456				North-South: 1033 East-West: 423 SUM: 1456				
VOLUME/CAPACITY (V/C) RATIO:			0.999			1.005			1.054				1.059				1.059				
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.899			0.905			0.954				0.959				0.959				
LEVEL OF SERVICE (LOS):			D			E			E				E				E				

REMARKS:

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.006

Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: 0.005

Significant impacted? **NO**

$\Delta v/c$ after mitigation: 0.005

Fully mitigated? **N/A**

I/S #:	North-South Street:		Lincoln Boulevard		Year of Count:		2017		Ambient Growth: (%):		1		Conducted by:		KOA Corp		Date:		8/31/17	
	3	East-West Street:		Jefferson Boulevard		Projection Year:		2020		Peak Hour:		PM		Reviewed by:		IDH		Project:		Del Rey Pointe
		No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			4			4			4			4			4			
		Right Turns: FREE-1, NRTOR-2 or OLA-3?			NB-- 3 SB-- 3 EB-- 0 WB-- 3			NB-- 3 SB-- 3 EB-- 0 WB-- 3			NB-- 3 SB-- 3 EB-- 0 WB-- 3			NB-- 3 SB-- 3 EB-- 0 WB-- 3			NB-- 3 SB-- 3 EB-- 0 WB-- 3			
		ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2			
		Override Capacity			0			0			0			0			0			
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	32	1	32	0	32	32	0	33	1	33	0	33	1	33	0	33	1	33	
	Left-Through		0							0				0				0		
	Through	1475	4	369	0	1475	369	15	1535	4	384	0	1535	4	384	0	1535	4	384	
	Through-Right		0							0				0				0		
	Right	285	1	0	16	301	0	13	307	1	0	16	323	1	0	0	323	1	0	
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0			
SOUTHBOUND	Left	517	2	284	16	533	293	74	607	2	334	16	623	2	343	0	623	2	343	
	Left-Through		0							0				0				0		
	Through	2047	3	645	0	2047	645	9	2118	3	667	0	2118	3	667	0	2118	3	667	
	Through-Right		1							1				1				1		
	Right	534	0	534	0	534	534	0	550	0	550	0	550	0	550	0	550	0	550	
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0			
EASTBOUND	Left	103	1	103	0	103	103	0	106	1	106	0	106	1	106	0	106	1	106	
	Left-Through		0							0				0				0		
	Through	198	2	99	5	203	100	90	294	2	132	5	299	2	134	0	299	2	134	
	Through-Right		1							1				1				1		
	Right	98	0	98	0	98	98	1	102	0	102	0	102	0	102	0	102	0	102	
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0			
WESTBOUND	Left	551	2	303	9	560	308	57	625	2	344	9	634	2	349	0	634	2	349	
	Left-Through		0							0				0				0		
	Through	372	2	186	3	375	188	131	514	2	257	3	517	2	259	0	517	2	259	
	Through-Right		0							0				0				0		
	Right	832	2	174	9	841	170	95	952	2	190	9	961	2	186	0	961	2	186	
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0			
CRITICAL VOLUMES		North-South: 677 East-West: 402 SUM: 1079			North-South: 677 East-West: 408 SUM: 1085			North-South: 718 East-West: 476 SUM: 1194				North-South: 727 East-West: 483 SUM: 1210				North-South: 727 East-West: 483 SUM: 1210				
VOLUME/CAPACITY (V/C) RATIO: V/C LESS ATSAC/ATCS ADJUSTMENT: LEVEL OF SERVICE (LOS):		0.785 0.685 B			0.789 0.689 B			0.868 0.768 C				0.880 0.780 C				0.880 0.780 C				

REMARKS:

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.004

Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: 0.012

Significant impacted? **NO**

$\Delta v/c$ after mitigation: 0.012

Fully mitigated? **N/A**

Change in v/c due to project:	0.007	Δ v/c after mitigation:	0.007
Significant impacted?	NO	Fully mitigated?	N/A

I/S #:		North-South Street:			Alla Road			Year of Count:			2017			Ambient Growth: (%):			1			Conducted by:			KOA Corp			Date:			8/31/17		
4		East-West Street:			Jefferson Boulevard			Projection Year:			2020			Peak Hour:			PM			Reviewed by:			IDH			Project:			Del Rey Pointe		
		No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			2			2			2			2			2			2			2			2			2		
		Right Turns: FREE-1, NRTOR-2 or OLA-3?			NB-- 0 SB-- 0			NB-- 0 SB-- 0			NB-- 0 SB-- 0			NB-- 0 SB-- 0			NB-- 0 SB-- 0			NB-- 0 SB-- 0			NB-- 0 SB-- 0			NB-- 0 SB-- 0					
		ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2			2			2			2			2		
		Override Capacity			0			0			0			0			0			0			0			0			0		
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION															
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume												
NORTHBOUND	Left	68	1	68	0	68	68	0	70	1	70	0	70	1	70	0	70	1	70												
	Left-Through		0							0				0				0													
	Through	9	1	9	0	9	9	0	9	1	9	0	9	1	9	0	9	1	9												
	Through-Right		0							0				0				0													
	Right	49	1	0	0	49	0	0	50	1	0	0	50	1	0	0	50	1	0												
	Left-Through-Right		0							0				0				0													
Left-Right		0							0				0				0														
SOUTHBOUND	Left	247	2	136	0	247	136	0	254	2	140	0	254	2	140	0	254	2	140												
	Left-Through		0							0				0				0													
	Through	20	1	20	0	20	20	0	21	1	21	0	21	1	21	0	21	1	21												
	Through-Right		0							0				0				0													
	Right	341	1	263	0	341	263	0	351	1	270	0	351	1	270	0	351	1	270												
	Left-Through-Right		0							0				0				0													
Left-Right		0							0				0				0														
EASTBOUND	Left	157	1	157	0	157	157	0	162	1	162	0	162	1	162	0	162	1	162												
	Left-Through		0							0				0				0													
	Through	917	3	306	37	954	318	177	1122	3	374	37	1159	3	386	0	1159	3	386												
	Through-Right		0							0				0				0													
	Right	81	1	47	0	81	47	0	83	1	48	0	83	1	48	0	83	1	48												
	Left-Through-Right		0							0				0				0													
Left-Right		0							0				0				0														
WESTBOUND	Left	195	1	195	0	195	195	0	201	1	201	0	201	1	201	0	201	1	201												
	Left-Through		0							0				0				0													
	Through	1697	3	566	20	1717	572	283	2031	3	677	20	2051	3	684	0	2051	3	684												
	Through-Right		0							0				0				0													
	Right	52	1	0	0	52	0	0	54	1	0	0	54	1	0	0	54	1	0												
	Left-Through-Right		0							0				0				0													
Left-Right		0							0				0				0														
CRITICAL VOLUMES		North-South: 331			331			North-South: 340			340			North-South: 340			340														
		East-West: 723			729			East-West: 839			846			East-West: 846			846														
		SUM: 1054			1060			SUM: 1179			1186			SUM: 1186			SUM: 1186														
VOLUME/CAPACITY (V/C) RATIO:		0.703			0.707			0.786			0.791			0.791																	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.603			0.607			0.686			0.691			0.691																	
LEVEL OF SERVICE (LOS):		B			B			B			B			B																	

