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MONTEREY PARK ORANGE ONTARIO SAN DIEGO LA QUINTA CULVER CITY

TECHNICAL MEMORANDUM

Date: August 13, 2021

To: Tony Bu – City of El Monte

Cc: Vincent Tsoi – SLSD

From: Brian Marchetti, AICP

Subject: Supplemental Traffic Review – Modified Site Plan for 4304 Temple City Boulevard Project

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The proposed project at 4304 Temple City Boulevard that was analyzed in the submitted traffic and vehicle miles traveled (VMT) studies previously had 68,457 square feet of floor area that consisted of two buildings, each with its own office and warehouse use (51,609 square feet of warehousing space and 16,848 square feet of related office space).

A driveway at the west side of the site would provide vehicle access from Temple City Boulevard. Project access details have not changed with the revised site plan.

The revised project site plan dated August 5, 2021 provides for the following modified floor area totals, all of which are lower than floor areas analyzed in the final traffic impact study:

- Office area: 14,209 sq.ft., a reduction of 8.4 percent versus the analyzed site plan
- Warehouse area: 48,663 sq.ft, a reduction of 5.7 percent versus the analyzed site plan

The reduction in floor area for both categories of project site land uses generally indicates that the submitted traffic impact study (TIS) and the vehicle miles traveled (VMT) study are conservative, and the change in the project would not create any new significant impacts. More review to verify this is provided below.

TIS Effects

The project traffic impact study (TIS) was completed by applying the previous site plan, and is dated March 2021. No significant local circulation impacts were found from that analysis, using all applicable local transportation impact guidelines of the City of El Monte and neighboring cities. The reduction in project size would lower the potential project trip generation, and therefore the TIS remains valid and conservative based on the revised project size.

VMT Analysis Effects

The vehicle miles traveled (VMT) analysis was completed and summarized in a tech memo dated January 22, 2021. The analysis determined that VMT impacts would occur due to the project, based on a review of regional model data and the San Gabriel Valley Council of Governments (SGVCOG) VMT Evaluation Tool. Impact reduction measures were identified and with the implementation of the recommended Transportation Demand Management (TDM) program defined in that document, project VMT impacts would be reduced to a less than significant level.

A review of the effect of the revised land use area totals for the project site plan indicates that the baseline pre-mitigation VMT values would not change with the project. Therefore, the previous VMT analysis remains valid for the proposed project.

TRAFFIC IMPACT STUDY
MANUFACTURING WAREHOUSE

4304 Temple City Boulevard, El Monte, CA

March 2021

Prepared For:

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1. INTRODUCTION

The proposed Project consists of two buildings each with its own office and warehouse at 4303 Temple City Boulevard, within the City of El Monte. KOA was retained by D&K Wellteam LLC to analyze the potential traffic impacts associated with the Project. The scope and methodologies used for this traffic study were developed in consultation with the City of El Monte, with additional consultation with the City of Rosemead and the City of Temple City.

1.1 PROJECT DESCRIPTION

The proposed Project would have 68,457 square feet of floor area that consists of two buildings each with its own office and warehouse use (51,609 square feet of warehousing space and 16,848 square feet of related office space), to be located at 4303 Temple City Boulevard in the city of El Monte. The project site buildings would have 44,323 square feet and 19,184 square feet of total floor space. The buildings would be tilt-up type. A driveway at the west side of the site would provide vehicle access from Temple City Boulevard.

The current project site is vacant. There are not specific tenants identified for the project industrial spaces at this time, so specific operational characteristics and hours of operations cannot be defined. The proposed use would generally generate trips from employee vehicles, and small and large delivery trucks. There are spaces provided in the site plan for larger articulated tractor-trailer type vehicles. Smaller delivery vehicles can also use these spaces as needed. Employees will park in the 78 parking spaces provided on the site, adjacent to the buildings.

Four loading spaces of 15-feet by 25-feet size and three spaces of 15 feet by 60 feet size would be provided. 74 total standard parking spaces and four accessible parking spaces will be provided on-site. Four bicycle parking spaces will be provided.

The Project is anticipated to be completed and occupied by the end of the year 2021. The proposed Project site plan is illustrated on Figure 1.

1.2 PROJECT STUDY AREA

The project study area, as defined through consultation with City staff, includes the following study intersections:

Intersection	Jurisdiciton
1) Temple City Boulevard/Valley Boulevard	City of Rosemead
2) Baldwin Avenue/ Valley Boulevard	City of El Monte
3) Temple City Boulevard/ Loftus Drive	City of Rosemead
4) Baldwin Avenue/ Loftus Drive	City of El Monte
5) Temple City Boulevard/ Olney Street	City of Rosemead

Figure 2 illustrates the study area and the locations of the study intersections.

FIGURE
1

4304 Temple City Boulevard Warehouse
Site Plan

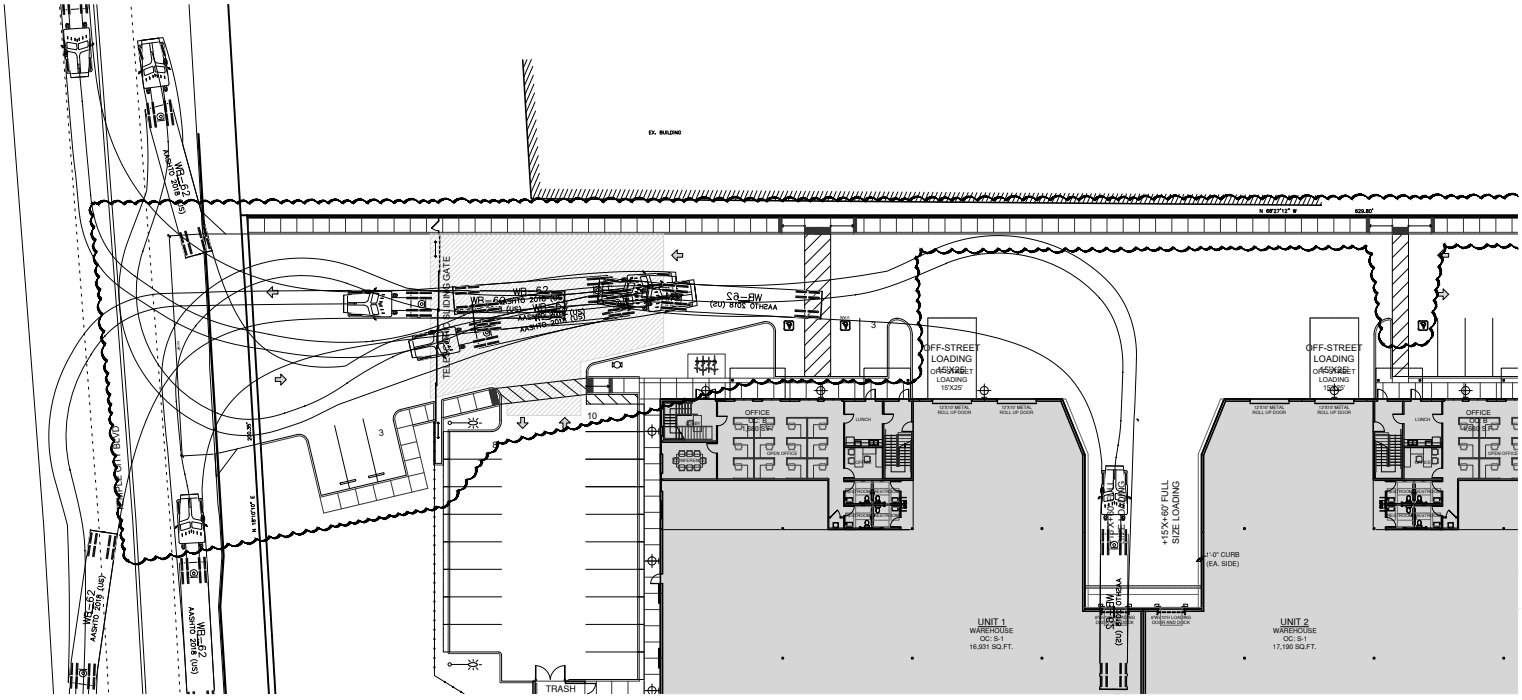
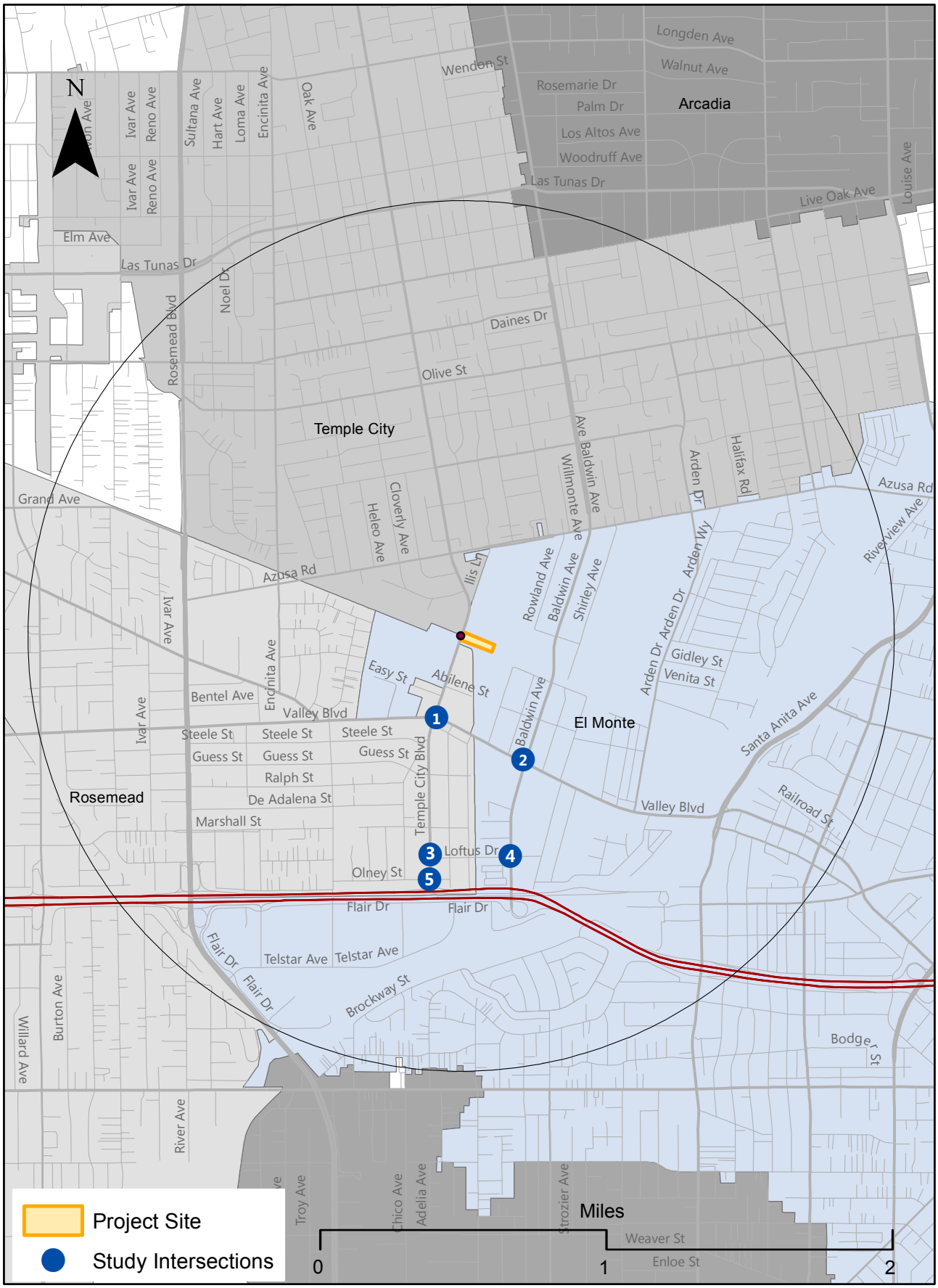


FIGURE 2

4304 Temple City Boulevard Warehouse
Study Intersection Locations



1.3 ANALYZED SCENARIOS

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

- Existing Conditions
- Existing with-Project Conditions
- Future without-Project Conditions
- Future with-Project Conditions

1.4 ANALYSIS METHODOLOGY

KOA coordinated with City staff as the first step in the traffic analysis, in order to define the study area and other major details. The following text introduces the study methodology framework for this report.

Existing Conditions

Traffic counts were conducted at the study intersections for weekday AM and PM peak periods. The traffic counts sources and the existing level of service (LOS) at each of the study intersections are discussed in Section 2 of this report.

Project Trip Generation and Distribution

Project trip generation was derived from rates defined by *Trip Generation, 10th Edition*, published by the Institute of Transportation Engineers. The trip generation and distribution calculations are discussed in Section 3 of this report.

Existing with-Project Conditions

Based on the projected Project traffic and the traffic count totals, an existing plus-Project conditions scenario was analyzed to review potential impacts based on existing baseline conditions. The level of service for existing with-Project conditions at the study intersections is discussed in Section 4 of this report.

Future without-Project Conditions

In order to account for traffic growth in the study area, an ambient/background traffic growth rate was applied to the existing traffic counts. In addition, traffic from related/area projects (approved and pending developments) was added to the study area. The levels of service at the study intersections for future without-Project conditions are discussed in Section 5 of this report.

Future with-Project Conditions

Trips from the proposed Project were added to the future without-Project volumes to define future with-Project traffic volume conditions. The levels of service for this scenario are discussed in Section 6 of this report.

Level of Service Methodology

For analysis of level of service (LOS) at signalized intersections, the City of El Monte, the City of Rosemead and the City of Temple City have designated the Intersection Capacity Utilization (ICU) methodology as their desired tool. The concept of roadway level of service under the ICU methodology is calculated as the volume of vehicles that pass through the facility divided by the capacity of that facility. A 10% adjustment to the clearance and loss time factor based on the critical phases of the signalized control were included in the traffic analysis. A facility is "at capacity" (ICU value of 1.00 or greater) when extreme congestion occurs. This value is a function of hourly volumes, signal phasing, and approach lane configuration on each leg of the intersection.

This volume/capacity ratio value is based upon volumes by lane, signal phasing, and approach lane configuration with a capacity of 1,600 vehicles per lane for all through and turn lanes, and a capacity of 2,880 for dual turn lanes. A 10 percent adjustment to the clearance and loss time factor based on the critical phases of the signalized control was included in the traffic analysis.

For intersections 1 and 2, which are stop-controlled, LOS was analyzed based on the Highway Capacity Manual (HCM) unsignalized intersection methodology. This method calculates roadway level of service based on intersection delay, defined as the worst-case approach delay experienced by users of the intersection who must stop or yield to free-flow through traffic. The method uses a "gap acceptance" technique to predict driver delay.

A facility with LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. The upper limit of LOS E is typically defined as the operating capacity of a roadway.

Table 1 defines the level of service criteria applied to the study intersections.

Table 1- Level of Service Definitions

Level of Service	Definition	Signalized: Volume to Capacity Ratio	Unsignalized: Average Control Delay (seconds/vehicle)
A	Excellent Operation. Free-flow Speeds prevail. Vehicles are almost unimpeded in their ability to maneuver within the traffic stream.	0 - .600	≤10
B	Very good operation. Reasonably free-flow speeds are maintained. The ability to maneuver within traffic is only slightly restricted.	.601 to .700	>10 to 15
C	Good operation. Flow with speeds at or near free-flow speed of the roadway. Freedom to maneuver within the traffic stream is noticeably restricted and lane changes require more care and vigilance on the part of the driver.	.701-.800	>15 to 25
D	Fair operation. Speeds begin to decline sightly with increasing flows. In this range, desnity begins to increase somewhat more quickly with increasing flow. Freedom to maneuver within the traffic stream is noticeably limited.	.801-.900	>25 to 35

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., 2000 and Interim Manuals on Highway Capacity, NCHRP Circular 2012, 1982.

Level of Service	Definition	Signalized: Volume to Capacity Ratio	Unsignalized: Average Control Delay (seconds/vehicle)
E	Poor operation. Operation at capacity with no usable gaps in the traffic stream. Any disruption to the traffic stream has little or no room to dissipate.	.901-1.000	>35 to 50
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.	>1.000	> 50
Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., 2000 and Interim Manuals on Highway Capacity, NCHRP Circular 2012, 1982.			

