

# **12841 VALLEY VIEW AVENUE PROJECT TRAFFIC IMPACT ANALYSIS**

City of La Mirada

August 16, 2019

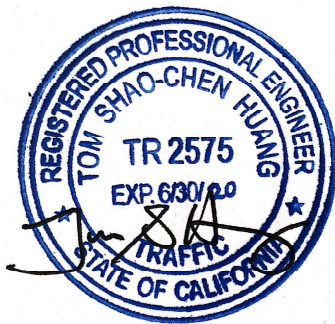


Traffic Engineering • Transportation Planning • Parking • Noise & Vibration  
Air Quality • Global Climate Change • Health Risk Assessment

# 12841 VALLEY VIEW AVENUE PROJECT TRAFFIC IMPACT ANALYSIS

City of La Mirada

August 16, 2019



*prepared by*

Tom Huang, TE  
Giancarlo Ganddini, TE, PTP



**GANDDINI GROUP, INC.**

550 Parkcenter Drive, Suite 202  
Santa Ana, California 92705  
714.795.3100 | [www.ganddini.com](http://www.ganddini.com)

19-0060

# TABLE OF CONTENTS

---

## EXECUTIVE SUMMARY

<b>1. INTRODUCTION.....</b>	<b>1</b>
Purpose and Objectives.....	1
Project Description.....	1
Study Area.....	1
Analysis Scenarios.....	1
<b>2. METHODOLOGY.....</b>	<b>4</b>
Intersection Capacity Utilization Methodology.....	4
Intersection Delay Methodology.....	4
Performance Standards.....	5
Thresholds of Significance.....	6
<b>3. EXISTING CONDITIONS.....</b>	<b>7</b>
Existing Roadway System.....	7
Pedestrian Facilities.....	7
Bicycle Routes.....	7
Transit Facilities.....	7
Truck Routes.....	7
General Plan Context.....	7
Existing Traffic Volumes.....	7
Existing Level of Service.....	8
<b>4. PROJECT TRIP FORECASTS.....</b>	<b>19</b>
Project Trip Generation.....	19
Project Trip Distribution and Assignment.....	19
Project Design Features.....	19
<b>5. FUTURE VOLUME FORECASTS.....</b>	<b>26</b>
Cumulative Trips.....	26
Ambient Growth Rate.....	26
Other Development.....	26
Analysis Scenario Volume Forecasts.....	26
Existing Plus Project.....	26
Opening Year (2021) Without Project.....	26
Opening Year (2021) With Project.....	26
<b>6. FUTURE OPERATIONAL ANALYSIS.....</b>	<b>40</b>
Existing Plus Project.....	40
Opening Year (2021) Without Project.....	40
Opening Year (2021) With Project.....	40
<b>7. CONCLUSIONS.....</b>	<b>44</b>
Site Access.....	44
Mitigation Measures.....	44
General Recommendations.....	44

## APPENDICES

---

- Appendix A Glossary
- Appendix B Scoping Agreement
- Appendix C Volume Count Worksheets
- Appendix D Level of Service Worksheets

## LIST OF TABLES

---

Table 1.	Existing Levels of Service.....	9
Table 2.	Project Trip Generation.....	20
Table 3.	Other Development Trip Generation .....	27
Table 4.	Existing Plus Project Intersection Levels of Service and Significant Impact Evaluation.....	41
Table 5.	Opening Year (2021) Without Project Intersection Levels of Service.....	42
Table 6.	Opening Year (2021) With Project Intersection Levels of Service and Significant Impact Evaluation.....	43

# LIST OF FIGURES

---

Figure 1.	Project Location Map.....	2
Figure 2.	Site Plan.....	3
Figure 3.	Existing Lane Geometry and Intersection Traffic Controls.....	10
Figure 4.	Existing Pedestrian Facilities .....	11
Figure 5.	City of La Mirada Bikeway Master Plan.....	12
Figure 6.	City of La Mirada Transit Routes .....	13
Figure 7.	City of La Mirada General Plan Circulation Element.....	14
Figure 8.	City of La Mirada General Plan Roadway Cross-Sections .....	15
Figure 9.	Existing Average Daily Traffic Volumes .....	16
Figure 10.	Existing AM Peak Hour Intersection Turning Movement Volumes.....	17
Figure 11.	Existing PM Peak Hour Intersection Turning Movement Volumes .....	18
Figure 12.	Project Outbound Trip Distribution .....	21
Figure 13.	Project Inbound Trip Distribution.....	22
Figure 14.	Project Average Daily Traffic Volumes .....	23
Figure 15.	Project AM Peak Hour Intersection Turning Movement Volumes.....	24
Figure 16.	Project PM Peak Hour Intersection Turning Movement Volumes .....	25
Figure 17.	Other Development Average Daily Traffic Volumes.....	28
Figure 18.	Other Development AM Peak Hour Intersection Turning Movement Volumes .....	29
Figure 19.	Other Development PM Peak Hour Intersection Turning Movement Volumes.....	30
Figure 20.	Existing Plus Project Average Daily Traffic Volumes.....	31
Figure 21.	Existing Plus Project AM Peak Hour Intersection Turning Movement Volumes .....	32
Figure 22.	Existing Plus Project PM Peak Hour Intersection Turning Movement Volumes.....	33
Figure 23.	Opening Year (2021) Without Project Average Daily Traffic Volumes.....	34
Figure 24.	Opening Year (2021) Without Project AM Peak Hour Intersection Turning Movement Volumes.....	35
Figure 25.	Opening Year (2021) Without Project PM Peak Hour Intersection Turning Movement Volumes.....	36
Figure 26.	Opening Year (2021) With Project Average Daily Traffic Volumes.....	37
Figure 27.	Opening Year (2021) With Project AM Peak Hour Intersection Turning Movement Volumes.....	38
Figure 28.	Opening Year (2021) With Project PM Peak Hour Intersection Turning Movement Volumes.....	39
Figure 29.	Circulation Recommendations.....	45

# EXECUTIVE SUMMARY

---

The purpose of this Traffic Impact Analysis is to provide an assessment of traffic operations resulting from development of the proposed 12841 Valley View Avenue Project and to identify measures necessary to mitigate potentially significant traffic impacts, if any. This report analyzes traffic impacts for the anticipated project opening year in Year 2021.

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

## PROJECT DESCRIPTION

The project site is located at 12841 Valley View Avenue in the City of La Mirada. The project site is located west of Valley View Avenue and north of Adoree Street. The project site currently has a vacated commercial building and it is not occupied by any tenants. The proposed project consists of redeveloping the project site with 39 dwelling units of low-rise multi-family housing. A right-in/right-out only access driveway is proposed on Valley View Avenue. The proposed project is anticipated to be constructed and fully operational by year 2021.

## EXISTING OPERATIONS

The study intersections currently operate within acceptable Levels of Service (D or better) during the peak hours for Existing conditions, except for the following study intersections that are projected to operate at deficient Levels of Service (see Table 1):

- Valley View Avenue/Rosecrans Avenue - #6 (LOS E, PM peak hour)

## PROJECT TRIPS

The proposed project is forecast to generate a total of approximately 285 net daily vehicle trips, including 18 vehicle trips during the morning peak hour and 22 vehicle trips during the evening peak hour.

## FORECAST OPERATIONS

Existing Plus Project Conditions: The study intersections are projected to operate within acceptable Levels of Service (D or better) during the peak hours for Existing Plus Project conditions, except for the following study intersection that is projected to continue to operate at deficient Levels of Service (see Table 4):

- Valley View Avenue/Rosecrans Avenue - #6 (LOS E, PM peak hour)

It should be noted that this is a degradation of Level of Service for the already deficient intersection during the Existing conditions. The deficiency is not solely caused by the proposed project.

Opening Year (2021) Without Project: The study intersections are projected to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2021) Without Project traffic conditions, except for the following study intersection that is projected to operate at deficient Levels of Service (see Table 5):

- Valley View Avenue/Rosecrans Avenue - #6 (LOS E, PM peak hour)

Opening Year (2021) With Project: The study intersections are projected to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2021) With Project traffic conditions, except for the following study intersection that is projected to operate at deficient Levels of Service (see Table 6):

- Valley View Avenue/Rosecrans Avenue - #6 (LOS E, PM peak hour)

It should be noted that this is a degradation of Level of Service for the already deficient intersection during the Existing conditions. The deficiency is not solely caused by the proposed project. Based on the City's guidelines, the project does not contribute to a significant traffic impact because the change in ICU is within the impact threshold.

## **MITIGATION MEASURES**

No off-site mitigation measure are recommended for the intersection of Valley View Avenue and Rosecrans Avenue because this is a degradation of Level of Service for the already deficient intersection during the Existing conditions. The deficiency is not solely caused by the proposed project. Based on the City's guidelines, the project does not contribute to a significant traffic impact because the change in ICU is within the impact threshold.

# 1. INTRODUCTION

---

This section describes the purpose of this traffic impact analysis, project location, proposed development, and study area. Figure 1 shows the project location map and Figure 2 illustrates the project site plan.

## PURPOSE AND OBJECTIVES

The purpose of this traffic impact analysis is to provide an assessment of traffic operations resulting from development of the proposed 12841 Valley View Avenue Project and to identify measures necessary to mitigate potentially significant traffic impacts. This report analyzes traffic impacts for the anticipated project opening year in 2021.

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

## PROJECT DESCRIPTION

The project site is located at 12841 Valley View Avenue in the City of La Mirada. The project site is located west of Valley View Avenue and north of Adoree Street. The project site currently has a vacated commercial building and it is not occupied by any tenants. The proposed project consists of redeveloping the project site with 39 dwelling units of low-rise multi-family housing. A right-in/right-out only access driveway is proposed on Valley View Avenue. The proposed project is anticipated to be constructed and fully operational by year 2021.