REMARKS:

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.004

Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: 0.005

Significant impacted? **NO**

$\Delta v/c$ after mitigation: 0.005

Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:		North-South Street: Beethoven Street			Year of Count: 2017			Ambient Growth: (%): 1				Conducted by: KOA Corp				Date: 8/31/17					
5		East-West Street: Jefferson Boulevard			Projection Year: 2020			Peak Hour: AM				Reviewed by: IDH				Project: Del Rey Pointe					
No. of Phases		2			2			2				2				2					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0			0				0				0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0
		EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?		2			2			2				2				2					
Override Capacity		0			0			0				0				0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through		0							0				0				0			
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through-Right		0							0				0				0			
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through-Right		0							0				0				0			
SOUTHBOUND	Left	59	1	53	62	121	101	2	63	1	58	62	125	1	106	0	125	1	106		
	Left-Through		0							0				0				0			
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through-Right		0							0				0				0			
	Right	46	0	53	34	80	101	5	52	0	58	34	86	0	106	0	86	0	106		
	Left-Through-Right		0							0				0				0			
EASTBOUND	Left	121	1	121	8	129	129	39	164	1	164	8	172	1	172	0	172	1	172		
	Left-Through		0							0				0				0			
	Through	1361	3	454	0	1361	454	115	1517	3	506	0	1517	3	506	0	1517	3	506		
	Through-Right		0							0				0				0			
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through-Right		0							0				0				0			
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through		0							0				0				0			
	Through	1341	2	493	0	1341	499	76	1458	2	545	0	1458	2	550	0	1458	2	550		
	Through-Right		1							1				1				1			
	Right	139	0	139	16	155	155	33	176	0	176	16	192	0	192	0	192	0	192		
	Left-Through-Right		0							0				0				0			
CRITICAL VOLUMES		North-South: 53 East-West: 614 SUM: 667			North-South: 101 East-West: 628 SUM: 729			North-South: 58 East-West: 709 SUM: 767				North-South: 106 East-West: 722 SUM: 828				North-South: 106 East-West: 722 SUM: 828					
VOLUME/CAPACITY (V/C) RATIO:		0.445			0.486			0.511				0.552				0.552					
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.345			0.386			0.411				0.452				0.452					
LEVEL OF SERVICE (LOS):		A			A			A				A				A					

REMARKS:

Version: 1I Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: **0.041**
Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: **0.041** Δv/c after mitigation: **0.041**
Significant impacted? **NO** Fully mitigated? **N/A**

Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	McConnell Avenue	Year of Count:	2017	Ambient Growth: (%):	1	Conducted by:	KOA Corp	Date:	8/31/17										
6	East-West Street:	Jefferson Boulevard	Projection Year:	2020	Peak Hour:	AM	Reviewed by:	IDH	Project:	Del Rey Pointe										
No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity			NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0											
MOVEMENT			EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT			FUTURE CONDITION W/ PROJECT			FUTURE W/ PROJECT W/ MITIGATION					
			Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left		51	1	51	0	51	51	0	53	1	53	0	53	1	53	0	53	1	53
	Left-Through		15	0	15	0	15	15	0	15	0	15	0	15	0	15	0	15	0	15
	Through			0							0				0				0	
	Through-Right		248	1	197	0	248	197	0	256	1	203	0	256	1	203	0	256	1	203
	Right			0							0				0				0	
SOUTHBOUND	Left-Through-Right			0							0				0				0	
	Left-Right			0							0				0				0	
	Left		43	1	43	0	43	43	0	44	1	44	0	44	1	44	0	44	1	44
	Left-Through		7	0	22	0	7	22	0	7	0	22	0	7	0	22	0	7	0	22
	Through		15	0	0	0	15	0	0	15	0	0	0	15	0	0	0	15	0	0
EASTBOUND	Through-Right			1							1				1				1	
	Right			0							0				0				0	
	Left-Through-Right			0							0				0				0	
	Left-Right			0							0				0				0	
	Left		8	1	8	0	8	8	0	8	1	8	0	8	1	8	0	8	1	8
WESTBOUND	Left-Through			0							0				0				0	
	Through		1396	3	361	62	1458	377	117	1555	3	401	62	1617	3	417	0	1617	3	417
	Through-Right		49	0	49	0	49	49	0	50	0	50	0	50	0	50	0	50	0	50
	Right			0							0				0				0	
	Left-Through-Right			0							0				0				0	
CRITICAL VOLUMES	Left-Right			0							0				0				0	
	Left		103	1	103	0	103	103	0	106	1	106	0	106	1	106	0	106	1	106
	Left-Through			0							0				0				0	
	Through		1275	2	470	16	1291	475	109	1423	2	521	16	1439	2	526	0	1439	2	526
	Through-Right		135	0	135	0	135	135	0	139	0	139	0	139	0	139	0	139	0	139
VOLUME/CAPACITY (V/C) RATIO:			0.479		0.482		0.517		0.521		0.521		0.521		0.521		0.521		0.521	
	V/C LESS ATSAC/ATCS ADJUSTMENT:		0.379		0.382		0.417		0.421		0.421		0.421		0.421		0.421		0.421	
	LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