Significant 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 acceptable level of service values and project traffic will cause a further decline below a threshold. Determination of potential significant traffic impacts due to the proposed Project is discussed in Section 7 of this report.

2. EXISTING CONDITIONS

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

2.1 EXISTING ROADWAY SYSTEM

The key roadways within the study area are described here. The discussion is limited to specific roadways that traverse the study intersections and provide access to the Project site. Figure 3 illustrates the existing traffic controls and approach lane geometries at the study intersections.

Baldwin Avenue- This north-south thoroughfare is classified as a major arterial, and also functions as a truck route. In the City of El Monte General Plan. It is classified as a primary arterial in the City of Temple City General Plan. The posted speed limit is 35 miles per hour and 40 miles per hour north of Gidley Street. On-street parking is generally permitted on both sides of the roadway south of Rose Avenue and prohibited on both sides of the roadway north of Rose Avenue.

Loftus Drive- This east-west roadway is classified as a collector street in the City of Rosemead General Plan. The posted speed limit is 35 miles per hour. Parking is permitted on both sides of the roadway.

Olney Street- This east-west roadway is a local street in the City of Rosemead General Plan. There is no posted speed limit and it is assumed to be 25 miles per hour per prima facie rules. Parking is permitted on both sides of the roadway.

Temple City Boulevard- This north-south roadway is classified as a minor arterial north of Valley Boulevard and a major arterial south of Valley Boulevard in the City of Rosemead General Plan. It is classified as a primary arterial in the City of Temple City General Plan. The posted speed limit is 35 miles per hour within the City of Temple City and 40 miles per hour within the City of Rosemead. Parking is prohibited on both sides of the roadway to the south of Ellis Lane.

Valley Boulevard- This east-west major arterial is designated as a truck route. It is a principal auto thoroughfare and a primary transit route in the City of El Monte General Plan and in the City of Rosemead General Plan. The posted speed limit is 35 miles per hour. Parking is generally permitted on both sides of the roadway.

2.2 EXISTING TRANSIT SERVICE

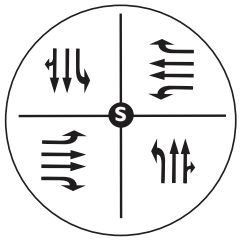
The Project study area is served by bus transit lines operated by the Los Angeles County Metropolitan Transportation Authority (Metro). Table 2 summarizes the Project study area transit services.

Table 2 - Existing Transit Service Summary

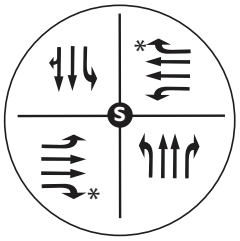
Agency	Line	From	To	Via	Peak Frequency
MTA	76	DTLA	El Monte	Valley Boulevard and Main Street	17 minutes
MTA	176	Highland Park	Montebello	Mission Street, Garfield Avenue, Main Street, Mission Drive, Flair Drive, Valley Boulevard, Rush Street, Paramount Boulevard	35 minutes
MTA	264/267	Altadena	El Monte	Lincoln Avenue, Del Mar Boulevard, Rosemead Boulevard, Temple City Boulevard	50 minutes

Figure 3 - Existing Study Intersection Lane and Control Configurations

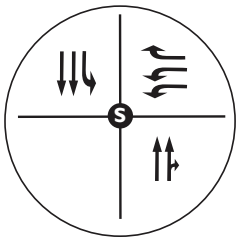
#1 Temple City Boulevard & Valley Boulevard



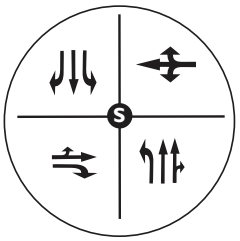
#2 Baldwin Avenue & Valley Bouelvard



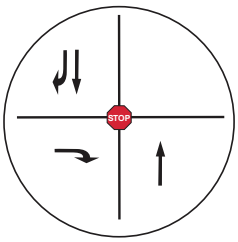
#3 Temple City Boulevard & Loftus Drive



#4 Baldwin Avenue & Loftus Drive

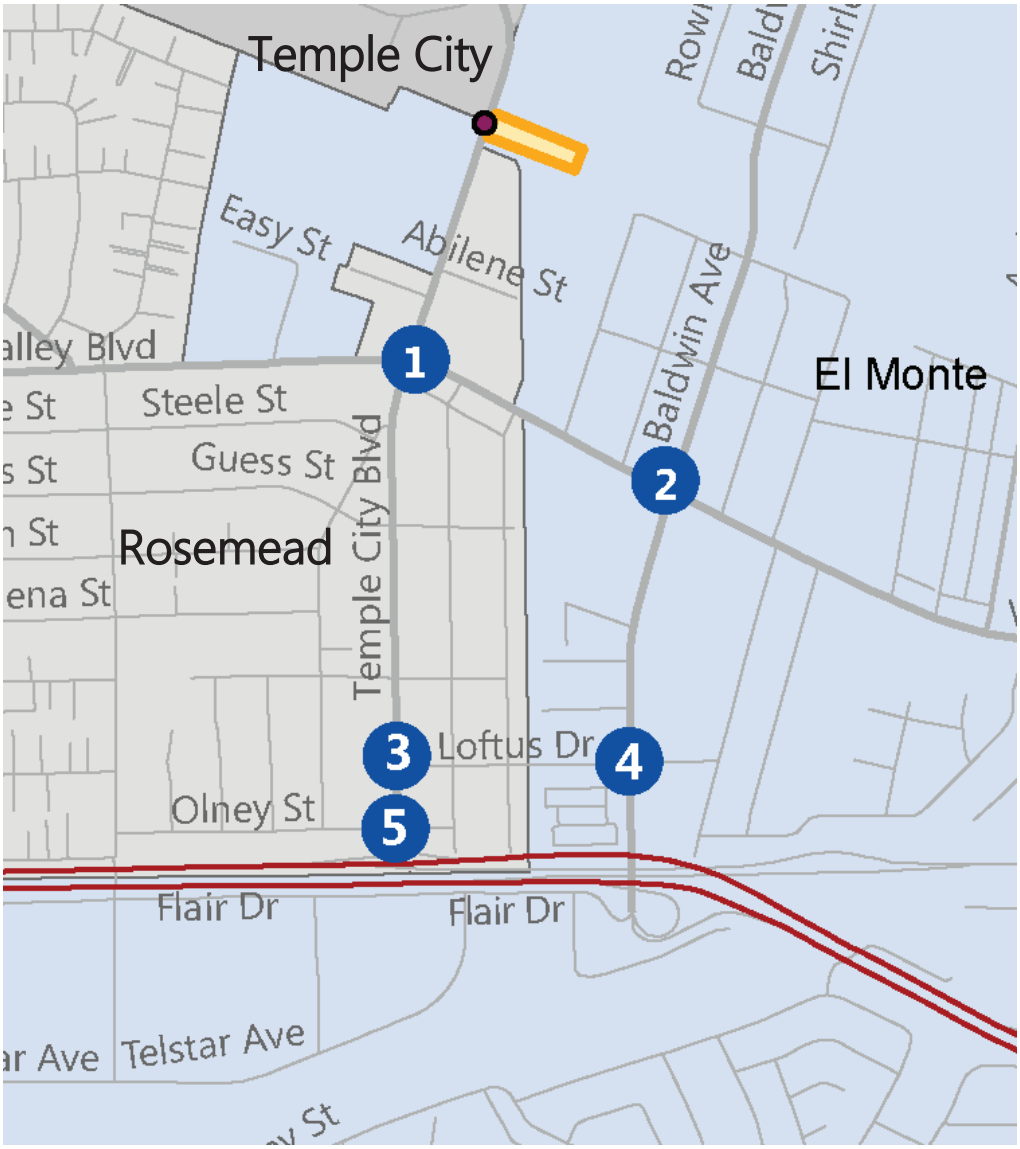


#5 Temple City Boulevard & Olney Street



LANE CONFIGURATION

- Signalized Intersection
- Stop Controlled Intersection
- Intersection Lane Geometry
- * De-facto right turn



2.3 EXISTING TRAFFIC VOLUMES

Due to the COVID-19 impact on economic activity and reduced vehicle volumes on the area roadway network, historic data was identified in-lieu of new traffic counts. Vehicle turning movement counts were compiled for the study intersections using historical data from September 30, 2015; December 16, 2015; September 7, 2017; and June 2019.

All count times were from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM on one weekday. Each of the traffic volume data collected was factored to existing (Year 2020) conditions using a one percent per year growth factor. The traffic count summary sheets are provided in Appendix A.

2.4 EXISTING INTERSECTION LEVEL OF SERVICE

Based on the intersection lane configurations and the existing traffic volumes, volume-to-capacity ratios or delay values and corresponding levels of service (LOS) were determined for each of the study intersections during the weekday a.m. and p.m. peak hours.

Table 3 summarizes the volume-to-capacity ratios, delay and LOS values for existing traffic conditions.

Table 3 – Intersection Performance – Existing Conditions

Study Intersections		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS
1	Temple City Boulevard & Valley Boulevard	0.902	**E**	0.838	D
2	Baldwin Avenue & Valley Boulevard	0.816	D	0.922	**E**
3	Temple City Boulevard & Loftus Drive	0.747	C	0.734	C
4	Baldwin Avenue & Loftus Drive	1.179	**F**	1.700	**F**
5	Temple City Boulevard & Olney Street*	15.5	C	18.1	C

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format.

** Unsignalized intersection. Analysis output is in average seconds of delay based on higher approach delay.*

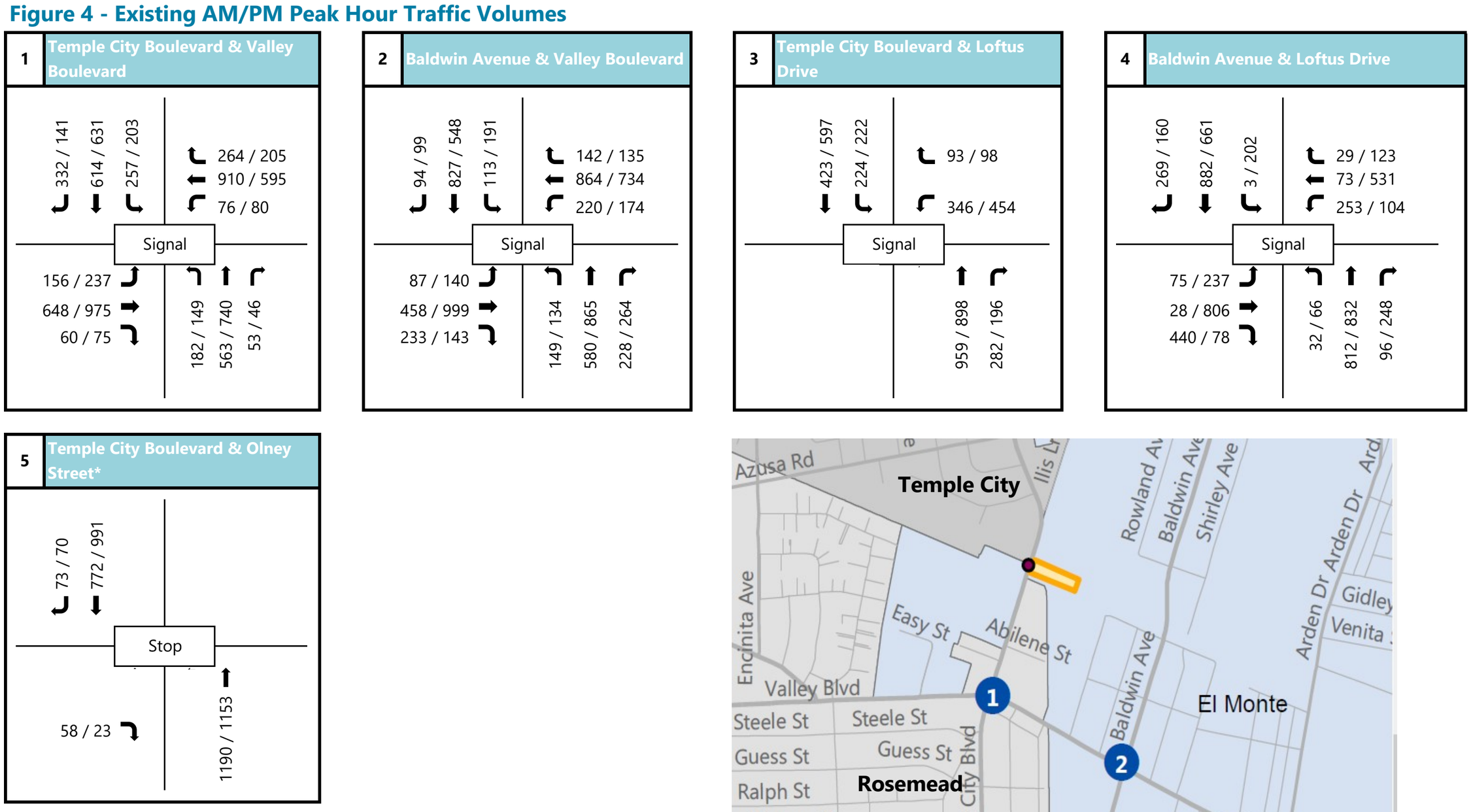
Existing operations are as follows:

- Two of the study intersections currently operate at LOS C or better during the weekday a.m. and p.m. peak hours.
- The intersection of Temple City Boulevard/Valley Boulevard operates at LOS E during the AM peak period.
- The intersection of Baldwin Avenue/Valley Boulevard operates at LOS E during the PM peak period.

- The intersection of Baldwin Avenue/Loftus Drive operates at LOS F during both AM and PM peak periods.

The existing weekday a.m. peak-hour and p.m. peak-hour traffic turn movement volumes are illustrated on Figure 4 of this report. The existing traffic analysis scenario LOS worksheets are provided in Appendix B.

Figure 4 - Existing AM/PM Peak Hour Traffic Volumes



XX/XX AM /PM Peak Hour Traffic Volumes

3. PROJECT TRAFFIC

This section defines the traffic that would be generated by the proposed Project in a three-step process including trip generation, trip distribution and trip assignment.

3.1 PROJECT TRIP GENERATION

Project trip generation was derived from rates defined by *Trip Generation, 10th Edition,* published by the Institute of Transportation Engineers. The trip generation totals were based on the number of vehicle and truck trips at the proposed warehouse facility. The rates, based on surveys at existing facilities, include all trips generated per single occupancy vehicles, 2-3 axle trucks and 4+ axle trucks. The trip rates include all types of trips that would be generated by the Project .

Table 4 – Project Trip Generation

				Weekday						
				Daily	AM Peak Hour			PM Peak Hour		
ITE Code	Land Use	Intensity	Units	Rate	Rate	In	Out	Rate	In	Out
Trip Generation Rates										
150	Warehousing	-	KSF	1.74	0.17	77%	23%	0.19	27%	73%
710	General Office	-	KSF	9.74	1.16	86%	14%	1.15	16%	84%
	Truck Trips - 2/3 Axle		KSF	0.17	0.02	0.013	0.004	0.02	0.005	0.014
	Truck Trips - 4+ Axles		KSF	0.21	0.02	0.016	0.005	0.02	0.006	0.017
Trip Generation Totals										
150	Warehousing	51.609	KSF	90	30	23	7	32	10	22
710	General Office	16.848	KSF	164	20	17	3	19	3	16
	Truck Trips - 2/3 Axle *			13	1	1	0	1	0	1
	Truck Trips - 4+ Axles *			27	3	2	1	3	1	2
Total		**68.457**		**294**	**53**	**43**	**11**	**56**	**14**	**41**

** Truck trip generation from rates defined in 10th edition of ITE Trip Generation - PCE factors of 1.5 and 2.5 applied based on truck type.*

The project would generate 294 daily vehicle trips, including 53 vehicle trips during the a.m. peak-hour (43 inbound trips and 11 outbound trips) and 56 vehicle trips during the p.m. peak hour (14 inbound trips and 41 outbound trips).