## STUDY AREA

Based on the study intersections identified in the scoping agreement (Appendix B), the study area consists of the following study intersections within the City of La Mirada jurisdiction:

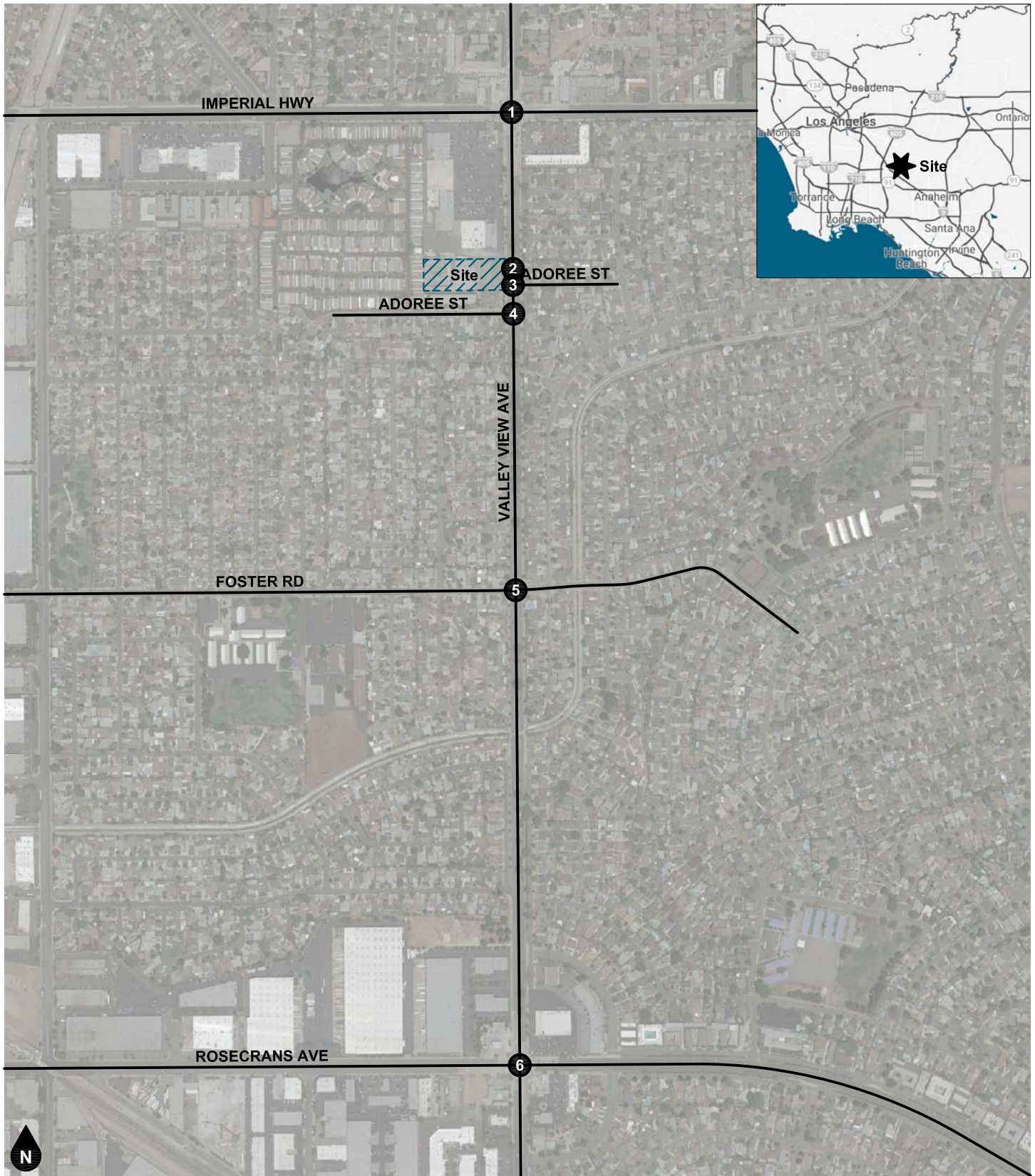
Study Intersections	Jurisdiction
1. Valley View Avenue (NS) at Imperial Highway (EW)	La Mirada
2. Valley View Avenue (NS) at Project Driveway (EW) [Future]	La Mirada
3. Valley View Avenue (NS) at Adoree Street North (EW)	La Mirada
4. Valley View Avenue (NS) at Adoree Street South (EW)	La Mirada
5. Valley View Avenue (NS) at Foster Road (EW)	La Mirada
6. Valley View Avenue (NS) at Rosecrans Avenue (EW)	La Mirada

## ANALYSIS SCENARIOS

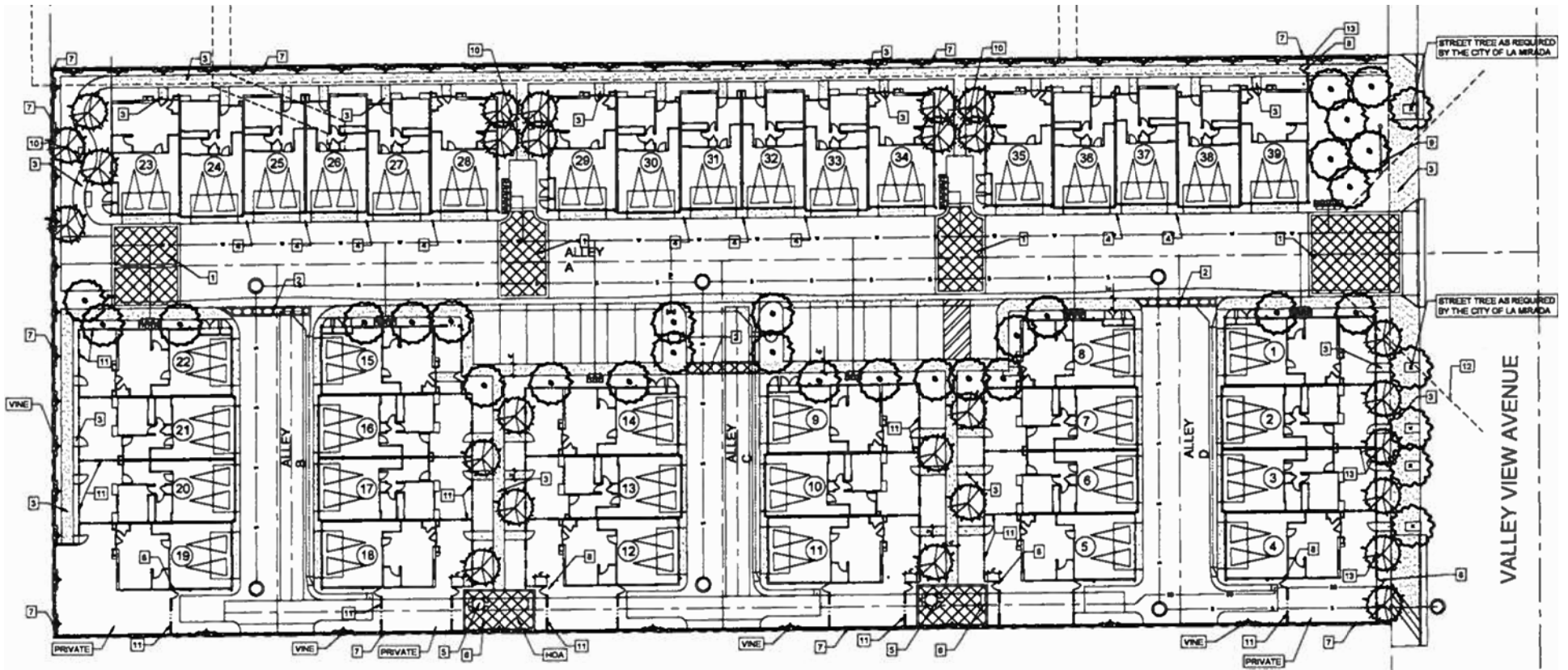
The following scenarios are analyzed during typical weekday AM and PM peak hour conditions:

- Existing Conditions
- Existing Plus Project Conditions
- Opening Year (2021) Without Project Conditions
- Opening Year (2021) With Project Conditions





**Figure 1**  
**Project Location Map**



**Figure 2**  
**Site Plan**

## 2. METHODOLOGY

---

This section discusses the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies.

### INTERSECTION CAPACITY UTILIZATION METHODOLOGY

Analysis of signalized intersections within the City of La Mirada is based on the Intersection Capacity Utilization (ICU) methodology. The ICU methodology compares the traffic volume using the intersection to the capacity of the intersection. The resulting volume-to-capacity ratio represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The volume-to-capacity ratio is then correlated to a performance measure known as Level of Service based on the following thresholds:

Level of Service	Volume/Capacity Ratio
A	$\leq 0.600$
B	0.601 to 0.700
C	0.701 to 0.800
D	0.801 to 0.900
E	0.901 to 1.000
F	$> 1.000$

Source: Transportation Research Board, Interim Materials on Highway Capacity, Transportation Research Circular No. 212, January 1980.

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure). ICU analysis was performed using the Vistro (Version 6.00-00) software.

Based on City of La Mirada/County of Los Angeles guidelines<sup>1</sup>, the ICU analysis utilizes the following parameters: 1,600 vehicles per hour per lane for through and turn lanes, 2,880 vehicles per hour for dual left-turn lanes, and a total clearance adjustment of 10 percent (i.e., 0.10 added to critical Volume/Capacity).

### INTERSECTION DELAY METHODOLOGY

The technique used to assess the performance of unsignalized intersections is known as the intersection delay methodology based on the procedures contained in the Highway Capacity Manual (Transportation Research Board, 6th Edition). The methodology considers the traffic volume and distribution of movements, traffic composition, geometric characteristics, and signalization details to calculate the average control delay per vehicle and corresponding Level of Service. Control delay is defined as the portion of delay attributed to the intersection traffic control (such as a traffic signal or stop sign) and includes initial deceleration, queue move-up time, stopped delay, and final acceleration delay. The intersection control delay is then correlated to Level of Service based on the following thresholds:

---

<sup>1</sup> County of Los Angeles Traffic Impact Analysis (TIA) Report Guidelines; December 2013.

Level of Service	Intersection Control Delay (Seconds / Vehicle)
	Unsignalized Intersection
A	≤ 10.0
B	> 10.0 to ≤ 15.0
C	> 15.0 to ≤ 25.0
D	> 25.0 to ≤ 35.0
E	> 35.0 to ≤ 50.0
F	> 50.0

Source: Transportation Research Board, [Highway Capacity Manual](#) (6th Edition).

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure). At intersections with traffic signal or all way stop control, Level of Service is determined by the average control delay for the overall intersection. At intersections with cross street stop control (i.e., one- or two-way stop control), Level of Service is determined by the average control delay for the worst individual movement (or movements sharing a single lane). Intersection delay analysis was performed using the Vistro (Version 6.00-00) software with default values recommended in the Highway Capacity Manual.

## PERFORMANCE STANDARDS

City of La Mirada / County of Los Angeles. Both the City of La Mirada and County of Los Angeles have established Level of Service D as the minimum acceptable Level of Service.

California Department of Transportation. As stated in the Guide for the Preparation of Traffic Impact Studies (State of California, 2002), "California Department of Transportation endeavors to maintain a target LOS [Level of Service] at the transition between LOS "C" and LOS "D" on State highway facilities". The California Department of Transportation acknowledges this may not always be feasible and recommends consultation with the California Department of Transportation to determine the appropriate target Level of Service. For consistency with local requirements, this analysis defines Level of Service D as the minimum acceptable Level of Service for State Highway facilities.