REMARKS:

Version: 1I Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: **0.003**
Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: **0.004** Δv/c after mitigation: **0.004**
Significant impacted? **NO** Fully mitigated? **N/A**

I/S #:	North-South Street:		McConnell Avenue			Year of Count: 2017			Ambient Growth: (%): 1			Conducted by:		KOA Corp		Date: 8/31/17						
	6	East-West Street:		Jefferson Boulevard			Projection Year: 2020			Peak Hour: PM			Reviewed by:		IDH		Project: Del Rey Pointe					
No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					2			2			2			2			2					
Right Turns: FREE-1, NRTOR-2 or OLA-3?					NB-- 0 SB-- 0			NB-- 0 SB-- 0			NB-- 0 SB-- 0			NB-- 0 SB-- 0			NB-- 0 SB-- 0					
ATSAC-1 or ATSAC+ATCS-2?					EB-- 0 WB-- 0			EB-- 0 WB-- 0			EB-- 0 WB-- 0			EB-- 0 WB-- 0			EB-- 0 WB-- 0					
Override Capacity					2			2			2			2			2					
					0			0			0			0			0					
MOVEMENT					EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
					Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	69	1	69	0	69	69	0	71	1	71	0	71	1	71	0	71	1	71			
	Left-Through		0							0				0				0				
	Through	7	1	7	0	7	7	0	7	1	7	0	7	1	7	0	7	1	7			
	Through-Right		0							0				0				0				
	Right	97	1	14	0	97	14	0	100	1	14	0	100	1	14	0	100	1	14			
	Left-Through-Right		0							0				0				0				
Left-Right		0							0				0				0					
SOUTHBOUND	Left	118	1	118	0	118	118	0	122	1	122	0	122	1	122	0	122	1	122			
	Left-Through		0							0				0				0				
	Through	16	0	54	0	16	54	0	16	0	55	0	16	0	55	0	16	0	55			
	Through-Right		1							1				1				1				
	Right	38	0	0	0	38	0	0	39	0	0	0	39	0	0	0	39	0	0			
	Left-Through-Right		0							0				0				0				
Left-Right		0							0				0				0					
EASTBOUND	Left	7	1	7	0	7	7	0	7	1	7	0	7	1	7	0	7	1	7			
	Left-Through		0							0				0				0				
	Through	1082	3	296	38	1120	305	128	1243	3	337	38	1281	3	346	0	1281	3	346			
	Through-Right		1							1				1				1				
	Right	100	0	100	0	100	100	0	103	0	103	0	103	0	103	0	103	0	103			
	Left-Through-Right		0							0				0				0				
Left-Right		0							0				0				0					
WESTBOUND	Left	167	1	167	0	167	167	0	172	1	172	0	172	1	172	0	172	1	172			
	Left-Through		0							0				0				0				
	Through	1616	2	553	70	1686	577	157	1822	2	622	70	1892	2	646	0	1892	2	646			
	Through-Right		1							1				1				1				
	Right	44	0	44	0	44	44	0	45	0	45	0	45	0	45	0	45	0	45			
	Left-Through-Right		0							0				0				0				
Left-Right		0							0				0				0					
CRITICAL VOLUMES					North-South: 132			132			North-South: 136				136				North-South: 136			
					East-West: 560			584			East-West: 629				653				East-West: 653			
					SUM: 692			716			SUM: 765				789				SUM: 789			
VOLUME/CAPACITY (V/C) RATIO:					0.461			0.477			0.510				0.526				0.526			
V/C LESS ATSAC/ATCS ADJUSTMENT:					0.361			0.377			0.410				0.426				0.426			
LEVEL OF SERVICE (LOS):					A			A			A				A				A			

REMARKS:

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.016

Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: 0.016

Significant impacted? **NO**

$\Delta v/c$ after mitigation: 0.016

Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:		Centinela Avenue / Campus Ctr. Drive			Year of Count:		2017		Ambient Growth: (%):		1		Conducted by:		KOA Corp		Date:		8/31/17		
	7	East-West Street:		Jefferson Boulevard			Projection Year:		2020		Peak Hour:		AM		Reviewed by:		IDH		Project:		Del Rey Pointe	
No. of Phases			4			4			4			4			4			4				
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0				
Right Turns: FREE-1, NRTOR-2 or OLA-3?			NB--	1	SB--	3	NB--	1	SB--	3	NB--	1	SB--	3	NB--	1	SB--	3	NB--	1	SB--	3
			EB--	3	WB--	3	EB--	3	WB--	3	EB--	3	WB--	3	EB--	3	WB--	3	EB--	3	WB--	3
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2			2				
Override Capacity			0			0			0			0			0			0				
MOVEMENT			EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
			Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
NORTHBOUND	Left	36	2	20	0	36	20	0	37	2	20	0	37	2	20	0	37	2	20			
	Left-Through		0							0				0				0				
	Through	215	3	72	0	215	72	86	308	3	103	0	308	3	103	0	308	3	103			
	Through-Right		0							0				0				0				
	Right	96	1	0	0	96	0	0	99	1	0	0	99	1	0	0	99	1	0			
	Left-Through-Right		0							0				0				0				
	Left-Right		0							0				0				0				
SOUTHBOUND	Left	331	2	182	0	331	182	9	350	2	193	0	350	2	193	0	350	2	193			
	Left-Through		0							0				0				0				
	Through	396	2	198	0	396	198	61	469	2	235	0	469	2	235	0	469	2	235			
	Through-Right		0							0				0				0				
	Right	874	1	655	4	878	651	18	918	1	674	4	922	1	670	0	922	1	670			
	Left-Through-Right		0							0				0				0				
	Left-Right		0							0				0				0				
EASTBOUND	Left	398	2	219	15	413	227	34	444	2	244	15	459	2	252	0	459	2	252			
	Left-Through		0							0				0				0				
	Through	1031	3	344	48	1079	360	116	1178	3	393	48	1226	3	409	0	1226	3	409			
	Through-Right		0							0				0				0				
	Right	135	1	115	0	135	115	0	139	1	119	0	139	1	119	0	139	1	119			
	Left-Through-Right		0							0				0				0				
	Left-Right		0							0				0				0				
WESTBOUND	Left	137	2	75	0	137	75	0	141	2	78	0	141	2	78	0	141	2	78			
	Left-Through		0							0				0				0				
	Through	1381	3	460	12	1393	464	253	1676	3	559	12	1688	3	563	0	1688	3	563			
	Through-Right		0							0				0				0				
	Right	273	1	91	0	273	91	4	285	1	92	0	285	1	92	0	285	1	92			
	Left-Through-Right		0							0				0				0				
	Left-Right		0							0				0				0				
CRITICAL VOLUMES			North-South: 675 East-West: 679 SUM: 1354			North-South: 671 East-West: 691 SUM: 1362			North-South: 694 East-West: 803 SUM: 1497			North-South: 690 East-West: 815 SUM: 1505			North-South: 690 East-West: 815 SUM: 1505							
VOLUME/CAPACITY (V/C) RATIO:			0.985			0.991			1.089			1.095			1.095							
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.885			0.891			0.989			0.995			0.995							
LEVEL OF SERVICE (LOS):			D			D			E			E			E							