3.2 PROJECT TRIP DISTRIBUTION

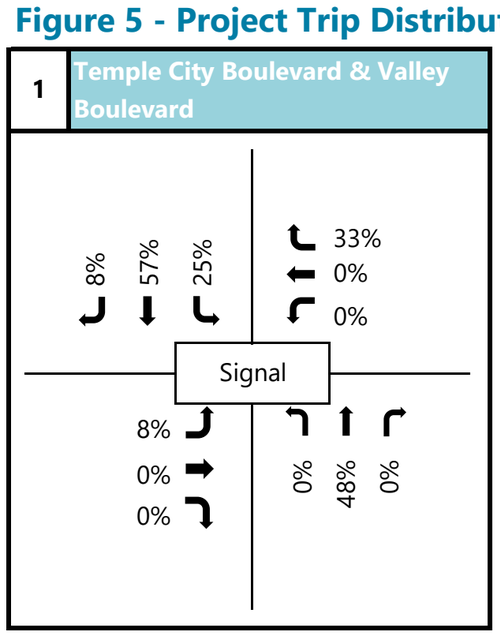
Trip distribution is the process of assigning the directions from which traffic will access the Project site. Trip distribution is dependent upon the land use characteristics of the Project, the local roadway network, and the general locations of other land uses to which Project trips would originate or terminate. The site plan provides for site access via a driveway on Temple City Boulevard.

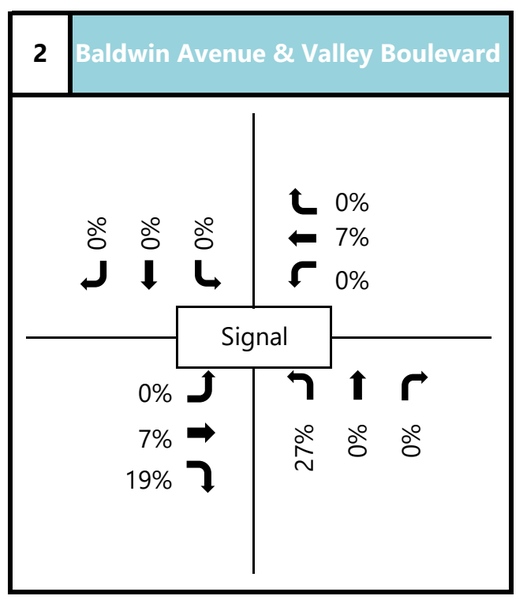
Figure 5 illustrates the trip distribution percentages at the study intersections.

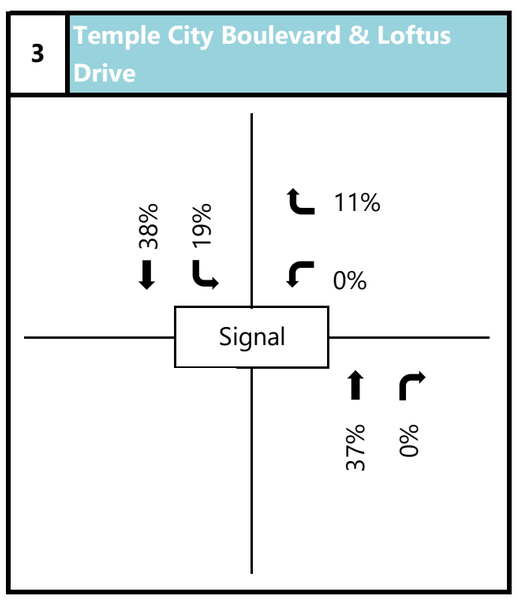
3.3 PROJECT TRIP ASSIGNMENT

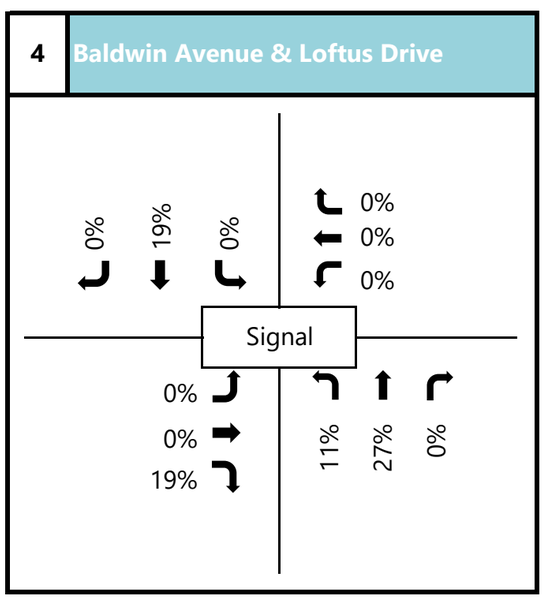
Based on the trip generation and distribution assumptions described above, Project traffic was assigned to the roadway system. The peak-hour Project trip assignment is illustrated on Figure 6.

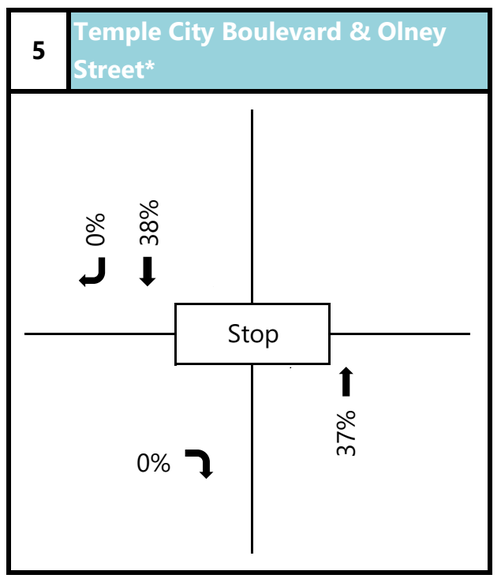
Figure 5 - Project Trip Distribution











XX/XX AM /PM Peak Hour Traffic Volumes

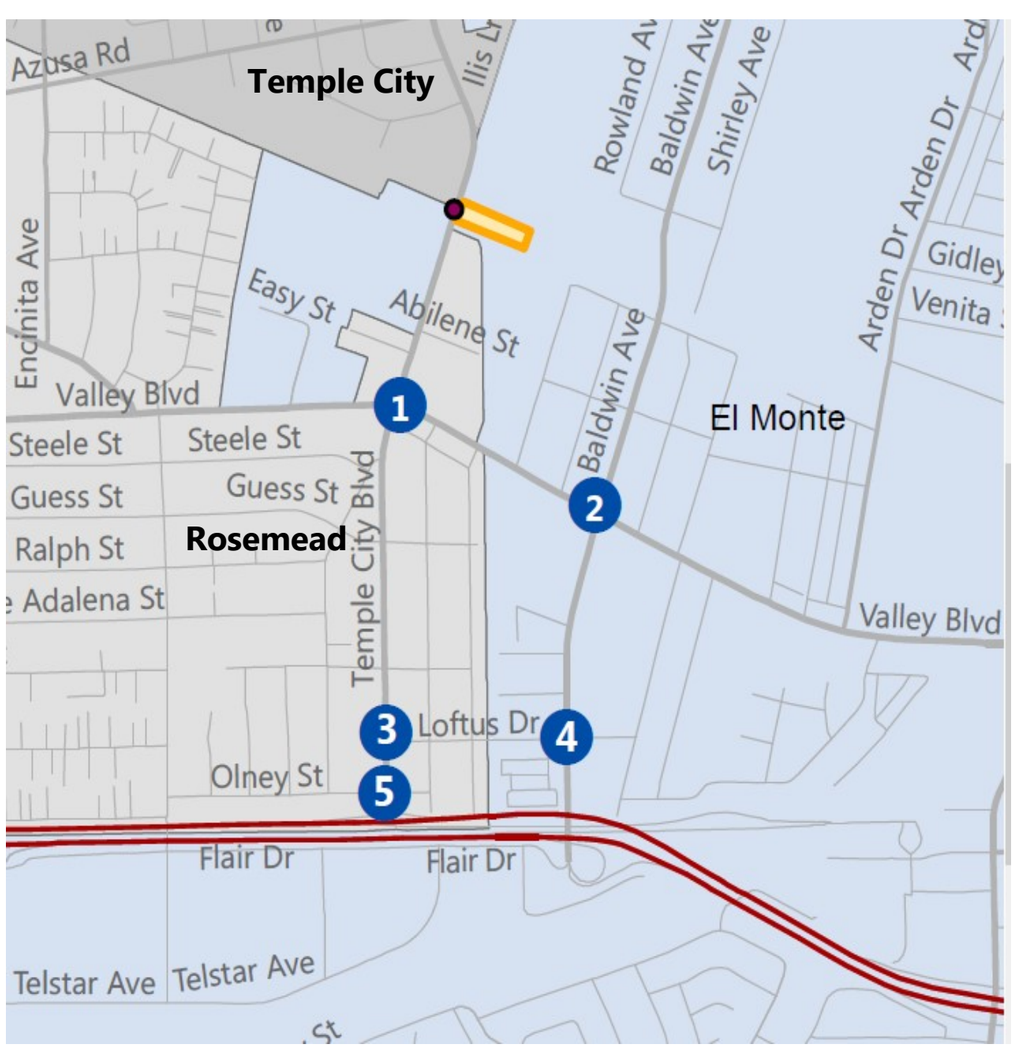
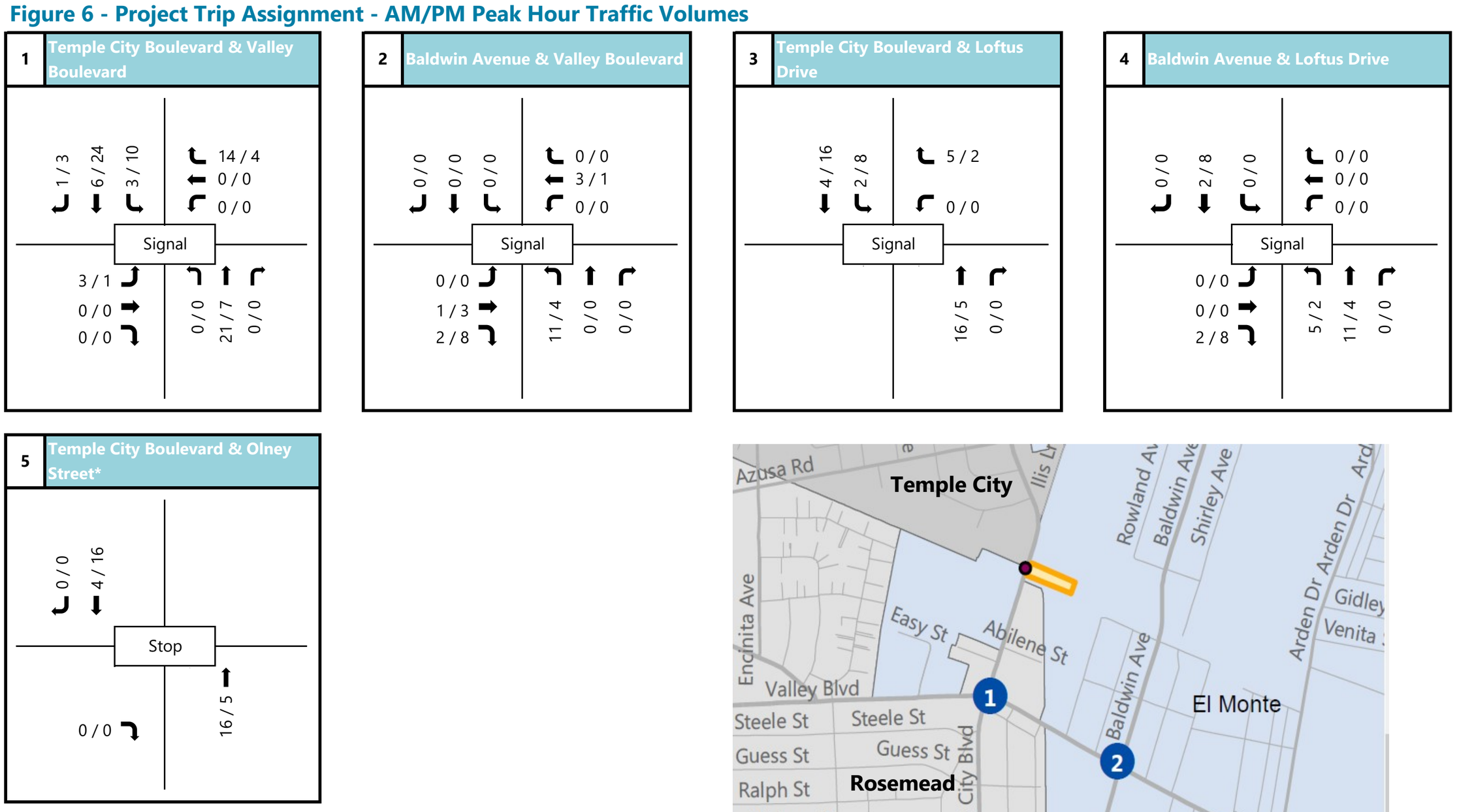


Figure 6 - Project Trip Assignment - AM/PM Peak Hour Traffic Volumes



4. EXISTING WITH-PROJECT CONDITIONS

This section documents existing traffic conditions at the study intersections with the addition of Project-generated traffic. Traffic volumes for these conditions were derived by adding Project trips to the existing traffic volumes.

Table 5 summarizes the resulting V/C, delay and LOS values at the study intersections for existing with-Project conditions.

Table 5- Intersection Performance – Existing with-Project

Study Intersections		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS
1	Temple City Boulevard & Valley Boulevard	0.906	**E**	0.847	D
2	Baldwin Avenue & Valley Boulevard	0.824	D	0.923	**E**
3	Temple City Boulevard & Loftus Drive	0.753	C	0.740	C
4	Baldwin Avenue & Loftus Drive	1.185	**F**	1.702	**F**
5	Temple City Boulevard & Olney Street*	15.6	C	18.4	C

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format.

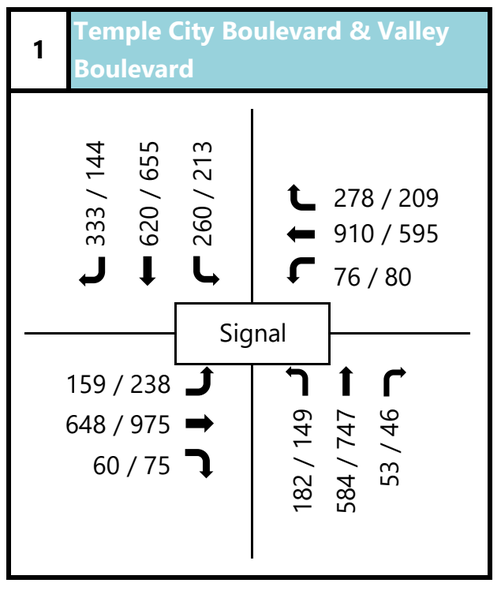
** Unsignalized intersection. Analysis output is in average seconds of delay based on higher approach delay.*

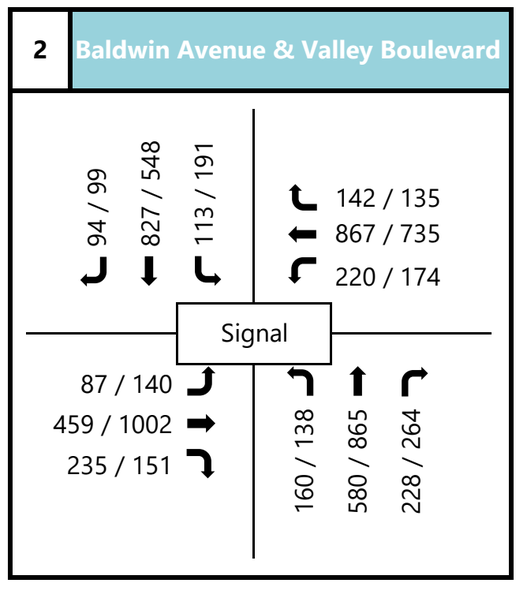
Operations would not change substantially from existing conditions:

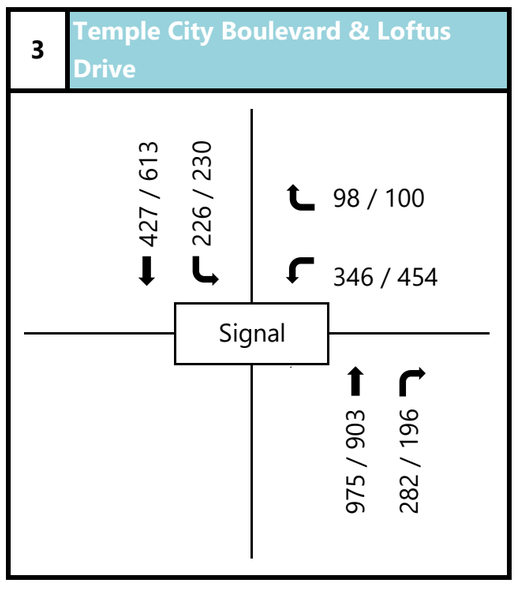
- Two of the study intersections would operate at LOS C or better during the weekday a.m. and p.m. peak hours.
- The intersection of Temple City Boulevard/Valley Boulevard would operate at LOS E during the AM peak period.
- The intersection of Baldwin Avenue/Valley Boulevard would operate at LOS E during the PM peak period.
- The intersection of Baldwin Avenue/Loftus Drive would operate at LOS F during both AM and PM peak periods.