## THRESHOLDS OF SIGNIFICANCE

For signalized study intersections, City of La Mirada and County of Los Angeles jurisdiction use the following table to determine significant impacts by project and identify feasible mitigation measures which would mitigate the project and/or other related projects' significant impacts to a level of insignificance

Pre-Project Conditions		Project Increase in V/C
LOS	V/C	
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

The City of La Mirada General Plan requires that LOS D or better be maintained on Arterial Streets with certain exceptions. As such, intersections operating at LOS E or F will be considered deficient. A significant impact occurs at a signalized intersection if the addition of Project trips to an intersection that is currently operating at a deficient LOS (i.e., LOS E or F) causes the V/C to increase by 0.01 or more.

For unsignalized intersection, based on review of the Los Angeles County Traffic Impact Analysis guidelines and the City's Circulation Element, there are no specific significance criteria for the performance of unsignalized intersections. Therefore, for purposes of determining project-specific impacts of the proposed project at unsignalized intersections, the following significance criteria is provided:

- The project would create a significant impact at an unsignalized intersection if the addition of project-traffic would cause the intersection to operate from LOS D, or better in the baseline (pre-project) condition, to LOS E or F in the plus-project condition. A traffic signal warrant analysis shall be conducted to determine whether a traffic signal is warranted. If a traffic signal is warranted, the City may require the project applicant to pay its fair-share of fees to an applicable program (e.g., DIF, CIP, etc.) for the signalization of the intersection, when warranted.
- If an unsignalized intersection is operating at LOS E or F in the baseline (pre-project) condition, the project would create a significant impact at that intersection if it contributes 10 percent, or more, to the total traffic volume of the impacted peak hour(s). A traffic signal warrant analysis shall be conducted to determine whether a traffic signal is warranted. If a traffic signal is warranted, the City may require the project applicant to pay its fair-share of fees to an applicable program (e.g., DIF, CIP, etc.) for the signalization of the intersection, when warranted.

## 3. EXISTING CONDITIONS

---

### EXISTING ROADWAY SYSTEM

Figure 3 identifies the lane geometry and intersection traffic controls for Existing conditions based on a field survey of the study area. Regional access to the project area is provided by the Interstate 210 Freeway approximately four miles north of the project site and Interstate 10 approximately two miles to the south. The primary roadway providing local circulation is Valley View Avenue.

**Valley View Avenue** is a 4-lane divided roadway. Valley View Avenue is classified as a Major Arterial in the City of La Mirada General Plan. On-street parking is generally prohibited on both sides of Valley View Avenue. Bicycle lanes are provided on both sides of Valley View Avenue. Sidewalks are provided on both sides of the roadway.

### PEDESTRIAN FACILITIES

Existing pedestrian facilities in the project vicinity are shown on Figure 4. As shown on Figure 4, pedestrian sidewalks are currently provided along the roadways adjacent to the project site.

### BICYCLE ROUTES

There are on-street bicycle lanes on both sides of Valley View Avenue. The City of La Mirada Bikeway Master Plan is depicted on Figure 5.

### TRANSIT FACILITIES

Figure 6 shows the existing transit routes available in the project vicinity.

### TRUCK ROUTES

Figure 7 shows the designated truck routes as identified in the City of La Mirada.

### GENERAL PLAN CONTEXT

Figure 7 shows the City of La Mirada General Plan Circulation Element roadway classifications map. This figure shows the nature and extent of arterial and collector highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The City of La Mirada standard roadway cross-sections are illustrated on Figure 8.

### EXISTING TRAFFIC VOLUMES

Figure 9 shows the Existing average daily traffic volumes. The Existing average daily traffic volumes have been factored from peak hour intersection turning movement volumes using the following formula for each intersection leg:

$$\text{Evening Peak Hour (Approach Volume + Exit Volume)} \times 12^2 = \text{Leg Volume.}$$

The peak hour to daily volume factor was based on typical roadway conditions.

---

<sup>2</sup> Source: Approximate average evening peak hour K factor based on typical roadway conditions.

Existing peak hour traffic conditions are based upon morning peak period and evening peak period intersection turning movement counts obtained in La Mirada during typical weekday conditions. The morning peak period was counted between 7:00 AM and 9:00 AM and the evening peak period was counted between 4:00 PM and 6:00 PM. The actual peak hour within the peak period is the four consecutive 15 minute periods with the highest total volume when all movements are added together. Thus, the weekday evening peak hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15 minute periods have the highest combined volume. Intersection turning movement count worksheets are provided in Appendix C.

Figure 9 and Figure 11 show the Existing morning peak hour and evening peak hour intersection turning movement volumes.

## **EXISTING LEVEL OF SERVICE**

The ICU/delay and Levels of Service for Existing conditions are shown in Table 1. Detailed intersection Level of Service worksheets are provided in Appendix D.

As shown in Table 1, the study intersections currently operate within acceptable Levels of Service (D or better) during the peak hours for Existing conditions, except for the following study intersection that is projected to operate at deficient Levels of Service:

- Valley View Avenue/Rosecrans Avenue - #6 (LOS E, PM peak hour)

**Table 1**  
**Existing Intersection Levels of Service**

ID	Study Intersection	Traffic Control <sup>1</sup>	AM Peak Hour		PM Peak Hour	
			V/C <sup>2</sup> or [Delay] <sup>3</sup>	LOS <sup>4</sup>	V/C <sup>2</sup> or [Delay] <sup>3</sup>	LOS <sup>4</sup>
1.	Valley View Ave at Imperial Hwy	TS	0.833	D	0.808	D
3.	Valley View Ave at Adoree St N	TS	0.498	A	0.560	A
4.	Valley View Ave at Adoree St S	TS	0.521	A	0.550	A
5.	Valley View Ave at Foster Rd	TS	0.789	C	0.627	B
6.	Valley View Ave at Rosecrans Ave	TS	0.798	C	0.922	E

Notes:

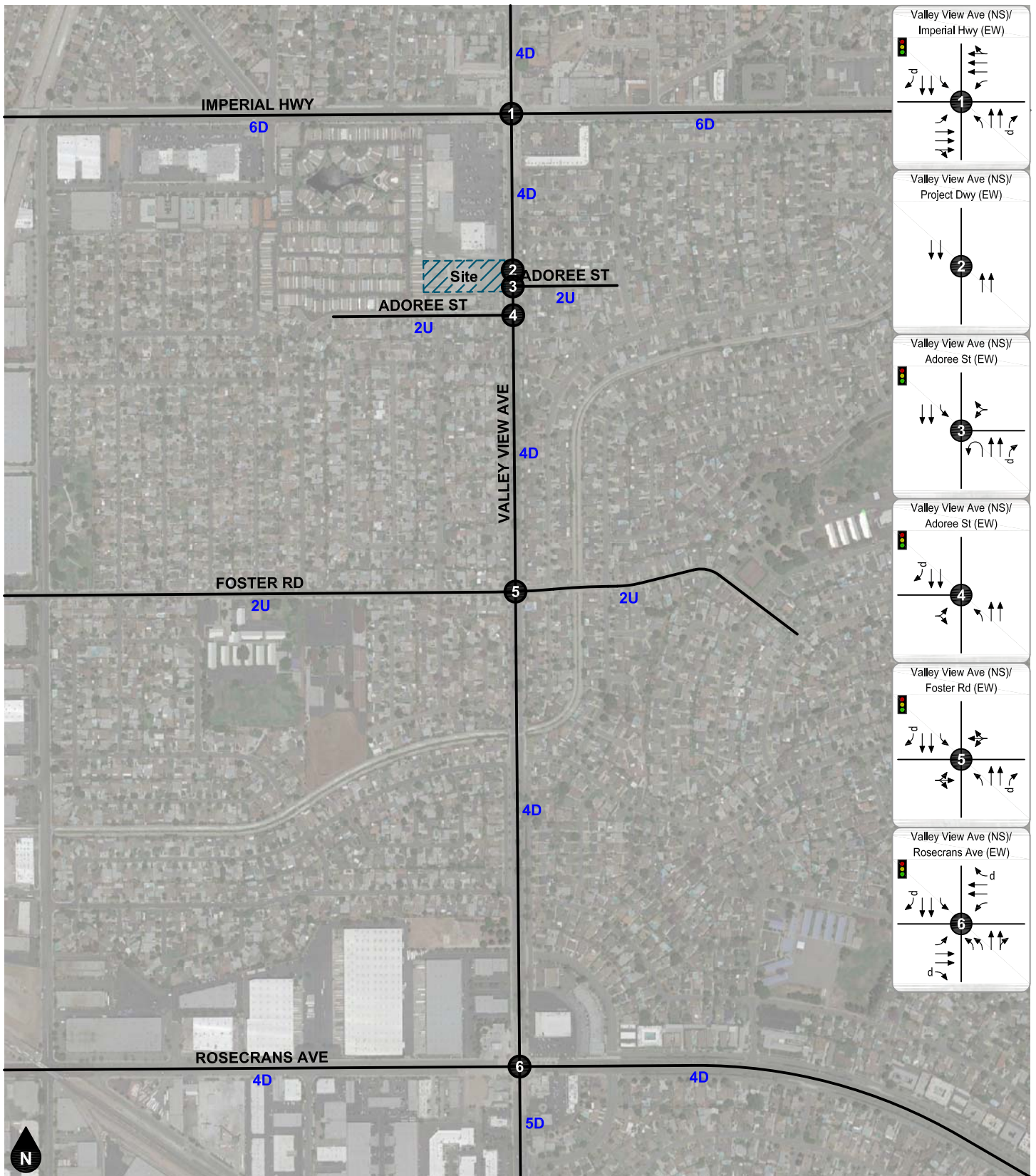
(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) V/C = Volume/Capacity