REMARKS:

Version: 1I Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: **0.006**
Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: **0.006** Δv/c after mitigation: **0.006**
Significant impacted? **NO** Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:		North-South Street: Centinela Avenue / Campus Ctr. Drive			Year of Count: 2017			Ambient Growth: (%): 1				Conducted by: KOA Corp				Date: 1/0/00						
7		East-West Street: Jefferson Boulevard			Projection Year: 2020			Peak Hour: PM				Reviewed by: IDH				Project: Del Rey Pointe						
No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					4			4			4			4			4					
Right Turns: FREE-1, NRTOR-2 or OLA-3?					NB-- 1 SB-- 3 EB-- 3 WB-- 3			NB-- 1 SB-- 3 EB-- 3 WB-- 3			NB-- 1 SB-- 3 EB-- 3 WB-- 3			NB-- 1 SB-- 3 EB-- 3 WB-- 3			NB-- 1 SB-- 3 EB-- 3 WB-- 3					
ATSAC-1 or ATSAC+ATCS-2?					2			2			2			2			2					
Override Capacity					0			0			0			0			0					
MOVEMENT					EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
					Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	121	2	67	0	121	67	0	125	2	69	0	125	2	69	0	125	2	69			
	Left-Through		0							0				0				0				
	Through	324	3	108	0	324	108	81	415	3	138	0	415	3	138	0	415	3	138			
	Through-Right		0							0				0				0				
	Right	220	1	0	0	220	0	0	227	1	0	0	227	1	0	0	227	1	0			
	Left-Through-Right		0							0				0				0				
	Left-Right		0							0				0				0				
SOUTHBOUND	Left	534	2	294	0	534	294	17	567	2	312	0	567	2	312	0	567	2	312			
	Left-Through		0							0				0				0				
	Through	212	2	106	0	212	106	140	358	2	179	0	358	2	179	0	358	2	179			
	Through-Right		0							0				0				0				
	Right	594	1	332	17	611	344	7	619	1	323	17	636	1	335	0	636	1	335			
	Left-Through-Right		0							0				0				0				
	Left-Right		0							0				0				0				
EASTBOUND	Left	477	2	262	9	486	267	47	538	2	296	9	547	2	301	0	547	2	301			
	Left-Through		0							0				0				0				
	Through	1350	3	450	29	1379	460	306	1697	3	566	29	1726	3	575	0	1726	3	575			
	Through-Right		0							0				0				0				
	Right	48	1	0	0	48	0	0	49	1	0	0	49	1	0	0	49	1	0			
	Left-Through-Right		0							0				0				0				
	Left-Right		0							0				0				0				
WESTBOUND	Left	107	2	59	0	107	59	0	110	2	61	0	110	2	61	0	110	2	61			
	Left-Through		0							0				0				0				
	Through	911	3	304	53	964	321	157	1096	3	365	53	1149	3	383	0	1149	3	383			
	Through-Right		0							0				0				0				
	Right	233	1	0	0	233	0	7	247	1	0	0	247	1	0	0	247	1	0			
	Left-Through-Right		0							0				0				0				
	Left-Right		0							0				0				0				
CRITICAL VOLUMES					North-South: 402 East-West: 566 SUM: 968			North-South: 411 East-West: 588 SUM: 999			North-South: 450 East-West: 661 SUM: 1111			North-South: 450 East-West: 684 SUM: 1134			North-South: 450 East-West: 684 SUM: 1134					
VOLUME/CAPACITY (V/C) RATIO:					0.704			0.727			0.808			0.825			0.825					
V/C LESS ATSAC/ATCS ADJUSTMENT:					0.604			0.627			0.708			0.725			0.725					
LEVEL OF SERVICE (LOS):					B			B			C			C			C					

REMARKS:

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: **0.023**
Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: **0.017** Δv/c after mitigation: **0.017**
Significant impacted? **NO** Fully mitigated? **N/A**