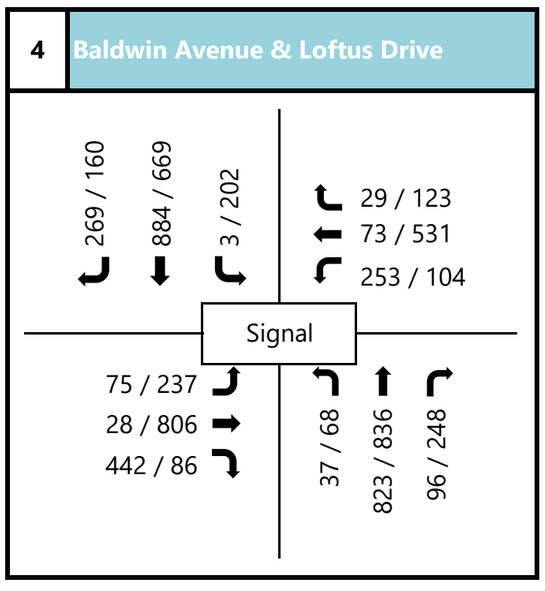
The existing with-Project traffic volumes for the weekday a.m. and p.m. peak hour are illustrated on Figure 7. The existing with-Project traffic analysis worksheets for this scenario are provided in Appendix C of this report.

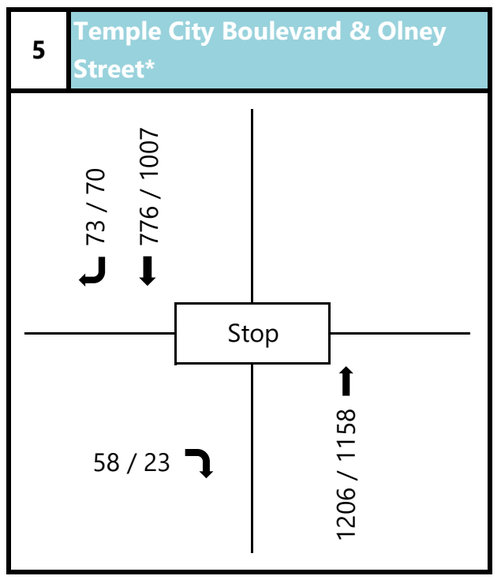
Figure 7 - Existing With-Project - AM/PM Peak Hour Traffic Volumes



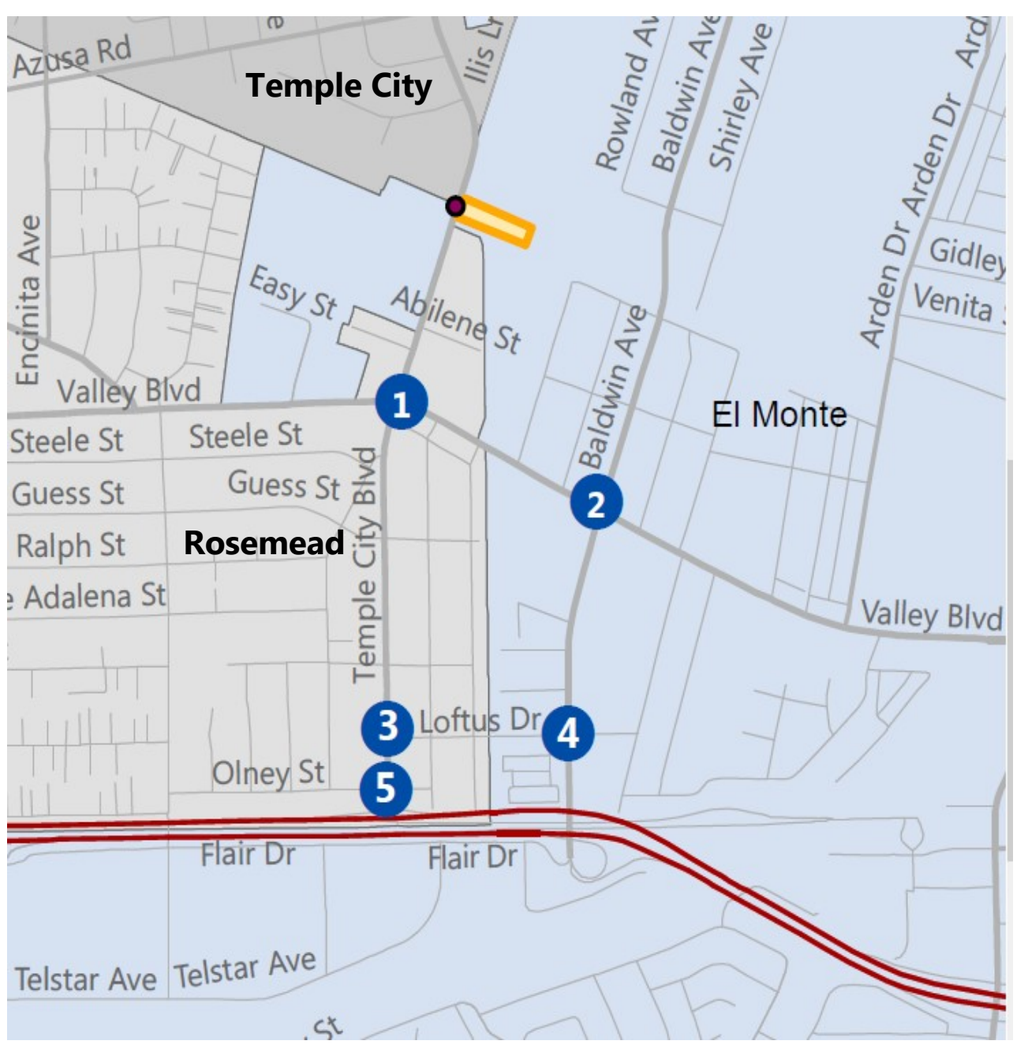








XX/XX AM /PM Peak Hour Traffic Volumes



5. FUTURE WITHOUT PROJECT CONDITIONS

This section provides an analysis of future traffic conditions in the study area with area/related project trips and background growth added, but without Project traffic. The proposed Project is anticipated to be completed by 2021, and this defined the future analysis year.

5.1 AMBIENT GROWTH

In order to acknowledge regional population and employment growth outside of the study area, an ambient/background traffic growth rate of one percent per year was applied to the existing (year 2020) traffic counts.

5.2 AREA PROJECTS

In addition to the application of the ambient traffic growth rate, traffic from related/area projects (approved and pending developments) was included as part of the year-2021 analysis. Seventeen projects in the City of El Monte and three projects in the City of Temple City were identified for inclusion in the traffic impact analysis. The City of Rosemead indicated during coordination efforts that no planned projects were in the vicinity of the Project site.

Table 6 provides the trip generation estimates for the area projects and the project locations are illustrated on Figure 8.

Table 6 – Area Projects Trip Generation Estimate

No	Project Name	Address	City	Land Use	Intensity	Units	Daily	AM Peak Hour			PM Peak Hour		
								Rate	% In	% Out	Rate	% In	% Out
1	Goodman Logistics Center*	10150 Lower Azusa Road	El Monte	High-Cube Transload and Short-Term Storage Warehouse	102,000	KSF	1729	98	76	22	123	35	88
2	New 2-story building with 12,250 sf of office and showroom.	3268 Rosemead Blvd	El Monte	General Office	5.888	KSF	57	7	6	1	7	1	6
				Specialty Trade Contractor	6.362	KSF	65	11	8	3	13	3	9
3	Two concrete tilt-up warehouse buildings. Building 1: 44k sf & Building 2: 48k sf for a total of 93k sf.	10460 Hickson St	El Monte	Warehousing	93	KSF	162	16	12	4	18	4	13
4	Façade remodel of an existing 2-story 26,762 SF commercial building; new 2-nd floor addition; assembly/office use; parking study	10962 Main St	El Monte	Shopping Center	9.574	KSF	361	9	6	3	36	4	32
				General Office	12.544	KSF	122	15	13	2	14	2	12
5	New 16,900 SF 2 story commercial building with surface parking and subterranean parking	9933 Valley Blvd	El Monte	Shopping Center	16.9	KSF	638	16	10	6	64	8	57
6	New 61,163 SF industrial warehouse building with 9,046 SF mezzanine floor area	4144 Arden Dr	El Monte	Warehousing	61.163	KSF	106	10	8	2	12	3	9
7	New proposed auto-repair building (7,443 SF); property is improved with an existing auto repair shop with used-car dealer.	9531 Valley Blvd	El Monte	Automobile Parts and Service Center	7.443	KSF	121	15	11	4	17	6	11
8	Two new 1,490 square foot detached two story homes	4708 Arden Dr	El Monte	Single-Family Homes	2	Dwelling Units	19	1	0	1	2	1	1
9	Two new four story residnetial buidlings totalling 53 residential units with a total of 53 off-street parking spaces	3650 Center St	El Monte	Multifamily Housing (Mid-Rise)	53.000	Dwelling Units	288	19	5	14	23	12	12
10	45 market rate townhomes and 42 workforce housing units and a 1 acre park	Valley Blvd b/w El Monte Ave and Monterey	El Monte	Multifamily Housing (Low Rise)	42.000	Dwelling Units	307	19	4	15	24	12	11
				Public Park	1.000	Acres	1	0	0	0	0	0	0
				Single-Family Homes	45.000	Dwelling Units	425	33	8	25	45	21	24
11	New 365,000 sf warehouse	3900 Arden Dr	El Monte	Warehousing	365.000	KSF	635	62	48	14	69	17	53
12	new six story, 27 unit residential development	3548 Santa Anita Ave	El Monte	Multifamily Housing (Mid-Rise)	27.000	Dwelling Units	147	10	3	7	12	6	6
13	55 multi-family affordable units	4102 Balwin Ave	El Monte	Multifamily Housing (Mid-Rise)	55.000	Dwelling Units	299	20	5	15	24	12	12
14	Parcel 4 of the Gateway Project. Construct 208 units above 25,000 SF of retail with underground parking.	10568 Gateway Promenade	El Monte	Multifamily Housing (Mid-Rise)	208.000	Dwelling Units	1132	75	19	55	92	46	46
			El Monte	Multifamily Housing (Mid-Rise)	212.000	Dwelling Units	1153	76	20	56	93	47	47
15	New 6 story hotel 115,490 sf/new 5 story parking structure/1 story solarium partial demo & new 2nd floor addition	9550 Flair Dr	El Monte	Hotel	171.000	Rooms	1430	80	47	33	103	41	62
16	53-unit affordable housing complex w/ 53 subterranean parking spaces.	3637 Tyler Ave	El Monte	Multifamily Housing (Mid-Rise)	53.000	Dwelling Units	288	19	5	14	23	12	12
17	Autobody Repair Shop	9334 Lower Azusa Road	Temple City	Automobile Parts and Service Center	4.500	KSF	73	9	6	2	10	4	7
18	Apartment Complex	9005 Rancho Real Road	Temple City	Multifamily Housing (Mid-Rise)	24.000	Dwelling Units	131	9	2	6	11	5	5
19	(Mixed-Use Development)	5570 Rosemead Blvd	Temple City	Multifamily Housing (Mid-Rise)	75.000	Dwelling Units	408	27	7	20	33	16	17
				Shopping Center	15.743	KSF	594	15	9	6	60	7	53
				General Office	1.311	KSF	13	2	1	0	2	0	1
TOTAL							**10,705**	**672**	**340**	**332**	**929**	**325**	**604**

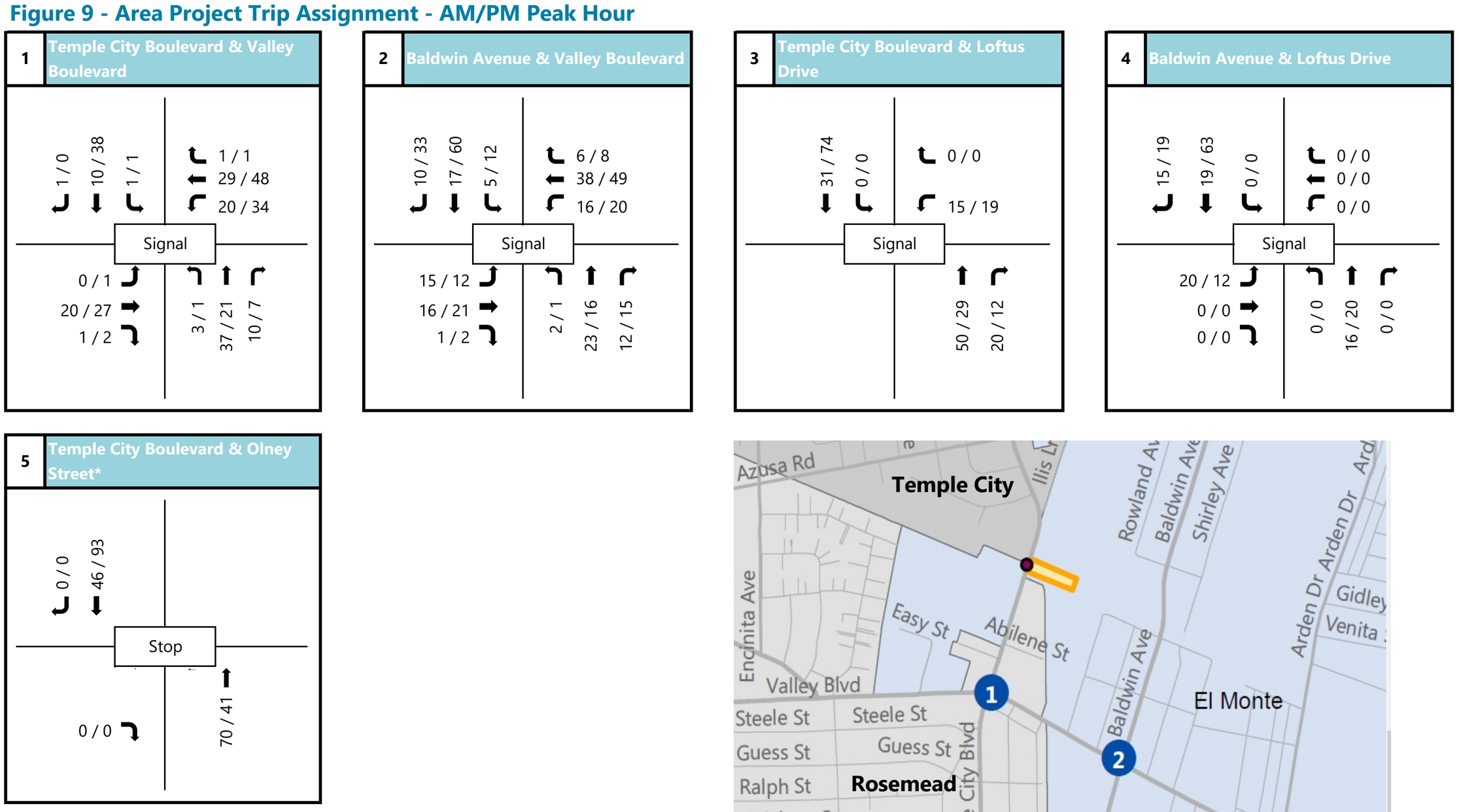
The area project trip assignment volumes for the a.m. and p.m. peak hours are provided on Figure 9.