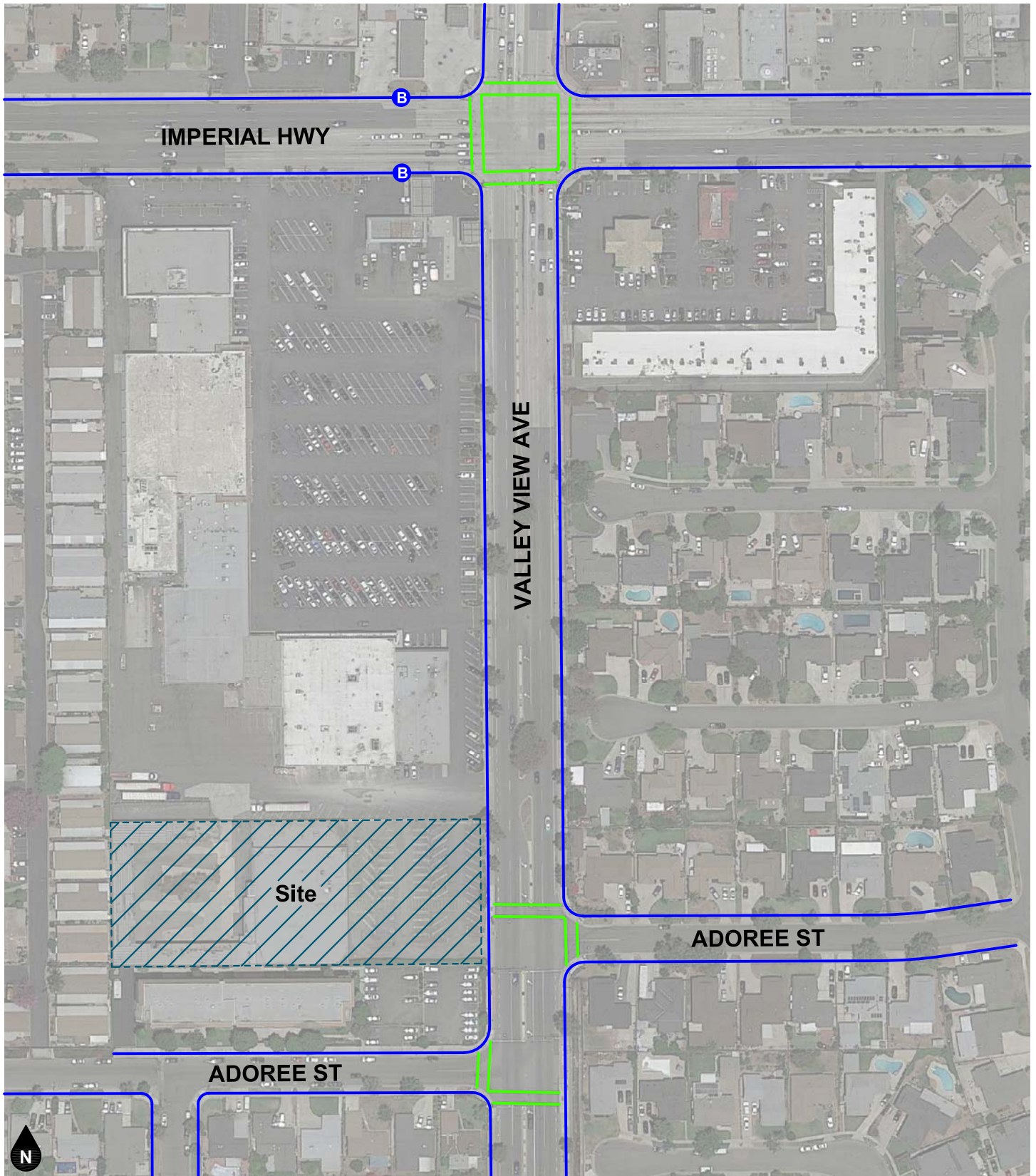
(3) Delay is shown in [seconds/vehicle]. Delay is reported for unsignalized study intersections. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

(4) LOS = Level of Service





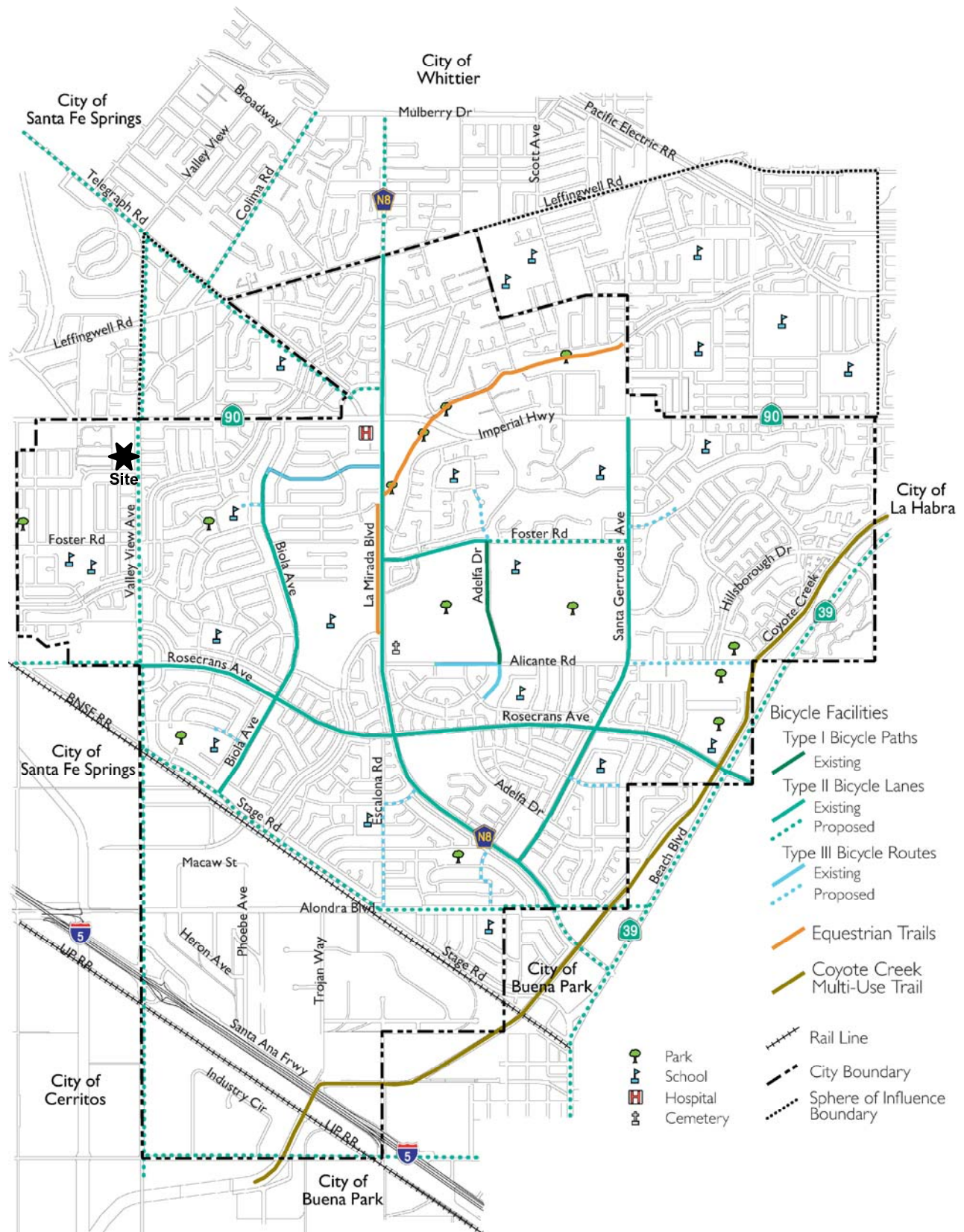
**Figure 3**  
**Existing Lane Geometry and Intersection Traffic Controls**