I/S #:	North-South Street:		Centinela Avenue / Inglewood Boulevard		Year of Count:		2017		Ambient Growth: (%):		1		Conducted by:		KOA Corp		Date:		8/31/17	
	8	East-West Street:		Jefferson Boulevard		Projection Year:		2020		Peak Hour:		AM		Reviewed by:		IDH		Project:		Del Rey Pointe
No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			3		3		3		3		3		3		3		3		3	
Right Turns: FREE-1, NRTOR-2 or OLA-3?			NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0	
ATSAC-1 or ATSAC+ATCS-2?			2		2		2		2		2		2		2		2		2	
Override Capacity			0		0		0		0		0		0		0		0		0	
MOVEMENT			EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
			Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	626	2	219	1	627	219	25	670	2	234	1	671	2	235	0	671	2	235	
	Left-Through		1							1				1				1		
	Through	759	0	784	0	759	784	53	835	0	874	0	835	0	874	0	835	0	874	
	Through-Right		1							1				1				1		
	Right	25	0	25	0	25	25	13	39	0	39	0	39	0	39	0	39	0	39	
	Left-Through-Right		0							0				0				0		
Left-Right		0								0				0				0		
SOUTHBOUND	Left	190	1	190	0	190	190	6	202	1	202	0	202	1	202	0	202	1	202	
	Left-Through		0							0				0				0		
	Through	343	1	277	0	343	278	30	383	1	309	0	383	1	310	0	383	1	310	
	Through-Right		1							1				1				1		
	Right	211	0	211	1	212	212	18	235	0	235	1	236	0	236	0	236	0	236	
	Left-Through-Right		0							0				0				0		
Left-Right		0								0				0				0		
EASTBOUND	Left	93	1	93	5	98	98	5	101	1	101	5	106	1	106	0	106	1	106	
	Left-Through		0							0				0				0		
	Through	895	2	448	31	926	463	115	1037	2	519	31	1068	2	534	0	1068	2	534	
	Through-Right		1							1				1				1		
	Right	537	0	428	12	549	440	5	558	0	441	12	570	0	453	0	570	0	453	
	Left-Through-Right		0							0				0				0		
Left-Right		0								0				0				0		
WESTBOUND	Left	47	1	47	0	47	47	7	55	1	55	0	55	1	55	0	55	1	55	
	Left-Through		0							0				0				0		
	Through	959	2	355	9	968	358	214	1202	2	439	9	1211	2	442	0	1211	2	442	
	Through-Right		1							1				1				1		
	Right	107	0	107	0	107	107	4	114	0	114	0	114	0	114	0	114	0	114	
	Left-Through-Right		0							0				0				0		
Left-Right		0								0				0				0		
CRITICAL VOLUMES			North-South: 1061 East-West: 495 SUM: 1556		North-South: 1062 East-West: 510 SUM: 1572		North-South: 1183 East-West: 574 SUM: 1757		North-South: 1184 East-West: 589 SUM: 1773		North-South: 1184 East-West: 589 SUM: 1773		North-South: 1184 East-West: 589 SUM: 1773		North-South: 1184 East-West: 589 SUM: 1773		North-South: 1184 East-West: 589 SUM: 1773			
VOLUME/CAPACITY (V/C) RATIO:			1.092		1.103		1.233		1.233		1.244		1.244		1.244		1.244		1.244	
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.992		1.003		1.133		1.133		1.144		1.144		1.144		1.144		1.144	
LEVEL OF SERVICE (LOS):			E		F		F		F		F		F		F		F		F	

REMARKS:

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.011

Significant impacted? **YES**

PROJECT IMPACT

Change in v/c due to project: 0.011

Significant impacted? **YES**

$\Delta v/c$ after mitigation: 0.011

Fully mitigated? **NO**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Centinela Avenue / Inglewood Boulevard	Year of Count:	2017	Ambient Growth: (%):	1	Conducted by:	KOA Corp	Date:	8/31/17									
8	East-West Street:	Jefferson Boulevard	Projection Year:	2020	Peak Hour:	PM	Reviewed by:	IDH	Project:	Del Rey Pointe									
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		1	1		1		1		1										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0										
Override Capacity		2	2		2		2		2										
		0	0		0		0		0										
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	390	2	137	5	395	138	7	409	2	143	5	414	2	145	0	414	2	145
	Left-Through		1							1				1				1	
	Through	338	0	376	0	338	376	53	401	0	453	0	401	0	453	0	401	0	453
	Through-Right		1							1				1				1	
	Right	38	0	38	0	38	38	13	52	0	52	0	52	0	52	0	52	0	52
SOUTHBOUND	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	Left	190	1	190	0	190	190	4	200	1	200	0	200	1	200	0	200	1	200
	Left-Through		0							0				0				0	
	Through	712	1	409	0	712	411	65	799	1	457	0	799	1	460	0	799	1	460
EASTBOUND	Through-Right		1							1				1				1	
	Right	105	0	105	5	110	110	7	115	0	115	5	120	0	120	0	120	0	120
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	Left	130	1	130	3	133	133	19	153	1	153	3	156	1	156	0	156	1	156
WESTBOUND	Left-Through		0							0				0				0	
	Through	1098	2	549	19	1117	559	275	1406	2	703	19	1425	2	713	0	1425	2	713
	Through-Right		1							1				1				1	
	Right	969	0	901	7	976	907	29	1027	0	956	7	1034	0	962	0	1034	0	962
	Left-Through-Right		0							0				0				0	
CRITICAL VOLUMES	Left-Right		0							0				0				0	
	Left	31	1	31	0	31	31	16	48	1	48	0	48	1	48	0	48	1	48
	Left-Through		0							0				0				0	
	Through	746	2	314	42	788	328	150	919	2	376	42	961	2	390	0	961	2	390
	Through-Right		1							1				1				1	
VOLUME/CAPACITY (V/C) RATIO:	Right	197	0	197	0	197	197	5	208	0	208	0	208	0	208	0	208	0	208
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	North-South:	785	North-South:	787	North-South:	910	North-South:	913	North-South:	913									
	East-West:	932	East-West:	938	East-West:	1004	East-West:	1010	East-West:	1010									
SUM:	1717	SUM:	1725	SUM:	1914	SUM:	1923	SUM:	1923										
	1.205	1.211	1.343	1.349	1.349														
	1.105	1.111	1.243	1.249	1.249														
	F	F	F	F	F														

REMARKS:

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: **0.006**
Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: **0.006** Δv/c after mitigation: **0.006**
Significant impacted? **NO** Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	I-405 SB Ramps	Year of Count:	2017	Ambient Growth: (%):	1	Conducted by:	KOA Corp	Date:	8/31/17										
9	East-West Street:	Jefferson Boulevard	Projection Year:	2020	Peak Hour:	AM	Reviewed by:	IDH	Project:	Del Rey Pointe										
No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity		0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200											
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOUTHBOUND	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left	109	1	109	0	109	109	0	112	1	112	0	112	1	112	0	112	1	112	
	Left-Through	2	0	366	0	2	367	0	2	0	439	0	2	0	440	0	2	0	440	
	Through	730	1	0	2	732	0	123	875	1	0	2	877	1	0	0	877	1	0	
EASTBOUND	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left	422	2	232	7	429	236	36	471	2	259	7	478	2	263	0	478	2	263	
WESTBOUND	Left-Through	590	1	315	17	607	323	68	676	1	364	17	693	1	372	0	693	1	372	
	Through	355	1	0	7	362	0	49	415	1	0	7	422	1	0	0	422	1	0	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CRITICAL VOLUMES	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left	385	2	212	0	385	212	0	397	2	218	0	397	2	218	0	397	2	218	
	Left-Through	867	2	434	8	875	438	109	1002	2	501	8	1010	2	505	0	1010	2	505	
VOLUME/CAPACITY (V/C) RATIO: V/C LESS ATSAC/ATCS ADJUSTMENT: LEVEL OF SERVICE (LOS):	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
North-South:		366	North-South:		367	North-South:		439	North-South:		440	North-South:		440	North-South:		440	North-South:		440
East-West:		666	East-West:		674	East-West:		760	East-West:		768	East-West:		768	East-West:		768	East-West:		768
SUM:		1032	SUM:		1041	SUM:		1199	SUM:		1208	SUM:		1208	SUM:		1208	SUM:		1208
VOLUME/CAPACITY (V/C) RATIO:		0.860	VOLUME/CAPACITY (V/C) RATIO:		0.868	VOLUME/CAPACITY (V/C) RATIO:		0.999	VOLUME/CAPACITY (V/C) RATIO:		1.007	VOLUME/CAPACITY (V/C) RATIO:		1.007	VOLUME/CAPACITY (V/C) RATIO:		1.007	VOLUME/CAPACITY (V/C) RATIO:		1.007
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.760	V/C LESS ATSAC/ATCS ADJUSTMENT:		0.768	V/C LESS ATSAC/ATCS ADJUSTMENT:		0.899	V/C LESS ATSAC/ATCS ADJUSTMENT:		0.907	V/C LESS ATSAC/ATCS ADJUSTMENT:		0.907	V/C LESS ATSAC/ATCS ADJUSTMENT:		0.907	V/C LESS ATSAC/ATCS ADJUSTMENT:		0.907
LEVEL OF SERVICE (LOS):		C	LEVEL OF SERVICE (LOS):		C	LEVEL OF SERVICE (LOS):		D	LEVEL OF SERVICE (LOS):		E	LEVEL OF SERVICE (LOS):		E	LEVEL OF SERVICE (LOS):		E	LEVEL OF SERVICE (LOS):		E

REMARKS:

Version: 11 Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: **0.008**
Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: **0.008** Δv/c after mitigation: **0.008**
Significant impacted? **NO** Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	I-405 SB Ramps	Year of Count:	2017	Ambient Growth: (%)	1	Conducted by:	KOA Corp	Date:	8/31/17									
9	East-West Street:	Jefferson Boulevard	Projection Year:	2020	Peak Hour:	PM	Reviewed by:	IDH	Project:	Del Rey Pointe									
No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity		0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200									
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTHBOUND	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left	62	1	61	0	62	62	0	64	1	64	0	64	1	64	0	64	1	64
	Left-Through	3	0	61	0	3	65	0	3	0	105	0	3	0	109	0	3	0	109
	Through	118	1	0	8	126	0	85	207	1	0	8	215	1	0	0	215	1	0
EASTBOUND	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left	284	2	156	4	288	158	103	396	2	218	4	400	2	220	0	400	2	220
WESTBOUND	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	932	1	466	10	942	471	87	1047	1	565	10	1057	1	570	0	1057	1	570
	Through-Right	454	1	454	4	458	458	180	648	1	0	4	652	1	0	0	652	1	0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRITICAL VOLUMES	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left	593	2	326	0	593	326	0	611	2	336	0	611	2	336	0	611	2	336
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	1034	2	517	34	1068	534	91	1156	2	578	34	1190	2	595	0	1190	2	595
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VOLUME/CAPACITY (V/C) RATIO:	North-South:	61	North-South:	65	North-South:	105	North-South:	109	North-South:	109									
	East-West:	792	East-West:	797	East-West:	901	East-West:	906	East-West:	906									
	SUM:	853	SUM:	862	SUM:	1006	SUM:	1015	SUM:	1015									
V/C LESS ATSAC/ATCS ADJUSTMENT:	0.711	0.718	0.838	0.846	0.846														
	0.611	0.618	0.738	0.746	0.746														
	LEVEL OF SERVICE (LOS):	B	B	C	C	C													

REMARKS:

Version: 11 Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: **0.007**
Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: **0.008** Δv/c after mitigation: **0.008**
Significant impacted? **NO** Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	I-405 NB Ramps	Year of Count:	2017	Ambient Growth: (%)	1	Conducted by:	KOA Corp	Date:	8/31/17									
10	East-West Street:	Jefferson Boulevard	Projection Year:	2020	Peak Hour:	AM	Reviewed by:	IDH	Project:	Del Rey Pointe									
No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity		0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200									
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	183	1	183	4	187	187	48	237	1	237	4	241	1	241	0	241	1	241
	Left-Through		0							0				0				0	
	Through	265	0	597	0	265	597	0	273	0	615	0	273	0	615	0	273	0	615
	Through-Right		0							0				0				0	
	Right	332	0	0	0	332	0	0	342	0	0	0	342	0	0	0	342	0	0
SOUTHBOUND	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EASTBOUND	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	Left	422	2	232	7	429	236	36	471	2	259	7	478	2	263	0	478	2	263
WESTBOUND	Left-Through		0							0				0				0	
	Through	764	2	382	16	780	390	68	855	2	428	16	871	2	436	0	871	2	436
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
CRITICAL VOLUMES	Left-Right		0							0				0				0	
	Left	385	1	385	0	385	385	0	397	1	397	0	397	1	397	0	397	1	397
	Left-Through		0							0				0				0	
	Through	676	1	338	4	680	340	60	756	1	378	4	760	1	380	0	760	1	380
	Through-Right		1							1				1				1	
VOLUME/CAPACITY (V/C) RATIO:	Right	154	1	154	0	154	154	0	159	1	159	0	159	1	159	0	159	1	159
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	North-South:	597	North-South:	597	North-South:	615	North-South:	615	North-South:	615									
	East-West:	767	East-West:	775	East-West:	825	East-West:	833	East-West:	833									
SUM:	1364	SUM:	1372	SUM:	1440	SUM:	1448	SUM:	1448										
	1.137	1.143	1.200	1.207	1.207														
	1.037	1.043	1.100	1.107	1.107														
	F	F	F	F	F														