FIGURE 08

4304 Temple City Boulevard Warehouse

Area Project Locations

Figure 9 - Area Project Trip Assignment - AM/PM Peak Hour



XX/XX AM /PM Peak Hour Traffic Volumes

5.3 FUTURE WITHOUT-PROJECT INTERSECTION LEVEL OF SERVICE

Table 7 summarizes the V/C, delay and LOS values at the study intersections under this scenario.

Table 7 – Intersection Performance – Future without-Project

Study Intersections		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS
1	Temple City Boulevard & Valley Boulevard	0.925	**E**	0.885	D
2	Baldwin Avenue & Valley Boulevard	0.854	D	0.962	**E**
3	Temple City Boulevard & Loftus Drive	0.780	C	0.759	C
4	Baldwin Avenue & Loftus Drive	1.202	**F**	1.754	**F**
5	Temple City Boulevard & Olney Street*	16.5	C	20.2	C

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format.

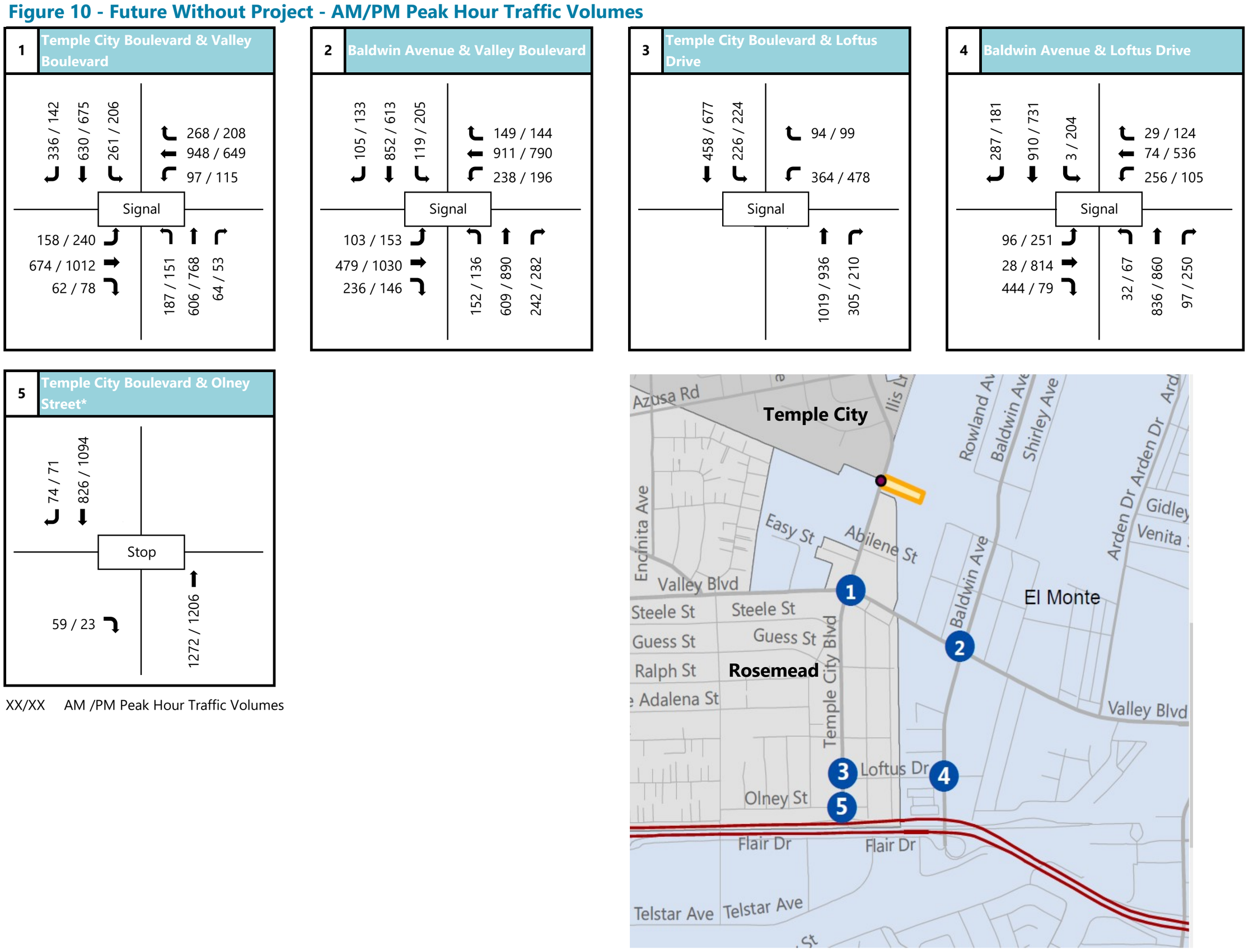
** Unsignalized intersection. Analysis output is in average seconds of delay based on higher approach delay.*

Operations would be as follows under this scenario:

- Two of the study intersections would operate at LOS C or better during the weekday a.m. and p.m. peak hours.
- The intersection of Temple City Boulevard/Valley Boulevard would operate at LOS E during the AM peak period.
- The intersection of Baldwin Avenue/Valley Boulevard would operate at LOS E during the PM peak period.
- The intersection of Baldwin Avenue/Loftus Drive would operate at LOS F during both AM and PM peak periods.

The future without-Project traffic volumes for the weekday a.m. and p.m. peak hour are illustrated on Figure 10. The future without-Project traffic analysis worksheets are provided in Appendix D of this report.

Figure 10 - Future Without Project - AM/PM Peak Hour Traffic Volumes



XX/XX AM /PM Peak Hour Traffic Volumes

6. FUTURE 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 Project trips to the future without-Project scenario volumes.

Table 8 summarizes the resulting V/C and LOS values at the study intersections for future with-Project traffic conditions.

Table 8 – Intersection Performance – Future with-Project

Study Intersections		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS
1	Temple City Boulevard & Valley Boulevard	0.929	**E**	0.893	D
2	Baldwin Avenue & Valley Boulevard	0.862	D	0.962	**E**
3	Temple City Boulevard & Loftus Drive	0.786	C	0.765	C
4	Baldwin Avenue & Loftus Drive	1.207	**F**	1.760	**F**
5	Temple City Boulevard & Olney Street*	16.6	C	20.5	C

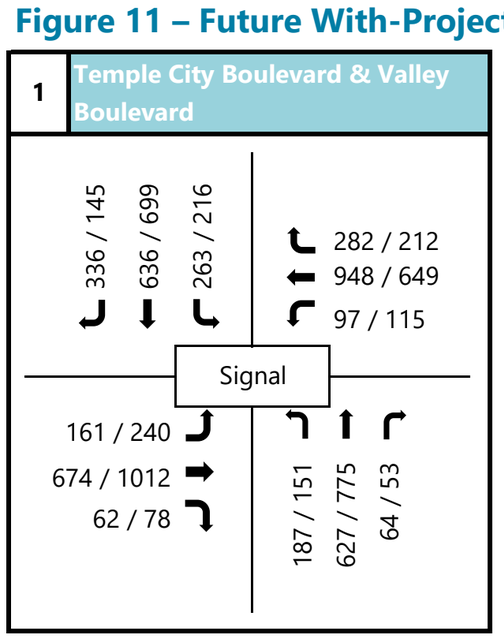
LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format.

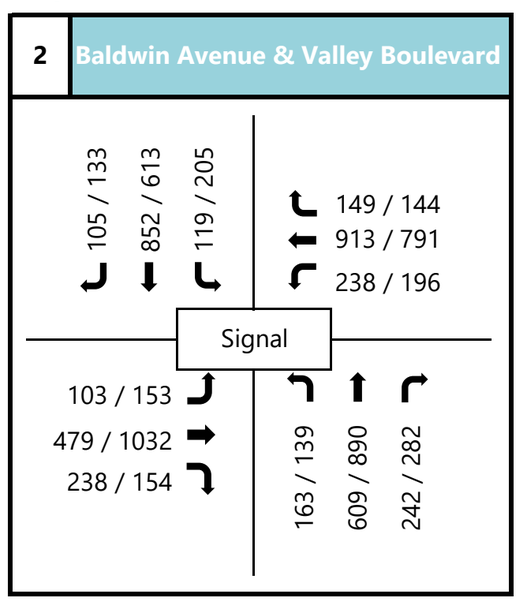
** Unsignalized intersection. Analysis output is in average seconds of delay based on higher approach delay.*

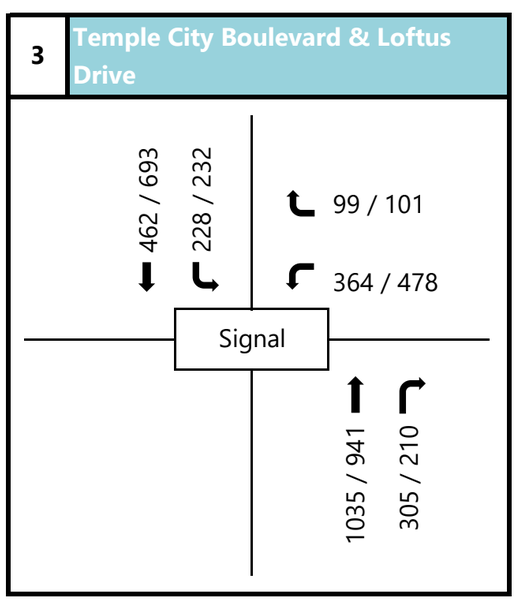
As in the future without project scenario, the future with project scenario would continue to operate at the same level of service at all study intersections.

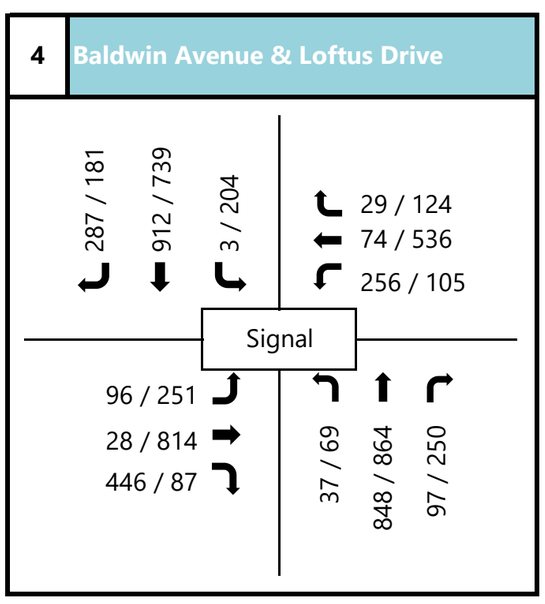
The future with-Project traffic volumes for the weekday a.m. and p.m. peak hour are illustrated on Figure 11. The future with-Project traffic analysis worksheets are provided in Appendix E of this report.

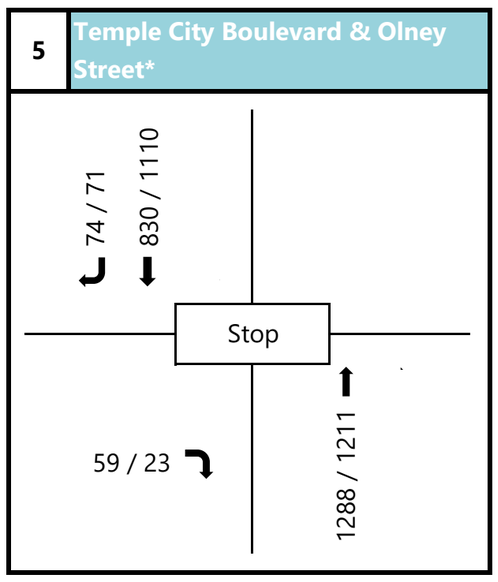
Figure 11 – Future With-Project - AM/PM Peak Hour Traffic Volumes



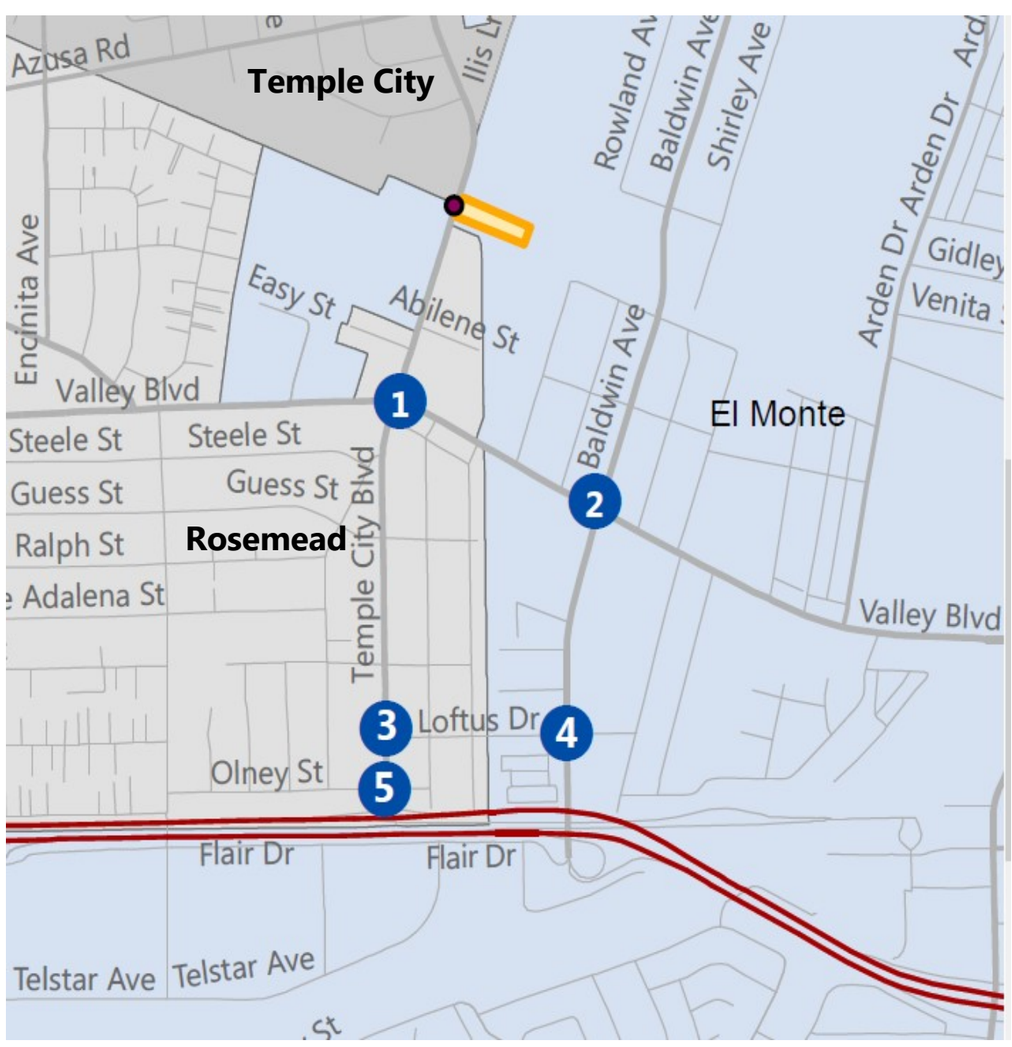








XX/XX AM /PM Peak Hour Traffic Volumes



7. PROJECT TRAFFIC ASSESSMENT

7.1 DETERMINATION OF TRAFFIC IMPACTS

Traffic impacts occur if a proposed development will result in significant changes in traffic conditions at a study location. A significant impact is typically identified if project-related traffic will cause LOS to deteriorate beyond a threshold limit specified by the reviewing agency. Impacts can also be significant if an intersection is already operating below the acceptable level of service and project traffic will cause a further decline in operations beyond the threshold.