Legend

- Sidewalk
- Cross Walk
- B Bus Stop

**Figure 4**  
**Existing Pedestrian Facilities**

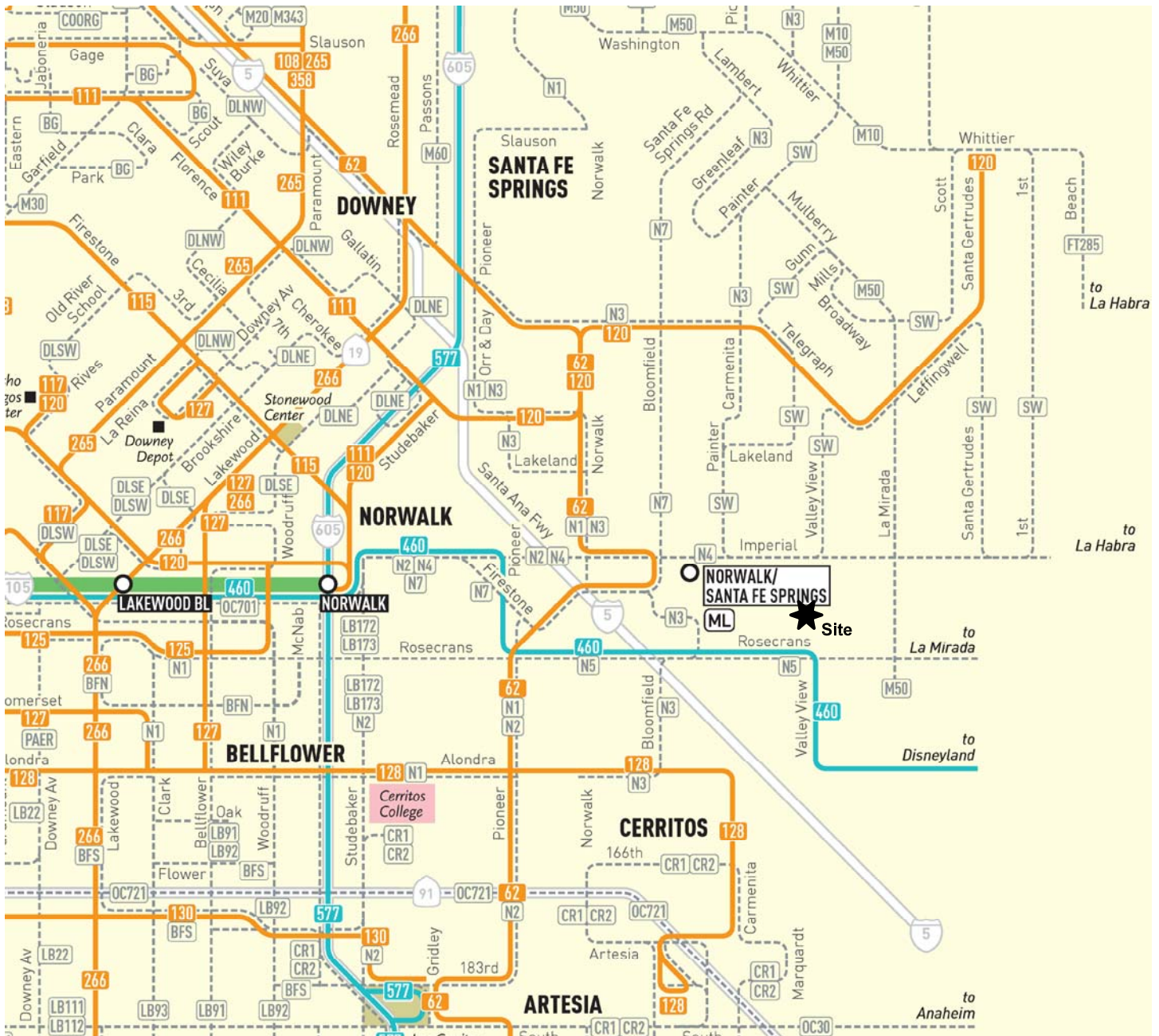


**Figure 5**  
**City of La Mirada Bikeway Master Plan**

Source: City of La Mirada



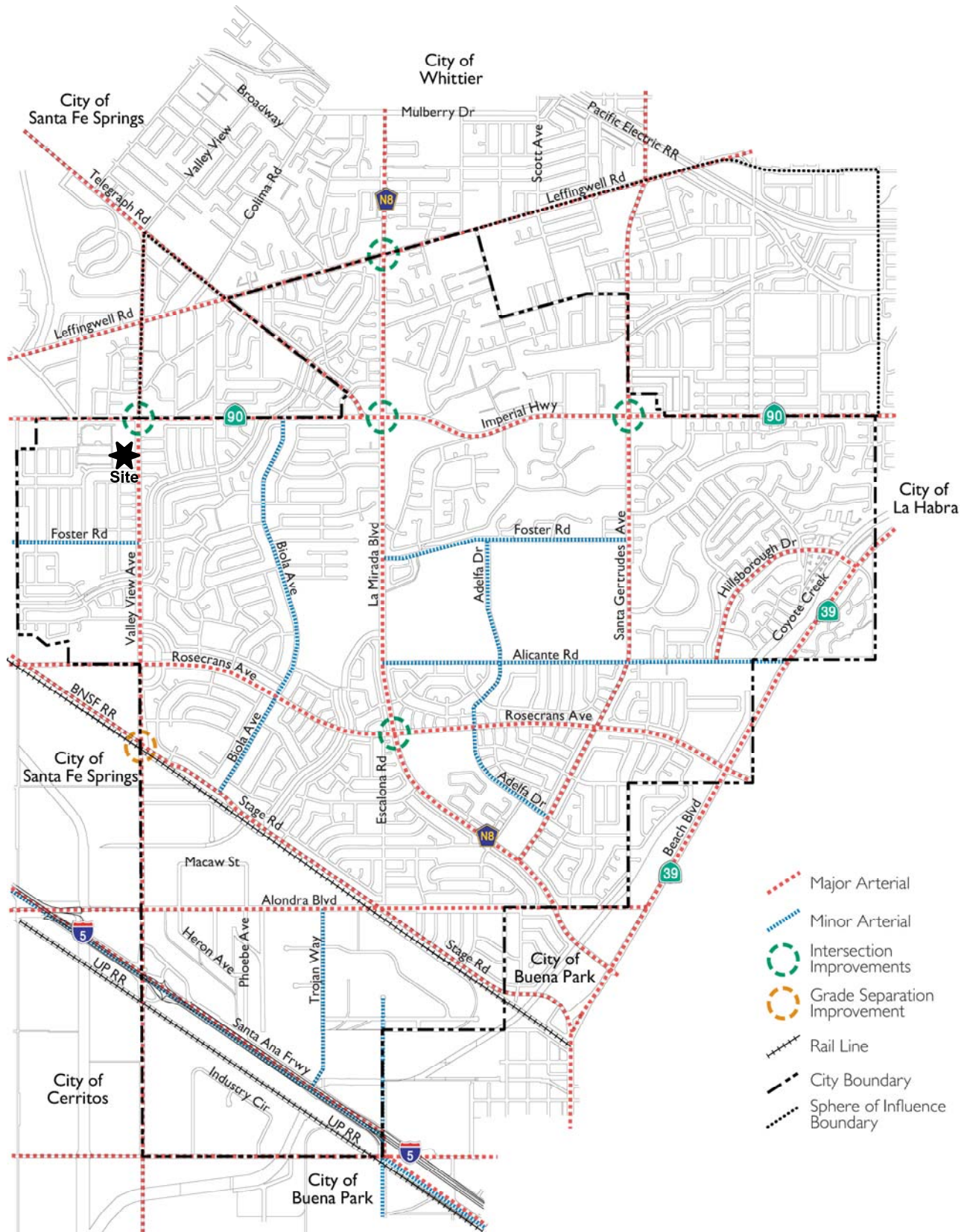
12841 Valley View Avenue Project  
 Traffic Impact Analysis  
 19-0060



Metro Local or Limited Line	81	Metro Express Line	460
Metro Late-Night or Owl Service	117, 125	Metro Rapid Line & Stop	740
Metro Shuttle Line	603	Municipal Bus Line	M10
Metro Rail Line & Station	(Multi-colored)	Metro Rail Station & Entrance (Downtown LA)	(Key icon)
Transfers	(Two overlapping circles)		
Metro Busway & Station	(Orange square)	Metro Silver Line Street Stop	(Grey square)
Metrolink Station	ML	Metro Customer Center	(Blue circle with 'i')
Amtrak Station	AM	Tourist Attraction/Sports Venue	(Purple square)
Greyhound	GR	Shopping Area	(Green square)
FlyAway	FA	School/College/University	(Pink square)
Megabus	MB	Point of Interest	(Black square)
Interstate Freeway	(Blue circle with number)	Airport/Civic/Government	(Grey square)
US Freeway	(Orange circle with number)	Park	(Green square)
State Highway or Freeway	(Blue circle with number)		

Source: L.A. Metro

**Figure 6**  
City of La Mirada Transit Routes



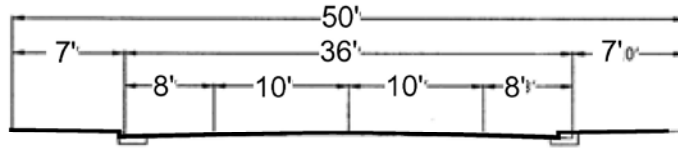
**Figure 7**  
**City of La Mirada General Plan Circulation Element**

Source: City of La Mirada

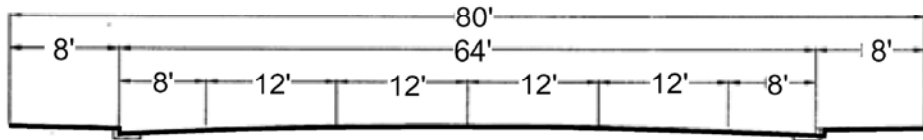


12841 Valley View Avenue Project  
 Traffic Impact Analysis  
 19-0060

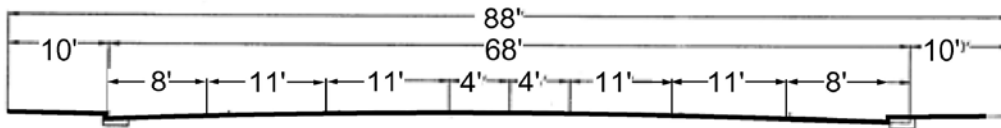
LOCAL  
(2 LANES, UNDIVIDED WITH PARKING)



MINOR ARTERIAL  
(4 LANES, UNDIVIDED WITH PARKING)



MINOR ARTERIAL  
(4 LANES, DIVIDED WITH PARKING)



MAJOR ARTERIAL  
(4 LANES, DIVIDED WITH PARKING)