REMARKS:

Version: 11 Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: **0.006**
Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: **0.007** Δv/c after mitigation: **0.007**
Significant impacted? **NO** Fully mitigated? **N/A**

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	I-405 NB Ramps	Year of Count:	2017	Ambient Growth: (%)	1	Conducted by:	KOA Corp	Date:	8/31/17									
10	East-West Street:	Jefferson Boulevard	Projection Year:	2020	Peak Hour:	PM	Reviewed by:	IDH	Project:	Del Rey Pointe									
No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity		0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200	0 0 0 0 2 1200									
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	311	1	311	16	327	327	11	331	1	331	16	347	1	347	0	347	1	347
	Left-Through	6	0	466	0	6	466	0	6	0	480	0	6	0	480	0	6	0	480
	Through		0							0				0				0	
	Through-Right	460	0	0	0	460	0	0	474	0	0	0	474	0	0	0	474	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	284	2	156	4	288	158	103	396	2	218	4	400	2	220	0	400	2	220
	Left-Through		0							0				0				0	
	Through	955	2	478	10	965	483	87	1071	2	536	10	1081	2	541	0	1081	2	541
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	593	1	593	0	593	593	0	611	1	611	0	611	1	611	0	611	1	611
	Left-Through		0							0				0				0	
	Through	741	1	371	18	759	380	80	843	1	422	18	861	1	431	0	861	1	431
	Through-Right		1							1				1				1	
	Right	152	1	152	0	152	152	0	157	1	157	0	157	1	157	0	157	1	157
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South: 466 East-West: 1071 SUM: 1537	North-South: 466 East-West: 1076 SUM: 1542	North-South: 480 East-West: 1147 SUM: 1627	North-South: 480 East-West: 1152 SUM: 1632	North-South: 480 East-West: 1152 SUM: 1632	North-South: 480 East-West: 1152 SUM: 1632	North-South: 480 East-West: 1152 SUM: 1632	North-South: 480 East-West: 1152 SUM: 1632	North-South: 480 East-West: 1152 SUM: 1632									
VOLUME/CAPACITY (V/C) RATIO:		1.281	1.285	1.356	1.360	1.360	1.360	1.360	1.360	1.360									
V/C LESS ATSAC/ATCS ADJUSTMENT:		1.181	1.185	1.256	1.260	1.260	1.260	1.260	1.260	1.260									
LEVEL OF SERVICE (LOS):		F	F	F	F	F	F	F	F	F									

REMARKS:

Version: 11 Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: **0.004**
Significant impacted? **NO**

PROJECT IMPACT

Change in v/c due to project: **0.004** Δv/c after mitigation: **0.004**
Significant impacted? **NO** Fully mitigated? **N/A**

APPENDIX D
Recommended Mitigation Measures LOS Worksheets

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Centinela Avenue / Inglewood Boulevard	Year of Count:	2017	Ambient Growth: (%):	1	Conducted by:	KOA Corp	Date:	3/23/17									
8	East-West Street:	Jefferson Boulevard	Projection Year:	2020	Peak Hour:	AM	Reviewed by:	IDH	Project:	Del Rey Pointe									
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		1	1		1		1		1										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0										
Override Capacity		2	2		2		2		2										
		0	0		0		0		0										
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	626	2	219	1	627	219	25	670	2	234	1	671	2	235	0	671	2	235
	Left-Through		1							1				1				1	
	Through	759	0	784	0	759	784	53	835	0	874	0	835	0	874	0	835	0	874
	Through-Right		1							1				1				1	
	Right	25	0	25	0	25	25	13	39	0	39	0	39	0	39	0	39	0	39
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	190	1	190	0	190	190	6	202	1	202	0	202	1	202	0	202	1	202
	Left-Through		0							0				0				0	
	Through	343	1	277	0	343	278	30	383	1	309	0	383	1	310	0	383	1	310
	Through-Right		1							1				1				1	
	Right	211	0	211	1	212	212	18	235	0	235	1	236	0	236	0	236	0	236
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	93	1	93	4	97	97	5	101	1	101	4	105	1	105	0	105	1	105
	Left-Through		0							0				0				0	
	Through	895	2	448	25	920	460	115	1037	2	519	25	1062	2	531	0	1062	2	531
	Through-Right		1							1				1				1	
	Right	537	0	428	10	547	438	5	558	0	441	10	568	0	451	0	568	0	451
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	47	1	47	0	47	47	7	55	1	55	0	55	1	55	0	55	1	55
	Left-Through		0							0				0				0	
	Through	959	2	355	8	967	358	214	1202	2	439	8	1210	2	441	0	1210	2	441
	Through-Right		1							1				1				1	
	Right	107	0	107	0	107	107	4	114	0	114	0	114	0	114	0	114	0	114
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South: 1061 East-West: 495 SUM: 1556	North-South: 1062 East-West: 507 SUM: 1569	North-South: 1183 East-West: 574 SUM: 1757	North-South: 1184 East-West: 586 SUM: 1770	North-South: 1184 East-West: 586 SUM: 1770	North-South: 1184 East-West: 586 SUM: 1770	North-South: 1184 East-West: 586 SUM: 1770	North-South: 1184 East-West: 586 SUM: 1770	North-South: 1184 East-West: 586 SUM: 1770									
VOLUME/CAPACITY (V/C) RATIO:		1.092	1.101	1.233	1.242	1.242	1.242	1.242	1.242	1.242									
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.992	1.001	1.133	1.142	1.142	1.142	1.142	1.142	1.142									
LEVEL OF SERVICE (LOS):		E	F	F	F	F	F	F	F	F									