The cities of El Monte and Temple City use the following impact standards in determining significant impacts for project-related increases based on the Los Angeles County Department of Public Works traffic impact guidelines.

Level of Service	Pre-Project Volume/Capacity Ratio	Project-Related Increase in ICU Value
C	0.71 to 0.80	0.04 or more
D	0.81 to 0.90	0.02 or more
E/F	0.91 or more	0.01 or more

For signalized intersections, Intersection Capacity Utilization (ICU) methodology can be used under these guidelines, using the output value that is similar to a volume-to-capacity ratio (v/c).

Significant impacts under these guidelines occur when pre-project conditions are LOS C or worse and the project causes the intersection operations to worsen by the thresholds shown in the table below.

For unsignalized intersections, the Highway Capacity Manual (HCM) unsignalized methodology was applied, which is typical for traffic studies. Significant impacts occur at unsignalized study intersections in the City of El Monte when pre-project conditions are acceptable at LOS D or LOS E and the project causes the intersection operations to worsen one by one letter grade or if the project traffic increases the delay by the following values:

Significant Impact Threshold for Non Signalized Intersections	
Level of Service	Delay Increase
E	2 Seconds
F	1 Second

For the City of Rosemead, the following impact standards are used when determining significant project impacts.

- A transportation impact for a project is considered significant if the Project increases traffic demand by 2% of capacity ($V/C \geq 0.02$), resulting in LOS F ($V/C > 1.00$).
- If the intersection is already operating at LOS F, a significant impact occurs when the Project increases traffic demand by 2% of capacity ($V/C \geq 0.02$).

7.2 PROJECT TRAFFIC IMPACTS – EXISTING PLUS PROJECT

Table 9 provides a summary of the Project impacts under existing conditions. Traffic impacts created by the proposed Project were determined by comparing the existing scenario conditions to the existing with-Project scenario conditions. The proposed Project would not create significant traffic impacts at the study intersections in the existing analysis period.

Table 9 – Determination of Project Impacts – Existing with-Project Conditions

Study Intersections		Peak Hour	Existing Conditions		Existing with Project		Change in V/C	Sig Impact?	Jurisdiction
			V/C or Delay	LOS	V/C or Delay	LOS			
1	Temple City Boulevard & Valley Boulevard	AM	0.902	**E**	0.906	**E**	0.004	No	Rosemead
		PM	0.838	D	0.847	D	0.009	No	Rosemead
2	Baldwin Avenue & Valley Boulevard	AM	0.816	D	0.824	D	0.008	No	El Monte
		PM	0.922	**E**	0.923	**E**	0.001	No	El Monte
3	Temple City Boulevard & Loftus Drive	AM	0.747	C	0.753	C	0.006	No	Rosemead
		PM	0.734	C	0.740	C	0.006	No	Rosemead
4	Baldwin Avenue & Loftus Drive	AM	1.179	**F**	1.185	**F**	0.006	No	El Monte
		PM	1.700	**F**	1.702	**F**	0.002	No	El Monte
5	Temple City Boulevard & Olney Street*	AM	15.5	C	15.6	C	0.1	No	Rosemead
		PM	18.1	C	18.4	C	0.3	No	Rosemead

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format.

** Unsignalized intersection. Analysis output is in average seconds of delay based on higher approach delay.*

7.3 PROJECT TRAFFIC IMPACTS – FUTURE WITH PROJECT

Table 10 provides a summary of the Project impacts under future conditions. Traffic impacts created by the Project were determined by comparing the future without-Project conditions to the future with-Project conditions. The proposed Project would not create significant traffic impacts at the study intersection in the future analysis period.

Table 10 – Determination of Project Impacts – Future with-Project

	Study Intersections	Peak Hour	Future Without Project		Future with Project		Change in V/C or Delay	Sig Impact?	Jurisdiction
			V/C or Delay	LOS	V/C or Delay	LOS			
1	Temple City Boulevard & Valley Boulevard	AM	0.925	**E**	0.929	**E**	0.004	No	Rosemead
		PM	0.885	D	0.893	D	0.008	No	Rosemead
2	Baldwin Avenue & Valley Boulevard	AM	0.854	D	0.862	D	0.008	No	El Monte
		PM	0.962	**E**	0.962	**E**	0.000	No	El Monte
3	Temple City Boulevard & Loftus Drive	AM	0.780	C	0.786	C	0.006	No	Rosemead
		PM	0.759	C	0.765	C	0.006	No	Rosemead
4	Baldwin Avenue & Loftus Drive	AM	1.202	**F**	1.207	**F**	0.005	No	El Monte
		PM	1.754	**F**	1.760	**F**	0.006	No	El Monte
5	Temple City Boulevard & Olney Street*	AM	16.5	C	16.6	C	0.1	No	Rosemead
		PM	20.2	C	20.5	C	0.4	No	Rosemead

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format.

** Unsignalized intersection. Analysis output is in average seconds of delay based on higher approach delay.*

7.4 SITE ACCESS AND CIRCULATION

Project access will all occur from the proposed driveway on Temple City Boulevard, with travel occurring via on-site parking lot drive aisles to vehicle parking areas and truck loading spaces. A total of 78 parking spaces will be provided, with four of those spaces as accessible spaces. Four bicycle parking spaces will be provided. Four truck loading spaces will also be provided – two will be 25 feet in length, and two will be 60 feet in length.

Intersection operations were analyzed, focusing on the southbound left-turn movement into the project driveway from Temple City Boulevard, as that movement must yield to oncoming northbound traffic to enter the site and would be waiting within a thru lane of the roadway. Using roadway volumes compiled from the nearby study intersection and the project trip generation, an analysis of operations at the driveway was conducted using the Highway Capacity Manual (HCM) method for unsignalized intersections. The following was found from this analysis, which would not represent new major traffic issues:

- In the AM peak hour, the average southbound movement queue would be less than one vehicle
- In the PM peak hour, the average southbound movement queue would be less than one vehicle

The driveway operations analysis worksheets are provided in Attachment F.

The project driveway will be gated, but the gate will be set back from the roadway to allow trucks to pull in fully if the gate is temporarily closed. A turning radius analysis for truck movements into and out of the project driveway was conducted, to determine if the driveway would be of adequate width for trucks to enter and exit the property without needing to cross over the roadway centerline or enter the site from the improper travel lane. A standard template for a tractor-trailer vehicle was applied. The final driveway configuration as analyzed for this effort is adequate for truck turning movements.

The truck turning radius analysis for the project driveway is provided in Attachment G.

Tenants will be instructed by the property owner to follow a rule that trucks will only be routed on truck routes in Temple City, El Monte, and adjacent cities.

8. CONGESTION MANAGEMENT PROGRAM

This section provides study conformance with the regional impact analysis procedures mandated by the County of Los Angeles Congestion Management Program (CMP).

The CMP was created statewide because of Proposition 111 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:

- 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.

Based on the trip generation defined in Table 4, it is not expected that 50 or more new Project trips per hour would be added to the nearest CMP intersections. Therefore, no further analysis of potential CMP impacts is required.

- CMP ID 131 – Rosemead Boulevard and Valley Boulevard, approximately 1.16 miles west of the Project site

In addition, the proposed Project is expected to add less than 150 new trips per hour, in either direction, to the I-10 (San Bernardino) freeway segments based on the Project trip generation defined in Table 4. Therefore, no further analysis of CMP freeway monitoring stations is required.

- CMP Stn 1016 – Rosemead Boulevard and Valley Boulevard, approximately 1.75 miles southwest of the Project site

9. ANALYSIS SUMMARY AND CONCLUSIONS

The following summarizes the traffic study results, conclusions and recommendations:

Project Background

- The proposed Project is a 68,457 square foot floor area that consists of two buildings each with its own office and warehouse use (51,609 square feet of warehousing space and 16,848 square feet of related office space), to be located on 4303 Temple City Boulevard in the City of El Monte.

- A total of 70 parking spaces would be provided for the Project use.

- The proposed site is currently unoccupied, and the Project is anticipated to be completed and occupied by the end of the year 2021.

Project Trip Generation

- Trip generation of the Project was derived from Trip Generation, 10th Edition, published by the Institute of Transportation Engineers.

- The project would generate 294 daily vehicle trips, including 53 vehicle trips during the a.m. peak-hour (43 inbound trips and 11 outbound trips) and 56 vehicle trips during the p.m. peak hour (14 inbound trips and 41 outbound trips).

Traffic Impacts and Access

- Based on the applied significant traffic impact criteria, the proposed Project would not create significant traffic impacts at any of the study intersections under existing with-Project and future with-Project conditions.

- An analysis of operations at the driveway was conducted and no major queuing issues for inbound Project trips was found.

- A turning radius analysis for truck movements into and out of the project driveway was conducted, to determine if the driveway would be of adequate width for trucks to enter and exit the property. The driveway configuration is adequate for truck turning movements.

- Tenants will be instructed by the property owner to follow a rule that trucks will only be routed on truck routes in Temple City, El Monte, and adjacent cities.

APPENDIX A

Traffic Count Data

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Wednesday

City: El Monte

Date: 9/30/2015

AM

NS/EW Streets:	Temple City Blvd			Temple City Blvd			Valley Blvd			Valley Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL
7:00 AM	35	96	10	33	122	41	16	63	5	14	188	52	675
7:15 AM	53	115	4	47	139	52	27	93	5	17	223	59	834
7:30 AM	54	139	8	43	130	73	28	153	13	22	235	62	960
7:45 AM	45	160	17	64	159	70	40	181	18	17	201	60	1032
8:00 AM	21	140	13	55	153	86	48	158	14	14	197	63	962
8:15 AM	53	97	12	83	142	87	33	125	11	19	233	67	962
8:30 AM	48	109	9	48	114	73	44	132	11	18	248	44	898
8:45 AM	52	131	5	55	129	73	31	111	6	18	215	55	881
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	361	987	78	428	1088	555	267	1016	83	139	1740	462	7204
APPROACH %'s :	25.32%	69.21%	5.47%	20.67%	52.54%	26.80%	19.55%	74.38%	6.08%	5.94%	74.33%	19.74%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	173	536	50	245	584	316	149	617	56	72	866	252	3916
PEAK HR FACTOR :		0.855			0.917			0.860			0.933		0.949

UTURNS				
NB	SB	EB	WB	
0	0	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Wednesday

City: El Monte

Date: 9/30/2015

PM

NS/EW Streets:	Temple City Blvd			Temple City Blvd			Valley Blvd			Valley Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL
4:00 PM	23	130	17	40	131	26	54	198	17	20	78	29	763
4:15 PM	39	117	5	47	118	29	45	211	18	18	139	38	824
4:30 PM	25	163	6	49	113	25	55	202	23	23	131	45	860
4:45 PM	38	160	10	31	116	39	57	248	16	24	103	39	881
5:00 PM	38	159	9	49	160	28	56	216	20	18	132	49	934
5:15 PM	34	163	6	44	169	31	52	243	19	15	152	48	976
5:30 PM	35	200	19	49	151	39	59	233	16	22	119	49	991
5:45 PM	34	183	10	52	121	36	58	236	16	21	163	50	980
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	266	1275	82	361	1079	253	436	1787	145	161	1017	347	7209
APPROACH %'s :	16.39%	78.56%	5.05%	21.32%	63.73%	14.94%	18.41%	75.46%	6.12%	10.56%	66.69%	22.75%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	141	705	44	194	601	134	225	928	71	76	566	196	3881
PEAK HR FACTOR :		0.876			0.952			0.975			0.895		0.979

UTURNS				
NB	SB	EB	WB
NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Wednesday

City: El Monte

Date: 12/16/2015

AM

NS/EW Streets:	Baldwin Ave			Baldwin Ave			Valley Blvd			Valley Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	25	81	21	11	116	22	10	50	28	34	171	20	589
7:15 AM	29	115	28	11	145	14	20	95	40	47	197	19	760
7:30 AM	46	166	56	16	208	22	19	88	57	46	236	26	986
7:45 AM	33	138	73	38	176	17	29	144	63	56	179	45	991
8:00 AM	29	142	52	26	196	20	21	110	40	54	189	36	915
8:15 AM	34	107	35	28	208	30	14	94	62	53	219	29	913
8:30 AM	21	128	32	18	174	28	16	98	51	34	218	25	843
8:45 AM	22	110	36	15	174	38	26	114	47	46	196	37	861
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	239	987	333	163	1397	191	155	793	388	370	1605	237	6858
APPROACH %'s :	15.33%	63.31%	21.36%	9.31%	79.78%	10.91%	11.60%	59.36%	29.04%	16.73%	72.56%	10.71%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	142	553	216	108	788	89	83	436	222	209	823	136	3805
PEAK HR FACTOR :		0.850			0.926			0.785			0.948		0.960

UTURNS				
NB	SB	EB	WB	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: Historical

Day: Wednesday

City: El Monte

Date: 12/16/2015

PM

NS/EW Streets:	Baldwin Ave			Baldwin Ave			Valley Blvd			Valley Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	25	170	67	32	147	23	35	222	36	35	136	30	958
4:15 PM	24	160	66	27	132	40	30	279	29	36	177	32	1032
4:30 PM	33	182	70	52	157	24	29	212	32	32	162	27	1012
4:45 PM	22	202	74	45	122	28	29	222	30	43	151	24	992
5:00 PM	28	182	82	43	143	16	31	255	37	42	196	34	1089
5:15 PM	33	187	56	61	120	23	34	232	34	38	159	33	1010
5:30 PM	34	219	63	41	107	30	30	232	34	41	179	33	1043
5:45 PM	32	236	50	37	152	25	37	231	30	45	165	28	1068
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	231	1538	528	338	1080	209	255	1885	262	312	1325	241	8204
APPROACH %'s :	10.06%	66.96%	22.99%	20.77%	66.38%	12.85%	10.62%	78.48%	10.91%	16.61%	70.55%	12.83%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	127	824	251	182	522	94	132	950	135	166	699	128	4210
PEAK HR FACTOR :		0.945			0.932			0.942			0.913		0.966

UTURNS

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

TURNING MOVEMENT COUNT

Prepared by: G.E. Traffic Surveys

PROJECT NAME: City of Rosemead-Olney St Study
PROJECT NO:
DATE: 4-Jun-19

Kids- School age pedestrian
A- Adult pedestrian B=bikes

TIME	N-S STREET: Temple City Boulevard							E-W STREET: Olney Street							PED COUNT							
	NORTH BOUND			SOUTH BOUND			N-S	EAST BOUND			WEST BOUND			E-W	North Leg		South Leg		East Leg		West Leg	
	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	TOTAL	Adult	Kids/B	Adult	Kids/B	Adult	Kids/B	Adult	Kids/B
07:00-07:15		256			186	6	448			4				4								
07:15-07:30		292			170	6	468			6				6								
07:30-07:45		313			208	19	540			16				16								
07:45-08:00		292			190	18	500			10				10								
08:00-08:15		285			174	18	477			22				22								
08:15-08:30		288			192	18	498			10				10								
08:30-08:45		266			200	8	474			15				15								
08:45-09:00		279			198	6	483			9				9								
13:00-13:15							0							0								
13:15-13:30							0							0								
13:30-13:45							0							0								
13:45-14:00							0							0								
14:00-14:15							0							0								
14:15-14:30							0							0								
14:30-14:45							0							0								
14:45-15:00							0							0								
16:00-16:15		234			231	10	475			6				6								
16:15-16:30		228			234	9	471			3				3								
16:30-16:45		247			210	7	464			11				11								
16:45-17:00		255			243	14	512			3				3								
17:00-17:15		264			230	19	513			10				10								
17:15-17:30		279			287	17	583			3				3								
17:30-17:45		294			211	22	527			5				5								
17:45-18:00		304			253	12	569			5				5								