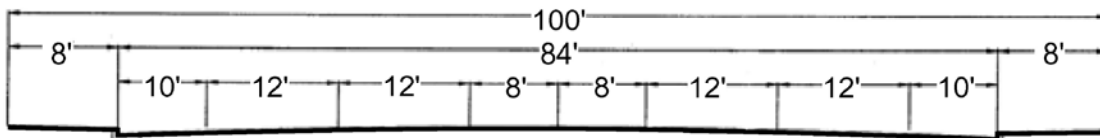


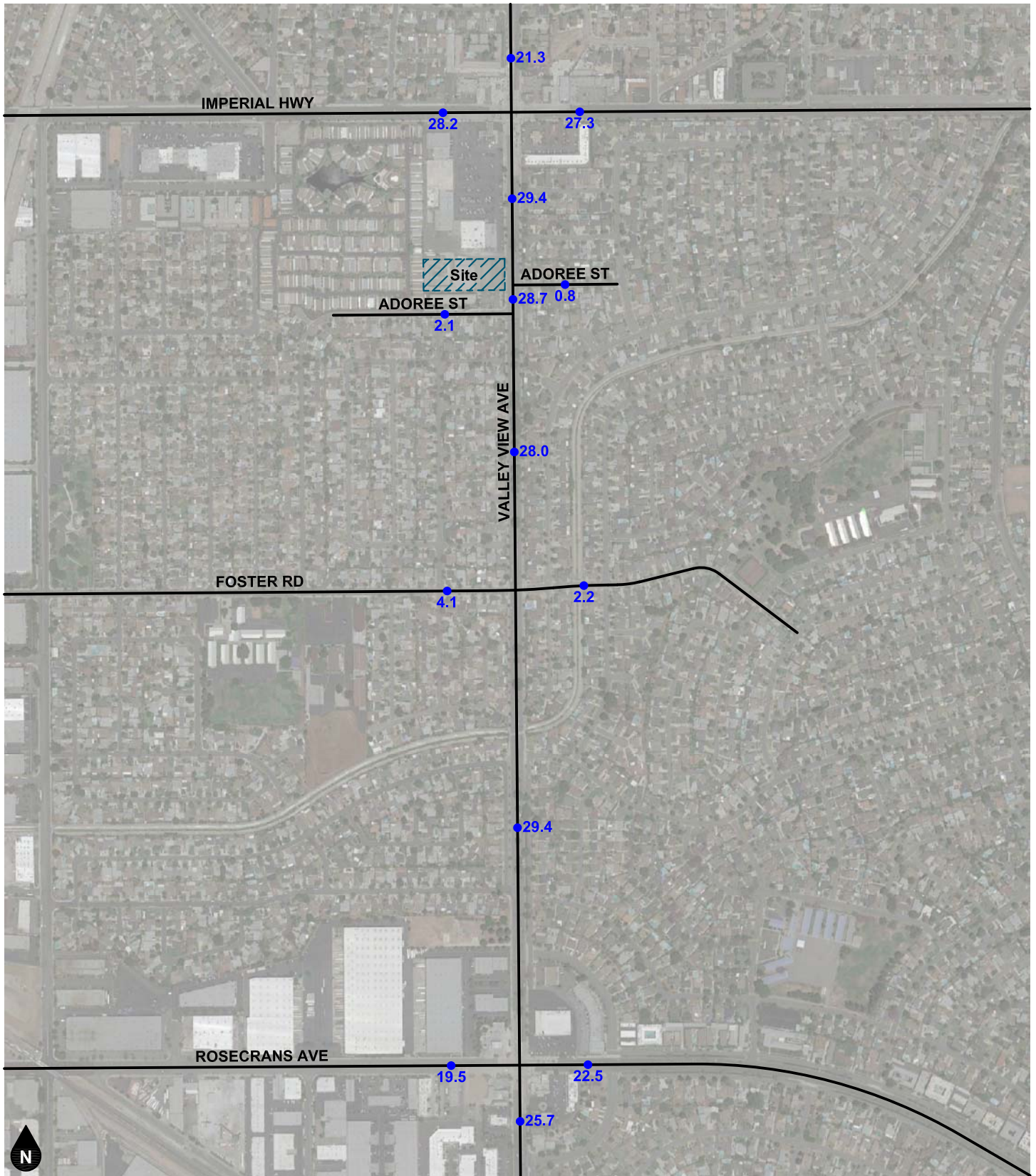
Figure 8

City of La Mirada General Plan Roadway Cross-Sections

Source: City of La Mirada

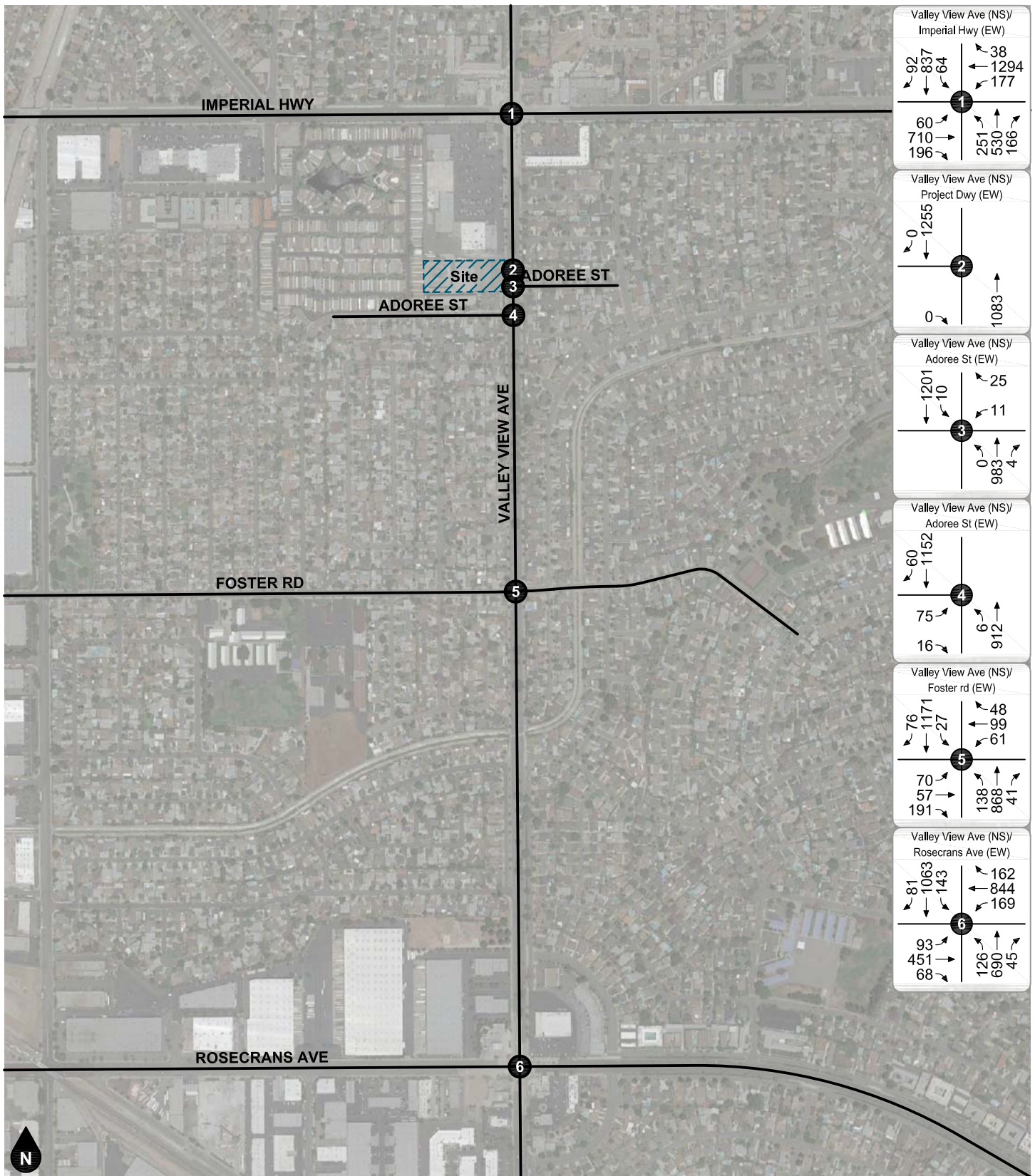


12841 Valley View Avenue Project  
Traffic Impact Analysis  
19-0060



Legend  
 ●## Vehicles Per Day (1,000's)

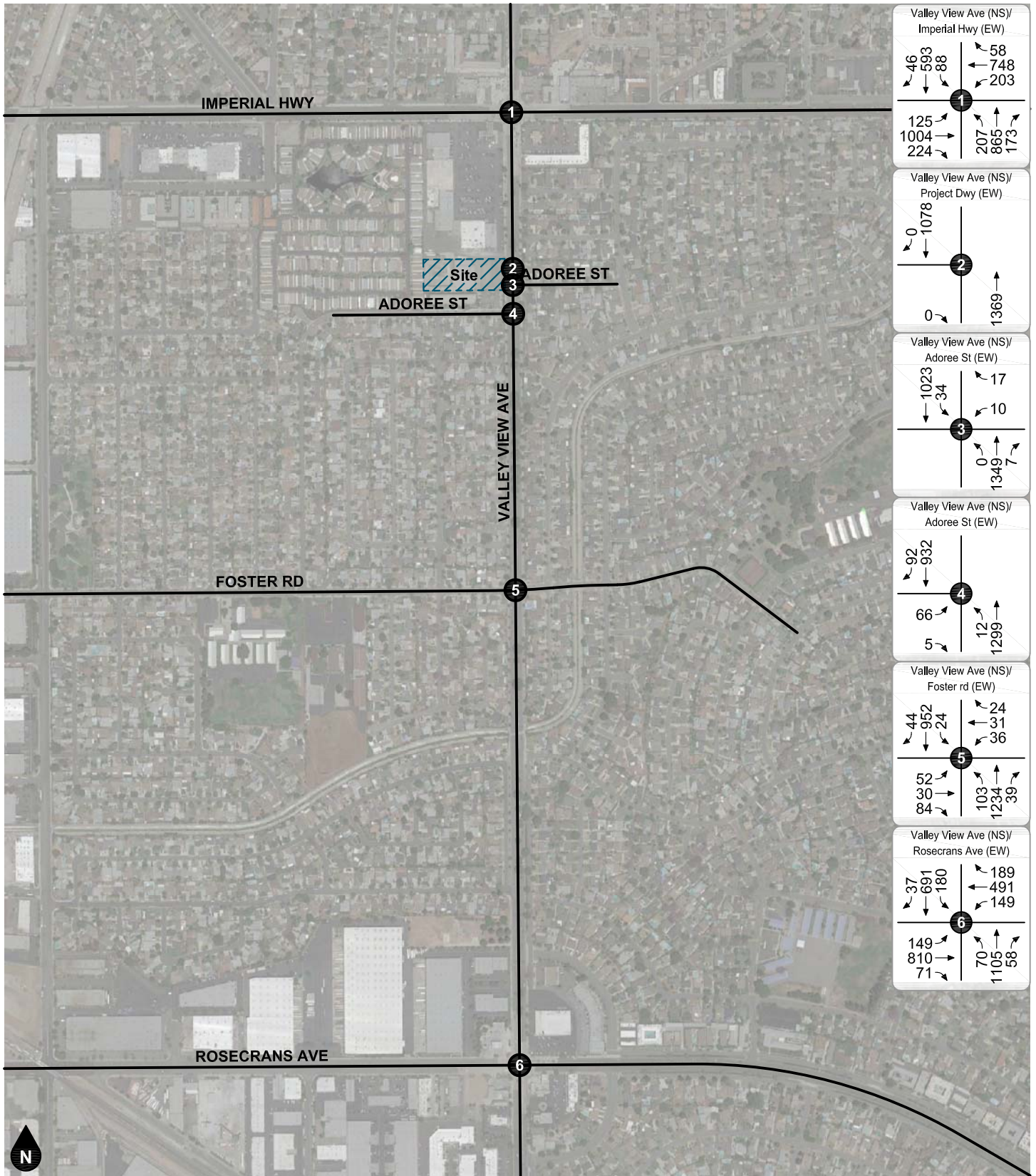
**Figure 9**  
**Existing Average Daily Traffic Volumes**



Legend  
 # Study Intersection

**Figure 10**  
**Existing AM Peak Hour Intersection Turning Movement Volumes**





Legend  
 # Study Intersection

**Figure 11**  
**Existing PM Peak Hour Intersection Turning Movement Volumes**

## 4. PROJECT TRIP FORECASTS

---

This section describes how project trip generation, trip distribution, and trip assignment forecasts were developed. The forecast project volumes are illustrated on figures contained in this section.

### PROJECT TRIP GENERATION

Table 2 shows the project trip generation based upon standard rates obtained from the Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017. Trip generation rates were determined for daily trips, AM peak hour trips, and PM peak hour trips for the proposed land use. Trip generation rates for Land Use Code 220 – Multifamily Housing were used for the proposed project. The number of trips forecast to be generated by the proposed use is determined by multiplying the trip generation rates by the land use quantity.

As shown in Table 2, the proposed project is forecast to generate a total of approximately 285 daily vehicle trips, including 18 vehicle trips during the AM peak hour and 22 vehicle trips during the PM peak hour.

### PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Figure 12 and Figure 13 show the forecast outbound and inbound directional distribution patterns for the project generated trips. The project trip distribution patterns are based on review of existing volume data, surrounding land uses, designated truck routes, and the local and regional roadway facilities in the project vicinity.

Based on the identified project trip generation and distributions, project average daily traffic volumes have been calculated and shown on Figure 14. Project Morning and evening peak hour intersection turning movement volumes expected from the project are depicted on Figure 15 and Figure 16, respectively.

### PROJECT DESIGN FEATURES

This analysis assumes the following improvements will be constructed by the project to provide project site access:

#### Project Driveway at Valley View Avenue

- Install an eastbound cross street stop-control.
- Construct the eastbound approach to consist of one right-turn lane.