REMARKS: Scenario: TDM - 20% Reduction

Version: 1i Beta; 8/4/2011

EXISTING + PROJECT IMPACT

Change in v/c due to project: 0.009
Significant impacted? NO

PROJECT IMPACT

Change in v/c due to project: 0.009
Significant impacted? NO
Δv/c after mitigation: 0.009
Fully mitigated? N/A

Fully mitigated?	N/A
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APPENDIX E
Traffic Signal Warrant Worksheet

INTERSECTION: Beethoven Street & Coral Tree Place

Figure 4C-101 (CA). Traffic Signal Warrants Worksheets (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume

SATISFIED* YES ☐ NO ☐

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More	5:00 PM	4:00 PM	3:00 PM	6:00 PM	Hour
Both Approaches - Major Street	x						
Higher Approach - Minor Street	x						

*All plotted points fall above the curves in Figure 4C-1. (Urban Areas)	YES ☐	NO ☐
<u>OR</u> , All plotted points fall above the curves in Figure 4C-2. (Rural Areas)	YES ☐	NO ☐

WARRANT 3 - Peak Hour
(Part A or Part B must be satisfied)

SATISFIED YES ☐ NO ☒

PART A

SATISFIED YES ☐ NO ☒

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1 The total delay experienced for traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u> <i>8.6 seconds in delay & 0 vehicle-hours of delay</i>	YES ☐	NO ☒
2 The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	YES ☒	NO ☐
3 The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	YES ☐	NO ☒

PART B

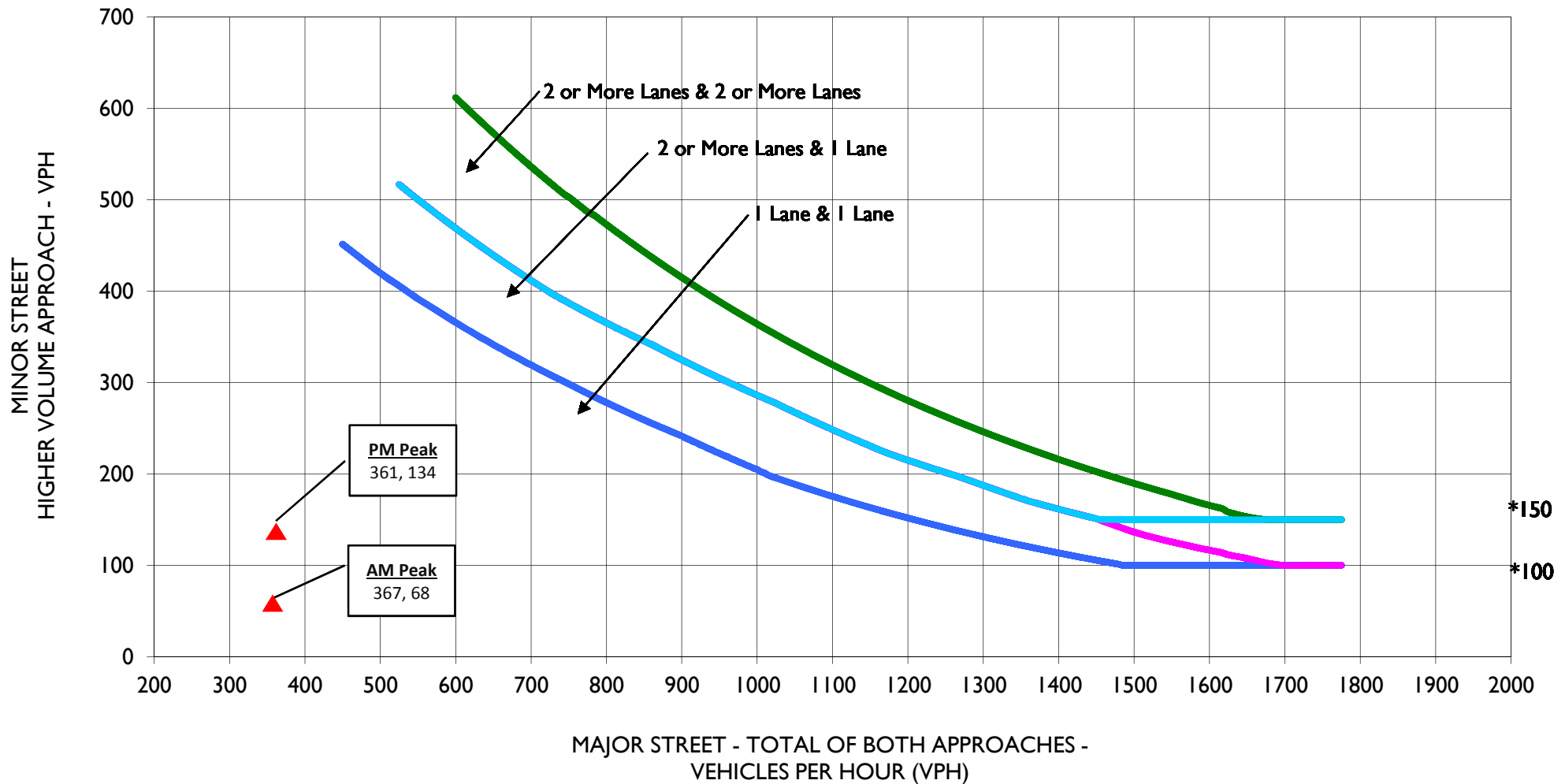
SATISFIED YES ☐ NO ☒

APPROACH LANES	One	2 or More	am peak	pm peak
Both Approaches - Major Street	x		367	361
Higher Approach - Minor Street	x		68	134

The plotted point falls above the curve in Figure 4C-3.	YES ☐	NO ☒
<u>OR</u> , The plotted point falls above the curve in Figure 4C-4.	YES ☐	NO ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

**Figure 4C-3 Warrant 3
Beethoven Street and Coral Tree Place
AM (PM) Peak hour Traffic Signal Warrant Based on
California Manual on Uniform Traffic Control Devices, 2014
Future post-Project Conditions**



***Note:** 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

LEGEND

- ▲ Beethoven Street (1 Lane Major Street): VPH
- ▲ Coral Tree Place (1 Lane Minor Street): VPH

Peak Hour Volumes Satisfy Warrants? NO