* SB vehicles that made a U turn

Turning Movement Count

PEAK-HOUR VOLUME ANALYSIS

Prepared by: G.E. Traffic Surveys

CALCULATED PEAK HOUR VOLUMES-AM

		SR	ST	SL		
		73	764	0		
0	EL				WR	0
0	ET		7:30-8:30		WT	0
58	ER				WL	0
		NL	NT	NR		
		0	1178	0		

ADJUSTED PEAK HOUR VOLUMES-AM

		SR	ST	SL		
_____	EL				WR	_____
_____	ET		_____		WT	_____
_____	ER				WL	_____
		NL	NT	NR		
		_____	_____	_____		

CALCULATED PEAK HOUR VOLUMES-NOON

		SR	ST	SL		
		0	0	0		
0	EL				WR	0
0	ET		13:00-14:00		WT	0
0	ER				WL	0
		NL	NT	NR		
		0	0	0		

ADJUSTED PEAK HOUR VOLUMES-NOON

		SR	ST	SL		
_____	EL				WR	_____
_____	ET		_____		WT	_____
_____	ER				WL	_____
		NL	NT	NR		
		_____	_____	_____		

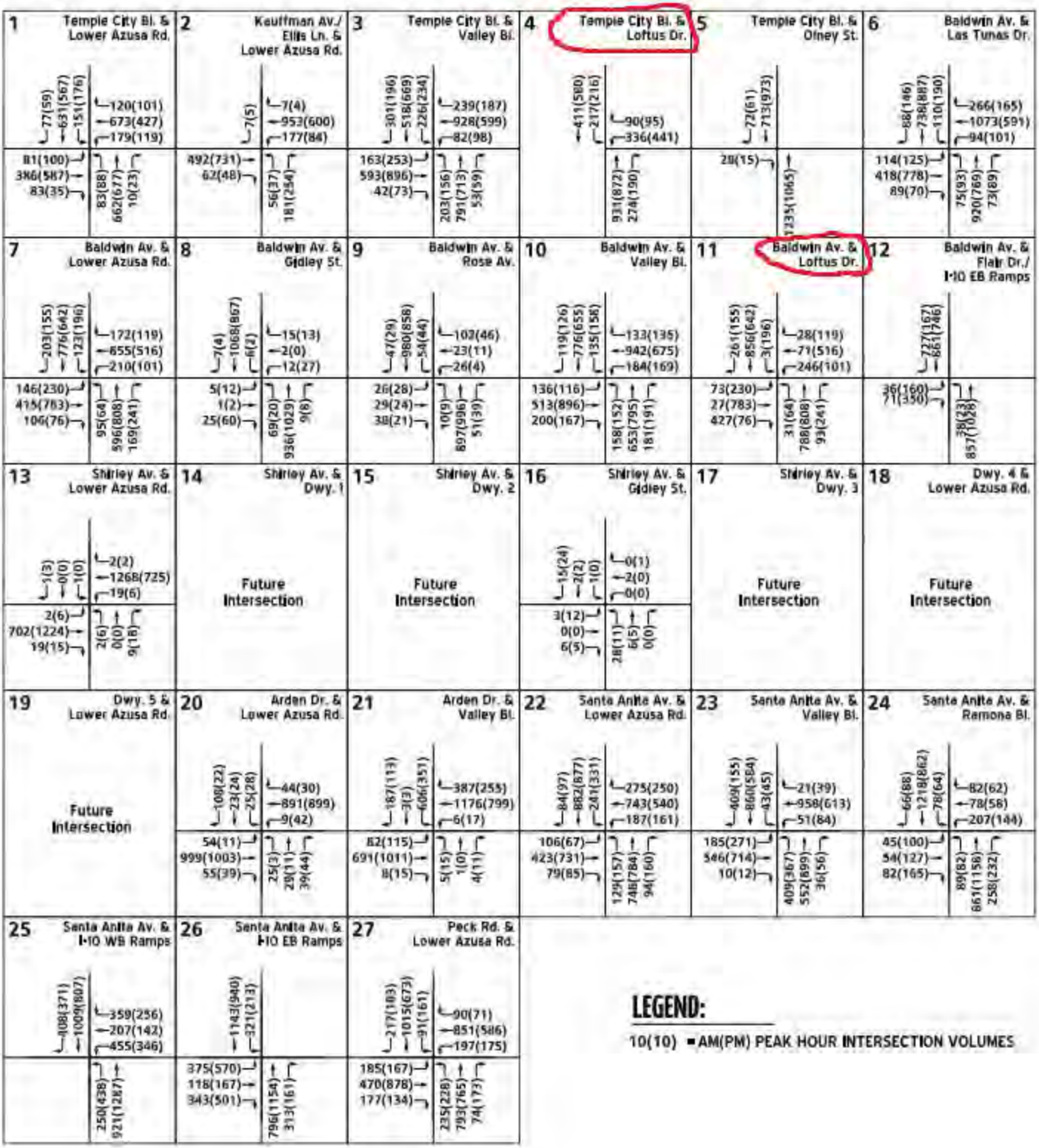
CALCULATED PEAK HOUR VOLUMES-PM

		SR	ST	SL		
		70	981	0		
0	EL				WR	0
0	ET		17:00-18:00		WT	0
23	ER				WL	0
		NL	NT	NR		
		0	1141	0		

ADJUSTED PEAK HOUR VOLUMES-PM

		SR	ST	SL		
_____	EL				WR	_____
_____	ET		_____		WT	_____
_____	ER				WL	_____
		NL	NT	NR		
		_____	_____	_____		

EXHIBIT 3-16: EXISTING (2017) TRAFFIC VOLUMES (IN PCE)



APPENDIX B

Existing LOS Worksheets

Intersection Level Of Service Report

Intersection 1: Temple City Boulevard/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.902

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	130.00	100.00	100.00	205.00	100.00	100.00	160.00	100.00	100.00	170.00	100.00	100.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	182	563	53	257	614	332	156	648	60	76	910	264
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	182	563	53	257	614	332	156	648	60	76	910	264
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	46	141	13	64	154	83	39	162	15	19	228	66
Total Analysis Volume [veh/h]	182	563	53	257	614	332	156	648	60	76	910	264
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	0	1	6	3	5	2	7
Auxiliary Signal Groups									3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.19	0.19	0.16	0.30	0.30	0.10	0.20	0.00	0.05	0.28	0.00
Intersection LOS	E											
Intersection V/C	0.902											

Intersection Level Of Service Report
Intersection 2: Baldwin Avenue/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.816

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Pocket Length [ft]	130.00	100.00	100.00	140.00	100.00	100.00	165.00	100.00	123.00	170.00	100.00	165.00
Speed [mph]	35.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	149	580	228	113	827	94	87	458	233	220	864	142
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	149	580	228	113	827	94	87	458	233	220	864	142
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	37	145	57	28	207	24	22	115	58	55	216	36
Total Analysis Volume [veh/h]	149	580	228	113	827	94	87	458	233	220	864	142
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.18	0.14	0.07	0.29	0.29	0.05	0.14	0.15	0.14	0.27	0.09
Intersection LOS	D											
Intersection V/C	0.816											

Intersection Level Of Service Report
Intersection 3: Temple City Boulevard/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.747

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	130.00	100.00	100.00	100.00
Speed [mph]	40.00		40.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	959	282	224	423	346	93
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	959	282	224	423	346	93
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	240	71	56	106	87	23
Total Analysis Volume [veh/h]	959	282	224	423	346	93
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Overlap
Signal Group	8	0	0	4	2	7
Auxiliary Signal Groups						2,7
Lead / Lag	-	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.39	0.39	0.14	0.13	0.11	0.06
Intersection LOS	C					
Intersection V/C	0.747					

Intersection Level Of Service Report
Intersection 4: Baldwin Avenue/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.179

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	95.00	100.00	100.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	32	812	96	3	882	269	75	28	440	253	73	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	812	96	3	882	269	75	28	440	253	73	29
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	203	24	1	221	67	19	7	110	63	18	7
Total Analysis Volume [veh/h]	32	812	96	3	882	269	75	28	440	253	73	29
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.28	0.28	0.00	0.55	0.17	0.05	0.06	0.28	0.16	0.22	0.22
Intersection LOS	F											
Intersection V/C	1.179											

Intersection Level Of Service Report
Intersection 5: Olney Street/Temple City Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	15.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.145

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	20.00		30.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	1190	772	73	0	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1190	772	73	0	58
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	298	193	18	0	15
Total Analysis Volume [veh/h]	0	1190	772	73	0	58
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.15
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	15.54
Movement LOS		A	A	A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.50
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	12.59
d_A, Approach Delay [s/veh]	0.00		0.00		15.54	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.43					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 1: Temple City Boulevard/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.838

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	130.00	100.00	100.00	205.00	100.00	100.00	160.00	100.00	100.00	170.00	100.00	100.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	149	740	46	203	631	141	237	975	75	80	595	205
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	149	740	46	203	631	141	237	975	75	80	595	205
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	37	185	12	51	158	35	59	244	19	20	149	51
Total Analysis Volume [veh/h]	149	740	46	203	631	141	237	975	75	80	595	205
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	0	1	6	3	5	2	7
Auxiliary Signal Groups									3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.25	0.25	0.13	0.24	0.24	0.15	0.30	0.00	0.05	0.19	0.00
Intersection LOS	D											
Intersection V/C	0.838											

Intersection Level Of Service Report
Intersection 2: Baldwin Avenue/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.922

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Pocket Length [ft]	130.00	100.00	100.00	140.00	100.00	100.00	165.00	100.00	123.00	170.00	100.00	165.00
Speed [mph]	35.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	134	865	264	191	548	99	140	999	143	174	734	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	134	865	264	191	548	99	140	999	143	174	734	135
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	216	66	48	137	25	35	250	36	44	184	34
Total Analysis Volume [veh/h]	134	865	264	191	548	99	140	999	143	174	734	135
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.27	0.17	0.12	0.20	0.20	0.09	0.31	0.09	0.11	0.23	0.08
Intersection LOS	E											
Intersection V/C	0.922											

Intersection Level Of Service Report
Intersection 3: Temple City Boulevard/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.734

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	130.00	100.00	100.00	100.00
Speed [mph]	40.00		40.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	898	196	222	597	454	98
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	898	196	222	597	454	98
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	225	49	56	149	114	25
Total Analysis Volume [veh/h]	898	196	222	597	454	98
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Overlap
Signal Group	8	0	0	4	2	7
Auxiliary Signal Groups						2,7
Lead / Lag	-	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.34	0.34	0.14	0.19	0.14	0.06
Intersection LOS	C					
Intersection V/C	0.734					

Intersection Level Of Service Report
Intersection 4: Baldwin Avenue/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.700

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	95.00	100.00	100.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	66	832	248	202	661	160	237	806	78	104	531	123
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	66	832	248	202	661	160	237	806	78	104	531	123
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	208	62	51	165	40	59	202	20	26	133	31
Total Analysis Volume [veh/h]	66	832	248	202	661	160	237	806	78	104	531	123
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.34	0.34	0.13	0.41	0.10	0.15	0.65	0.05	0.07	0.47	0.47
Intersection LOS	F											
Intersection V/C	1.700											

Intersection Level Of Service Report
Intersection 5: Olney Street/Temple City Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	18.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.077

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	20.00		30.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	1153	991	70	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1153	991	70	0	23
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	288	248	18	0	6
Total Analysis Volume [veh/h]	0	1153	991	70	0	23
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.08
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	18.06
Movement LOS		A	A	A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.25
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	6.21
d_A, Approach Delay [s/veh]	0.00		0.00		18.06	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.19					
Intersection LOS	C					

APPENDIX C

Existing with-Project LOS Worksheets

Intersection Level Of Service Report
Intersection 1: Temple City Boulevard/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.906

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	130.00	100.00	100.00	205.00	100.00	100.00	160.00	100.00	100.00	170.00	100.00	100.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	182	563	53	257	614	332	156	648	60	76	910	264
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	21	0	3	6	1	3	0	0	0	0	14
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	182	584	53	260	620	333	159	648	60	76	910	278
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	46	146	13	65	155	83	40	162	15	19	228	70
Total Analysis Volume [veh/h]	182	584	53	260	620	333	159	648	60	76	910	278
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	0	1	6	3	5	2	7
Auxiliary Signal Groups									3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.20	0.20	0.16	0.30	0.30	0.10	0.20	0.00	0.05	0.28	0.01
Intersection LOS	E											
Intersection V/C	0.906											

Intersection Level Of Service Report
Intersection 2: Baldwin Avenue/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.824

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Pocket Length [ft]	130.00	100.00	100.00	140.00	100.00	100.00	165.00	100.00	123.00	170.00	100.00	165.00
Speed [mph]	35.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	149	580	228	113	827	94	87	458	233	220	864	142
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	11	0	0	0	0	0	0	1	2	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	160	580	228	113	827	94	87	459	235	220	867	142
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	145	57	28	207	24	22	115	59	55	217	36
Total Analysis Volume [veh/h]	160	580	228	113	827	94	87	459	235	220	867	142
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.18	0.14	0.07	0.29	0.29	0.05	0.14	0.15	0.14	0.27	0.09
Intersection LOS	D											
Intersection V/C	0.824											

Intersection Level Of Service Report
Intersection 3: Temple City Boulevard/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.753

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	130.00	100.00	100.00	100.00
Speed [mph]	40.00		40.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	959	282	224	423	346	93
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	0	2	4	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	975	282	226	427	346	98
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	244	71	57	107	87	25
Total Analysis Volume [veh/h]	975	282	226	427	346	98
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Overlap
Signal Group	8	0	0	4	2	7
Auxiliary Signal Groups						2,7
Lead / Lag	-	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.39	0.39	0.14	0.13	0.11	0.06
Intersection LOS	C					
Intersection V/C	0.753					

Intersection Level Of Service Report
Intersection 4: Baldwin Avenue/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.185

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	95.00	100.00	100.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	32	812	96	3	882	269	75	28	440	253	73	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	11	0	0	2	0	0	0	2	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	37	823	96	3	884	269	75	28	442	253	73	29
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	206	24	1	221	67	19	7	111	63	18	7
Total Analysis Volume [veh/h]	37	823	96	3	884	269	75	28	442	253	73	29
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.29	0.29	0.00	0.55	0.17	0.05	0.06	0.28	0.16	0.22	0.22
Intersection LOS	F											
Intersection V/C	1.185											

Intersection Level Of Service Report
Intersection 5: Olney Street/Temple City Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	15.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.146

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	20.00		30.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	1190	772	73	0	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	16	4	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1206	776	73	0	58
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	302	194	18	0	15
Total Analysis Volume [veh/h]	0	1206	776	73	0	58
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.15
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	15.60
Movement LOS		A	A	A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.51
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	12.67
d_A, Approach Delay [s/veh]	0.00		0.00		15.60	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.43					
Intersection LOS	C					

Intersection Level Of Service Report

Intersection 1: Temple City Boulevard/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.847

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	130.00	100.00	100.00	205.00	100.00	100.00	160.00	100.00	100.00	170.00	100.00	100.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	149	740	46	203	631	141	237	975	75	80	595	205
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	7	0	10	24	3	1	0	0	0	0	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	149	747	46	213	655	144	238	975	75	80	595	209
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	37	187	12	53	164	36	60	244	19	20	149	52
Total Analysis Volume [veh/h]	149	747	46	213	655	144	238	975	75	80	595	209
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	0	1	6	3	5	2	7
Auxiliary Signal Groups									3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.25	0.25	0.13	0.25	0.25	0.15	0.30	0.00	0.05	0.19	0.00
Intersection LOS	D											
Intersection V/C	0.847											

Intersection Level Of Service Report
Intersection 2: Baldwin Avenue/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.923

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Pocket Length [ft]	130.00	100.00	100.00	140.00	100.00	100.00	165.00	100.00	123.00	170.00	100.00	165.00
Speed [mph]	35.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	134	865	264	191	548	99	140	999	143	174	734	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	0	0	0	0	3	8	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	138	865	264	191	548	99	140	1002	151	174	735	135
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	216	66	48	137	25	35	251	38	44	184	34
Total Analysis Volume [veh/h]	138	865	264	191	548	99	140	1002	151	174	735	135
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.27	0.17	0.12	0.20	0.20	0.09	0.31	0.09	0.11	0.23	0.08
Intersection LOS	E											
Intersection V/C	0.923											

Intersection Level Of Service Report
Intersection 3: Temple City Boulevard/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.740