**Table 2  
Project Trip Generation**

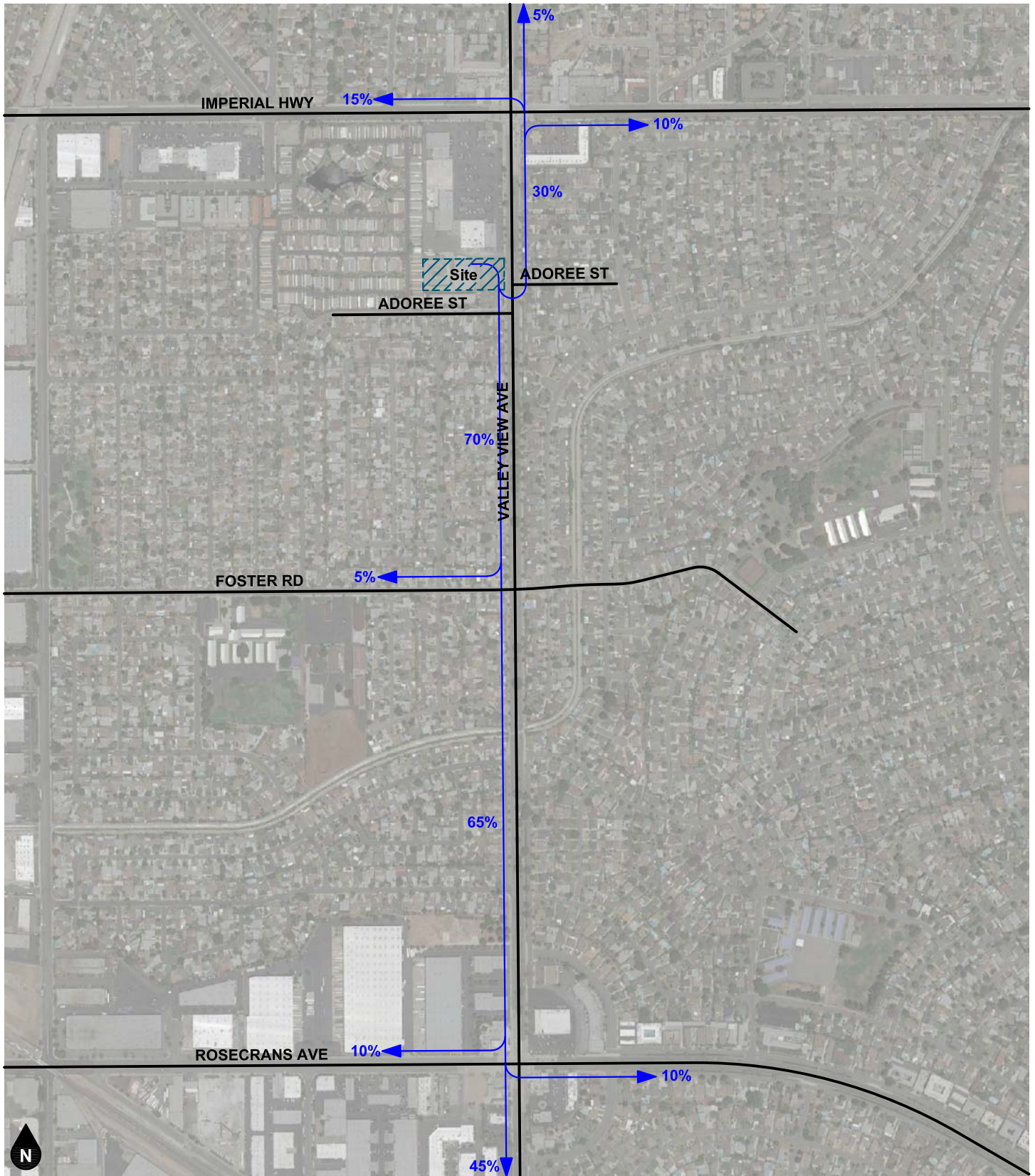
Trip Generation Rates									
Land Use	Source <sup>1</sup>	Units <sup>2</sup>	AM Peak Hour			PM Peak Hour			Daily Rate
			% In	% Out	Rate	% In	% Out	Rate	
Multifamily Housing (Low-Rise)	ITE 220	DU	23%	77%	0.46	63%	37%	0.56	7.32

Trips Generated									
Land Use	Quantity	Units <sup>2</sup>	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Multifamily Housing (Low-Rise)	39	DU	4	14	18	14	8	22	285

Notes:

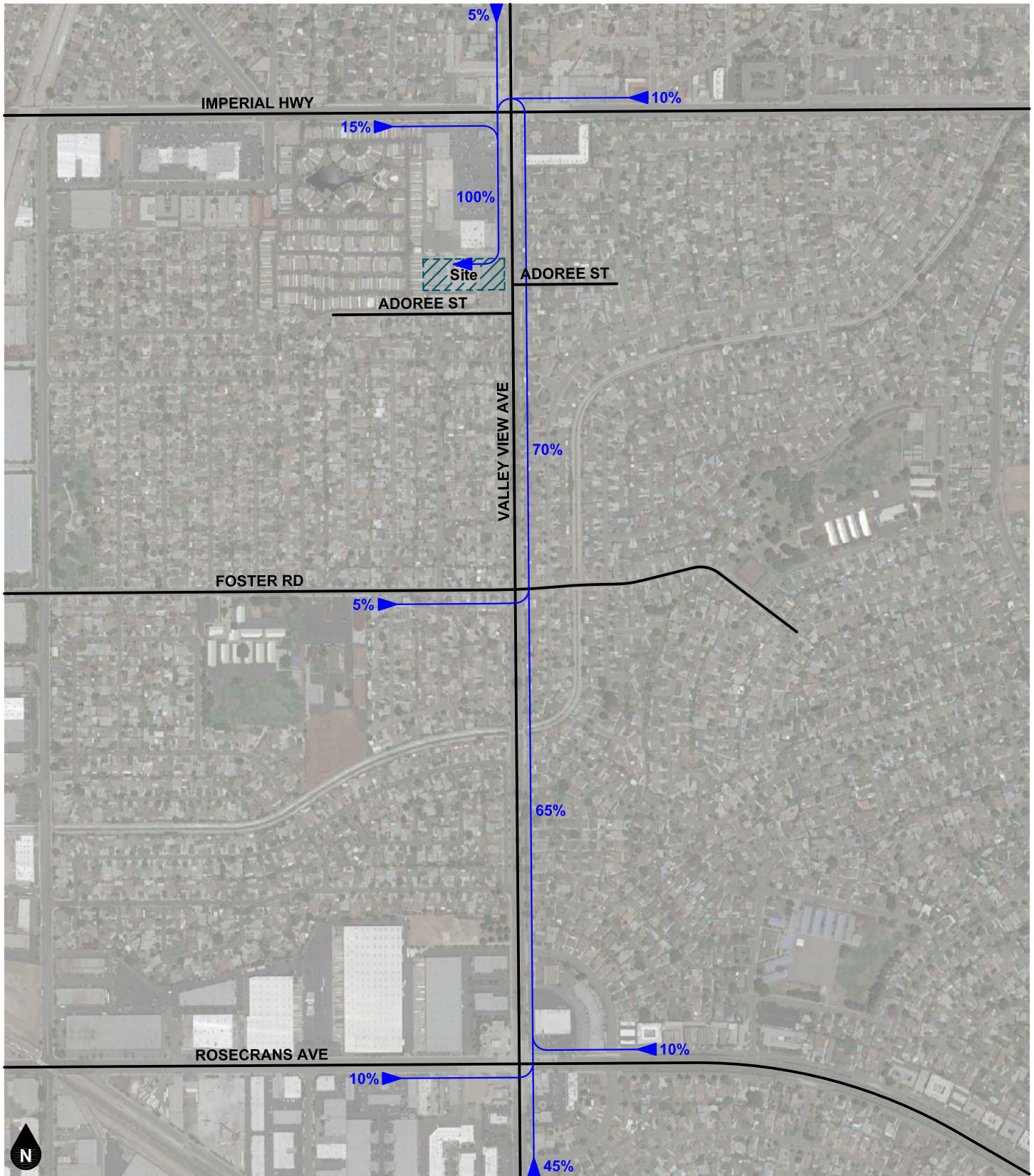
(1) ITE = Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017; ### = Land Use Code