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	130.00	100.00	100.00	100.00
Speed [mph]	40.00		40.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	898	196	222	597	454	98
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	8	16	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	903	196	230	613	454	100
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	226	49	58	153	114	25
Total Analysis Volume [veh/h]	903	196	230	613	454	100
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Overlap
Signal Group	8	0	0	4	2	7
Auxiliary Signal Groups						2,7
Lead / Lag	-	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.34	0.34	0.14	0.19	0.14	0.06
Intersection LOS	C					
Intersection V/C	0.740					

Intersection Level Of Service Report
Intersection 4: Baldwin Avenue/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.702

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	95.00	100.00	100.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	66	832	248	202	661	160	237	806	78	104	531	123
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	4	0	0	8	0	0	0	8	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	68	836	248	202	669	160	237	806	86	104	531	123
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	209	62	51	167	40	59	202	22	26	133	31
Total Analysis Volume [veh/h]	68	836	248	202	669	160	237	806	86	104	531	123
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.34	0.34	0.13	0.42	0.10	0.15	0.65	0.05	0.07	0.47	0.47
Intersection LOS	F											
Intersection V/C	1.702											

Intersection Level Of Service Report
Intersection 5: Olney Street/Temple City Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	18.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.079

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	20.00		30.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	1153	991	70	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	5	16	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1158	1007	70	0	23
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	290	252	18	0	6
Total Analysis Volume [veh/h]	0	1158	1007	70	0	23
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.08
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	18.36
Movement LOS		A	A	A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.25
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	6.36
d_A, Approach Delay [s/veh]	0.00		0.00		18.36	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.19					
Intersection LOS	C					

APPENDIX D

Future without-Project LOS Worksheets

Intersection Level Of Service Report

Intersection 1: Temple City Boulevard/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.925

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	130.00	100.00	100.00	205.00	100.00	100.00	160.00	100.00	100.00	170.00	100.00	100.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	182	563	53	257	614	332	156	648	60	76	910	264
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	37	10	1	10	1	0	20	1	20	29	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	187	606	64	261	630	336	158	674	62	97	948	268
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	152	16	65	158	84	40	169	16	24	237	67
Total Analysis Volume [veh/h]	187	606	64	261	630	336	158	674	62	97	948	268
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	0	1	6	3	5	2	7
Auxiliary Signal Groups									3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.21	0.21	0.16	0.30	0.30	0.10	0.21	0.00	0.06	0.30	0.00
Intersection LOS	E											
Intersection V/C	0.925											

Intersection Level Of Service Report
Intersection 2: Baldwin Avenue/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.854

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Pocket Length [ft]	130.00	100.00	100.00	140.00	100.00	100.00	165.00	100.00	123.00	170.00	100.00	165.00
Speed [mph]	35.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	149	580	228	113	827	94	87	458	233	220	864	142
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	23	12	5	17	10	15	16	1	16	38	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	152	609	242	119	852	105	103	479	236	238	911	149
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	152	61	30	213	26	26	120	59	60	228	37
Total Analysis Volume [veh/h]	152	609	242	119	852	105	103	479	236	238	911	149
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.19	0.15	0.07	0.30	0.30	0.06	0.15	0.15	0.15	0.28	0.09
Intersection LOS	D											
Intersection V/C	0.854											

Intersection Level Of Service Report
Intersection 3: Temple City Boulevard/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.780

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	130.00	100.00	100.00	100.00
Speed [mph]	40.00		40.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	959	282	224	423	346	93
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	50	20	0	31	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1019	305	226	458	364	94
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	255	76	57	115	91	24
Total Analysis Volume [veh/h]	1019	305	226	458	364	94
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Overlap
Signal Group	8	0	0	4	2	7
Auxiliary Signal Groups						2,7
Lead / Lag	-	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.41	0.41	0.14	0.14	0.11	0.06
Intersection LOS	C					
Intersection V/C	0.780					

Intersection Level Of Service Report
Intersection 4: Baldwin Avenue/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.202

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	95.00	100.00	100.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	32	812	96	3	882	269	75	28	440	253	73	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	16	0	0	19	15	20	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	836	97	3	910	287	96	28	444	256	74	29
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	209	24	1	228	72	24	7	111	64	19	7
Total Analysis Volume [veh/h]	32	836	97	3	910	287	96	28	444	256	74	29
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.29	0.29	0.00	0.57	0.18	0.06	0.08	0.28	0.16	0.22	0.22
Intersection LOS	F											
Intersection V/C	1.202											

Intersection Level Of Service Report
Intersection 5: Olney Street/Temple City Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	16.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.159

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	20.00		30.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	1190	772	73	0	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0100	1.0100	1.0100	1.0000	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	70	46	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1272	826	74	0	59
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	318	207	19	0	15
Total Analysis Volume [veh/h]	0	1272	826	74	0	59
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.16
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	16.49
Movement LOS		A	A	A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.56
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	13.94
d_A, Approach Delay [s/veh]	0.00		0.00		16.49	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.44					
Intersection LOS	C					

Intersection Level Of Service Report

Intersection 1: Temple City Boulevard/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.885

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	130.00	100.00	100.00	205.00	100.00	100.00	160.00	100.00	100.00	170.00	100.00	100.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	149	740	46	203	631	141	237	975	75	80	595	205
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	21	7	1	38	0	1	27	2	34	48	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	151	768	53	206	675	142	240	1012	78	115	649	208
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	192	13	52	169	36	60	253	20	29	162	52
Total Analysis Volume [veh/h]	151	768	53	206	675	142	240	1012	78	115	649	208
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	0	1	6	3	5	2	7
Auxiliary Signal Groups									3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.26	0.26	0.13	0.26	0.26	0.15	0.32	0.00	0.07	0.20	0.00
Intersection LOS	D											
Intersection V/C	0.885											

Intersection Level Of Service Report
Intersection 2: Baldwin Avenue/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.962

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Pocket Length [ft]	130.00	100.00	100.00	140.00	100.00	100.00	165.00	100.00	123.00	170.00	100.00	165.00
Speed [mph]	35.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	134	865	264	191	548	99	140	999	143	174	734	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	16	15	12	60	33	12	21	2	20	49	8
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	136	890	282	205	613	133	153	1030	146	196	790	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	223	71	51	153	33	38	258	37	49	198	36
Total Analysis Volume [veh/h]	136	890	282	205	613	133	153	1030	146	196	790	144
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.28	0.18	0.13	0.23	0.23	0.10	0.32	0.09	0.12	0.25	0.09
Intersection LOS	E											
Intersection V/C	0.962											

Intersection Level Of Service Report
Intersection 3: Temple City Boulevard/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.759

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	130.00	100.00	100.00	100.00
Speed [mph]	40.00		40.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	898	196	222	597	454	98
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	29	12	0	74	19	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	936	210	224	677	478	99
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	234	53	56	169	120	25
Total Analysis Volume [veh/h]	936	210	224	677	478	99
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Overlap
Signal Group	8	0	0	4	2	7
Auxiliary Signal Groups						2,7
Lead / Lag	-	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.36	0.36	0.14	0.21	0.15	0.06
Intersection LOS	C					
Intersection V/C	0.759					

Intersection Level Of Service Report
Intersection 4: Baldwin Avenue/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.754

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	95.00	100.00	100.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	66	832	248	202	661	160	237	806	78	104	531	123
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	20	0	0	63	19	12	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	67	860	250	204	731	181	251	814	79	105	536	124
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	215	63	51	183	45	63	204	20	26	134	31
Total Analysis Volume [veh/h]	67	860	250	204	731	181	251	814	79	105	536	124
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.35	0.35	0.13	0.46	0.11	0.16	0.67	0.05	0.07	0.48	0.48
Intersection LOS	F											
Intersection V/C	1.754											

Intersection Level Of Service Report
Intersection 5: Olney Street/Temple City Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	20.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.088

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	20.00		30.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	1153	991	70	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0100	1.0100	1.0100	1.0000	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	41	93	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1206	1094	71	0	23
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	302	274	18	0	6
Total Analysis Volume [veh/h]	0	1206	1094	71	0	23
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	20.18
Movement LOS		A	A	A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.29
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	7.20
d_A, Approach Delay [s/veh]	0.00		0.00		20.18	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.19					
Intersection LOS	C					

APPENDIX E

Future with-Project LOS Worksheets

Intersection Level Of Service Report

Intersection 1: Temple City Boulevard/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.929

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	130.00	100.00	100.00	205.00	100.00	100.00	160.00	100.00	100.00	170.00	100.00	100.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	182	563	53	257	614	332	156	648	60	76	910	264
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	58	10	3	16	1	3	20	1	20	29	15
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	187	627	64	263	636	336	161	674	62	97	948	282
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	157	16	66	159	84	40	169	16	24	237	71
Total Analysis Volume [veh/h]	187	627	64	263	636	336	161	674	62	97	948	282
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	0	1	6	3	5	2	7
Auxiliary Signal Groups									3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.22	0.22	0.16	0.30	0.30	0.10	0.21	0.00	0.06	0.30	0.01
Intersection LOS	E											
Intersection V/C	0.929											

Intersection Level Of Service Report
Intersection 2: Baldwin Avenue/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.862

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Pocket Length [ft]	130.00	100.00	100.00	140.00	100.00	100.00	165.00	100.00	123.00	170.00	100.00	165.00
Speed [mph]	35.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	149	580	228	113	827	94	87	458	233	220	864	142
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	23	12	5	17	10	15	16	3	16	40	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	163	609	242	119	852	105	103	479	238	238	913	149
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	152	61	30	213	26	26	120	60	60	228	37
Total Analysis Volume [veh/h]	163	609	242	119	852	105	103	479	238	238	913	149
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.19	0.15	0.07	0.30	0.30	0.06	0.15	0.15	0.15	0.29	0.09
Intersection LOS	D											
Intersection V/C	0.862											

Intersection Level Of Service Report
Intersection 3: Temple City Boulevard/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.786

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	130.00	100.00	100.00	100.00
Speed [mph]	40.00		40.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	959	282	224	423	346	93
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	66	20	2	35	15	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1035	305	228	462	364	99
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	259	76	57	116	91	25
Total Analysis Volume [veh/h]	1035	305	228	462	364	99
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Overlap
Signal Group	8	0	0	4	2	7
Auxiliary Signal Groups						2,7
Lead / Lag	-	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.42	0.42	0.14	0.14	0.11	0.06
Intersection LOS	C					
Intersection V/C	0.786					

Intersection Level Of Service Report
Intersection 4: Baldwin Avenue/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.207

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	95.00	100.00	100.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	32	812	96	3	882	269	75	28	440	253	73	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	28	0	0	21	15	20	0	2	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	37	848	97	3	912	287	96	28	446	256	74	29
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	212	24	1	228	72	24	7	112	64	19	7
Total Analysis Volume [veh/h]	37	848	97	3	912	287	96	28	446	256	74	29
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.30	0.30	0.00	0.57	0.18	0.06	0.08	0.28	0.16	0.22	0.22
Intersection LOS	F											
Intersection V/C	1.207											

Intersection Level Of Service Report
Intersection 5: Olney Street/Temple City Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	16.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.159

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	20.00		30.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	1190	772	73	0	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0100	1.0100	1.0100	1.0000	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	86	50	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1288	830	74	0	59
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	322	208	19	0	15
Total Analysis Volume [veh/h]	0	1288	830	74	0	59
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.16
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	16.57
Movement LOS		A	A	A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.56
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	14.03
d_A, Approach Delay [s/veh]	0.00		0.00		16.57	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.43					
Intersection LOS	C					

Intersection Level Of Service Report

Intersection 1: Temple City Boulevard/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.893

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	130.00	100.00	100.00	205.00	100.00	100.00	160.00	100.00	100.00	170.00	100.00	100.00
Speed [mph]	40.00			40.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	149	740	46	203	631	141	237	975	75	80	595	205
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	28	7	11	62	3	1	27	2	34	48	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	151	775	53	216	699	145	240	1012	78	115	649	212
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	194	13	54	175	36	60	253	20	29	162	53
Total Analysis Volume [veh/h]	151	775	53	216	699	145	240	1012	78	115	649	212
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	0	1	6	3	5	2	7
Auxiliary Signal Groups									3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.26	0.26	0.14	0.26	0.26	0.15	0.32	0.00	0.07	0.20	0.00
Intersection LOS	D											
Intersection V/C	0.893											

Intersection Level Of Service Report
Intersection 2: Baldwin Avenue/Valley Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.962

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Pocket Length [ft]	130.00	100.00	100.00	140.00	100.00	100.00	165.00	100.00	123.00	170.00	100.00	165.00
Speed [mph]	35.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	134	865	264	191	548	99	140	999	143	174	734	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	16	15	12	60	33	12	23	10	20	50	8
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	139	890	282	205	613	133	153	1032	154	196	791	144
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	223	71	51	153	33	38	258	39	49	198	36
Total Analysis Volume [veh/h]	139	890	282	205	613	133	153	1032	154	196	791	144
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.28	0.18	0.13	0.23	0.23	0.10	0.32	0.10	0.12	0.25	0.09
Intersection LOS	E											
Intersection V/C	0.962											

Intersection Level Of Service Report
Intersection 3: Temple City Boulevard/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.765

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	130.00	100.00	100.00	100.00
Speed [mph]	40.00		40.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	898	196	222	597	454	98
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	34	12	8	90	19	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	941	210	232	693	478	101
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	235	53	58	173	120	25
Total Analysis Volume [veh/h]	941	210	232	693	478	101
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Overlap
Signal Group	8	0	0	4	2	7
Auxiliary Signal Groups						2,7
Lead / Lag	-	-	-	-	Lead	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.36	0.36	0.15	0.22	0.15	0.06
Intersection LOS	C					
Intersection V/C	0.765					

Intersection Level Of Service Report
Intersection 4: Baldwin Avenue/Loftus Drive

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.760

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	95.00	100.00	100.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	66	832	248	202	661	160	237	806	78	104	531	123
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	24	0	0	71	19	12	0	8	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	69	864	250	204	739	181	251	814	87	105	536	124
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	216	63	51	185	45	63	204	22	26	134	31
Total Analysis Volume [veh/h]	69	864	250	204	739	181	251	814	87	105	536	124
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.35	0.35	0.13	0.46	0.11	0.16	0.67	0.05	0.07	0.48	0.48
Intersection LOS	F											
Intersection V/C	1.760											

Intersection Level Of Service Report
Intersection 5: Olney Street/Temple City Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	20.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.090

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	20.00		30.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	1153	991	70	0	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0100	1.0100	1.0100	1.0000	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	46	109	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1211	1110	71	0	23
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	303	278	18	0	6
Total Analysis Volume [veh/h]	0	1211	1110	71	0	23
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.09
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	20.54
Movement LOS		A	A	A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.29
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	7.37
d_A, Approach Delay [s/veh]	0.00		0.00		20.54	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.20					
Intersection LOS	C					

APPENDIX F

Driveway Operations Analysis

Intersection Level Of Service Report
Intersection 7: Project Driveway

Control Type:	Two-way stop	Delay (sec / veh):	51.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.105

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	983	0	0	1203	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	38	38	4	11	9	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1031	38	4	1226	9	2
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	258	10	1	307	2	1
Total Analysis Volume [veh/h]	1031	38	4	1226	9	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.01	0.10	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	10.59	0.00	51.17	16.64
Movement LOS	A	A	B	A	F	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.01	0.35	0.35
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.47	0.23	8.87	8.87
d_A, Approach Delay [s/veh]	0.00		0.03		44.90	
Approach LOS	A		A		E	
d_I, Intersection Delay [s/veh]	0.23					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 7: Proejct Driveway

Control Type:	Two-way stop	Delay (sec / veh):	86.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.475

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	1182	0	0	975	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0100	1.0100	1.0100	1.0100	1.0100	1.0100
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	11	2	39	37	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1217	11	2	1024	37	4
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	304	3	1	256	9	1
Total Analysis Volume [veh/h]	1217	11	2	1024	37	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.48	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	11.41	0.00	86.06	48.08
Movement LOS	A	A	B	A	F	E
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	2.05	2.05
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.27	0.13	51.25	51.25
d_A, Approach Delay [s/veh]	0.00		0.02		82.35	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	1.48					
Intersection LOS	F					

APPENDIX G

Site Driveway Truck Turning Radius Drawing