(2) DU = Dwelling Units



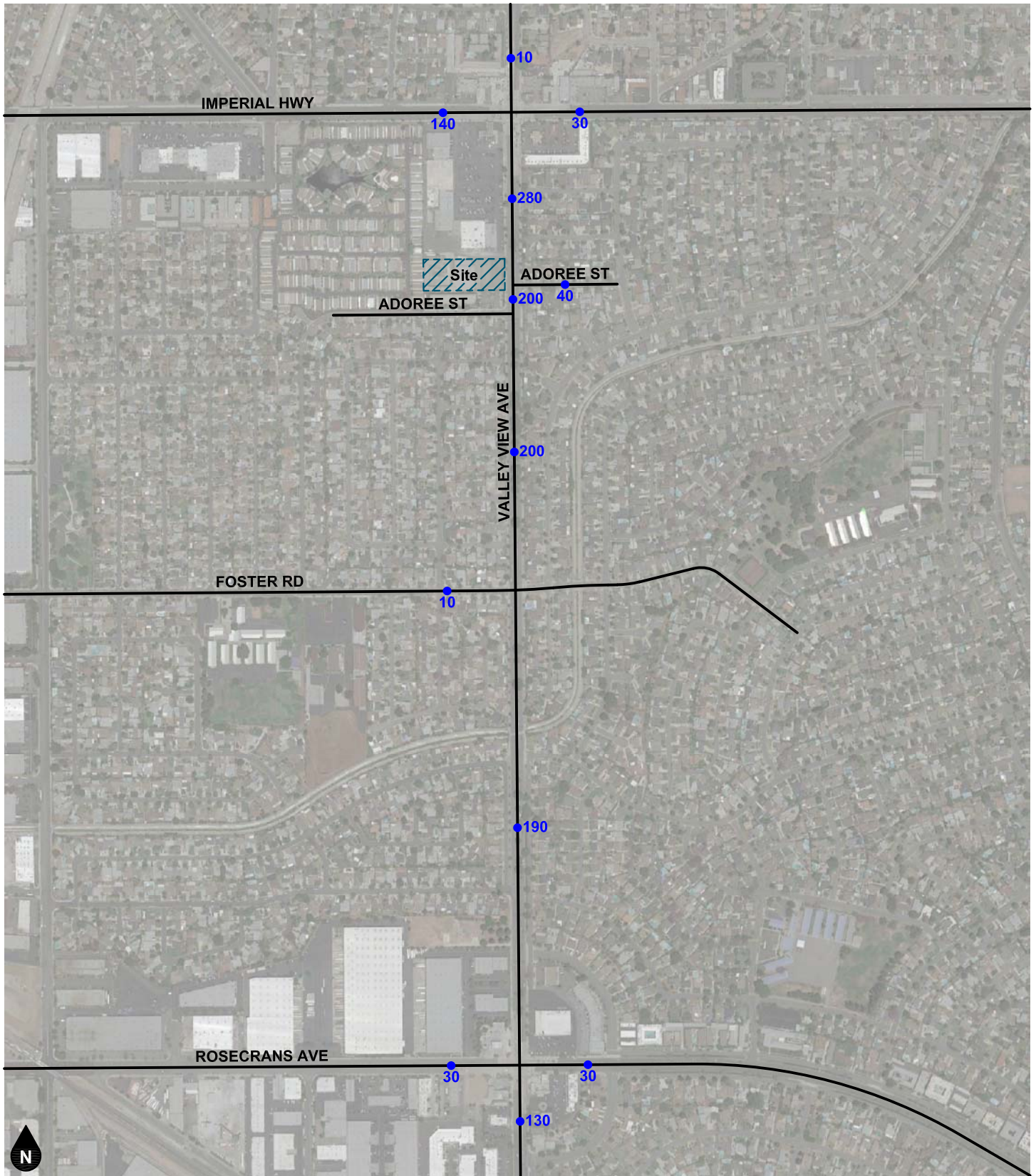
Legend  
 ← 10% Percent From Project

**Figure 12**  
**Project Outbound Trip Distribution**



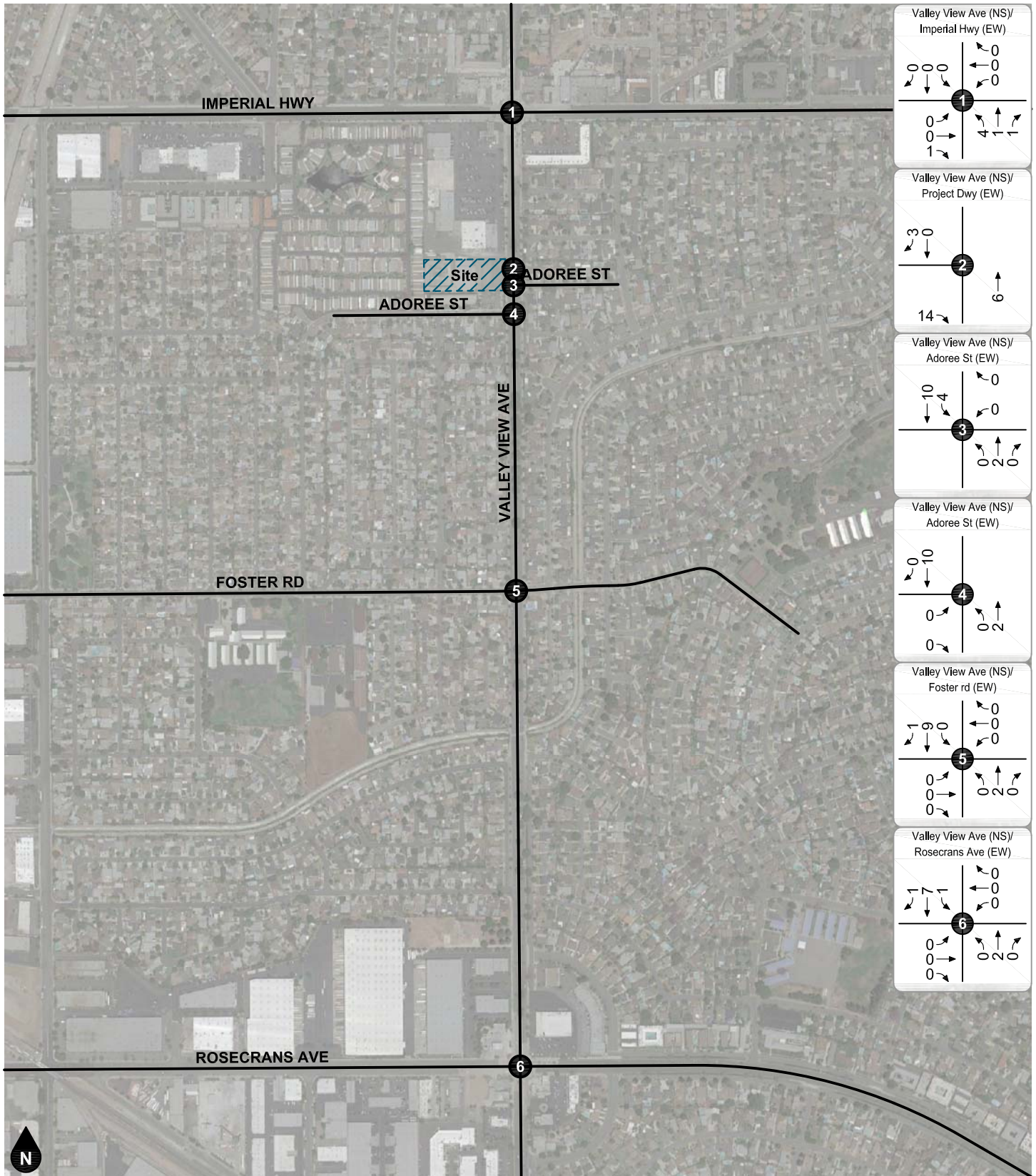
Legend  
 ← 10% Percent To Project

**Figure 13**  
**Project Inbound Trip Distribution**



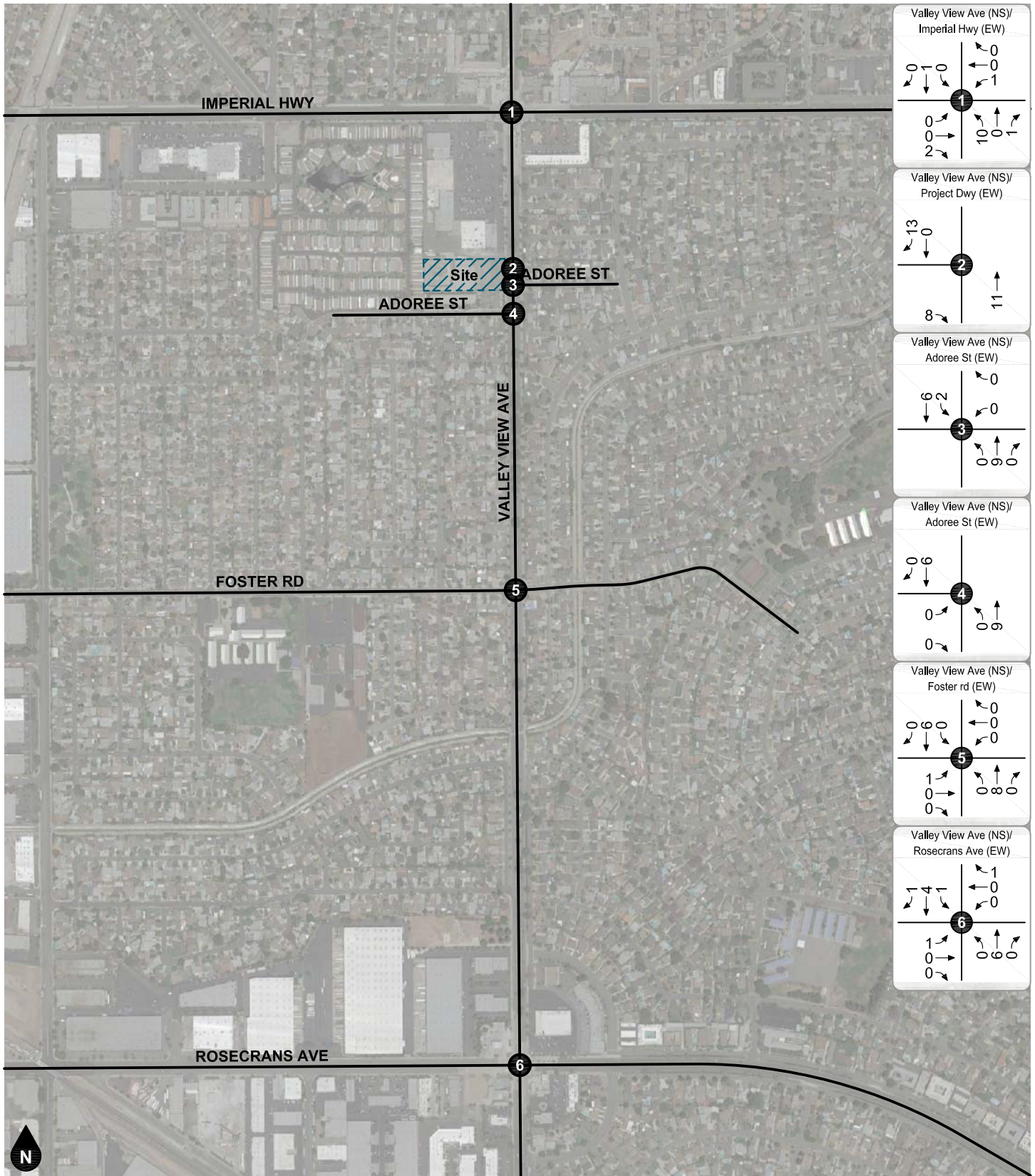
Legend  
 ●## Vehicles Per Day

**Figure 14**  
**Project Average Daily Traffic Volumes**



Legend  
 # Study Intersection

**Figure 15**  
**Project AM Peak Hour Intersection Turning Movement Volumes**



Legend  
 # Study Intersection

**Figure 16**  
**Project PM Peak Hour Intersection Turning Movement Volumes**



## 5. FUTURE VOLUME FORECASTS

---

This section describes how future volume forecasts for each analysis scenario were developed. Forecast study area volumes are illustrated on figures contained in this section.

### CUMULATIVE TRIPS

#### **Ambient Growth Rate**

To account for ambient growth on roadways, existing traffic volumes were increased by a growth rate of one percent (1%) per year over two years for Opening Year (2021) conditions. This equates to a total growth factor of approximately two percent (2%) for Opening Year. The ambient growth rate was conservatively applied to all movements at the study intersections.

#### **Other Development**

To account for trips generated by future development, trips generated by pending or approved other development projects in the City of La Mirada were added to the study area. Table 3 shows the trip generation summary for other development projects. The previously discussed ambient growth is assumed to account for any additional trips generated by other development projects located outside the project vicinity and not specifically listed in this report.

Figure 17 shows the forecast average daily traffic volumes for the other development. Figure 18 and Figure 19 show the forecast AM and PM peak hour intersection turning movement volumes for trips generated by other developments.

### ANALYSIS SCENARIO VOLUME FORECASTS

#### **Existing Plus Project**

Existing Plus Project volume forecasts were derived by adding the project generated trips to Existing volumes. Existing Plus Project average daily traffic volumes are shown on Figure 20. Existing Plus Project AM and PM peak hour intersection turning movement volumes are shown on Figure 21 and Figure 22.

#### **Opening Year (2021) Without Project**

To develop Opening Year (2021) Without Project volume forecasts, Existing volumes were combined with ambient growth and trips generated by other developments. Opening Year (2021) Without Project average daily traffic volumes are shown on Figure 23. Opening Year (2021) Without Project AM and PM hour intersection turning movement volumes are shown Figure 24 and Figure 25.

#### **Opening Year (2021) With Project**

Opening Year (2021) With Project volume forecasts were developed by adding project generated trips to the Opening Year (2021) Without Project forecast. Opening Year (2021) With Project average daily traffic volumes are shown on Figure 26. Opening Year (2021) With Project AM and PM peak hour intersection turning movement volumes are shown on Figure 27 and Figure 28.

**Table 3  
Other Development Trip Generation**

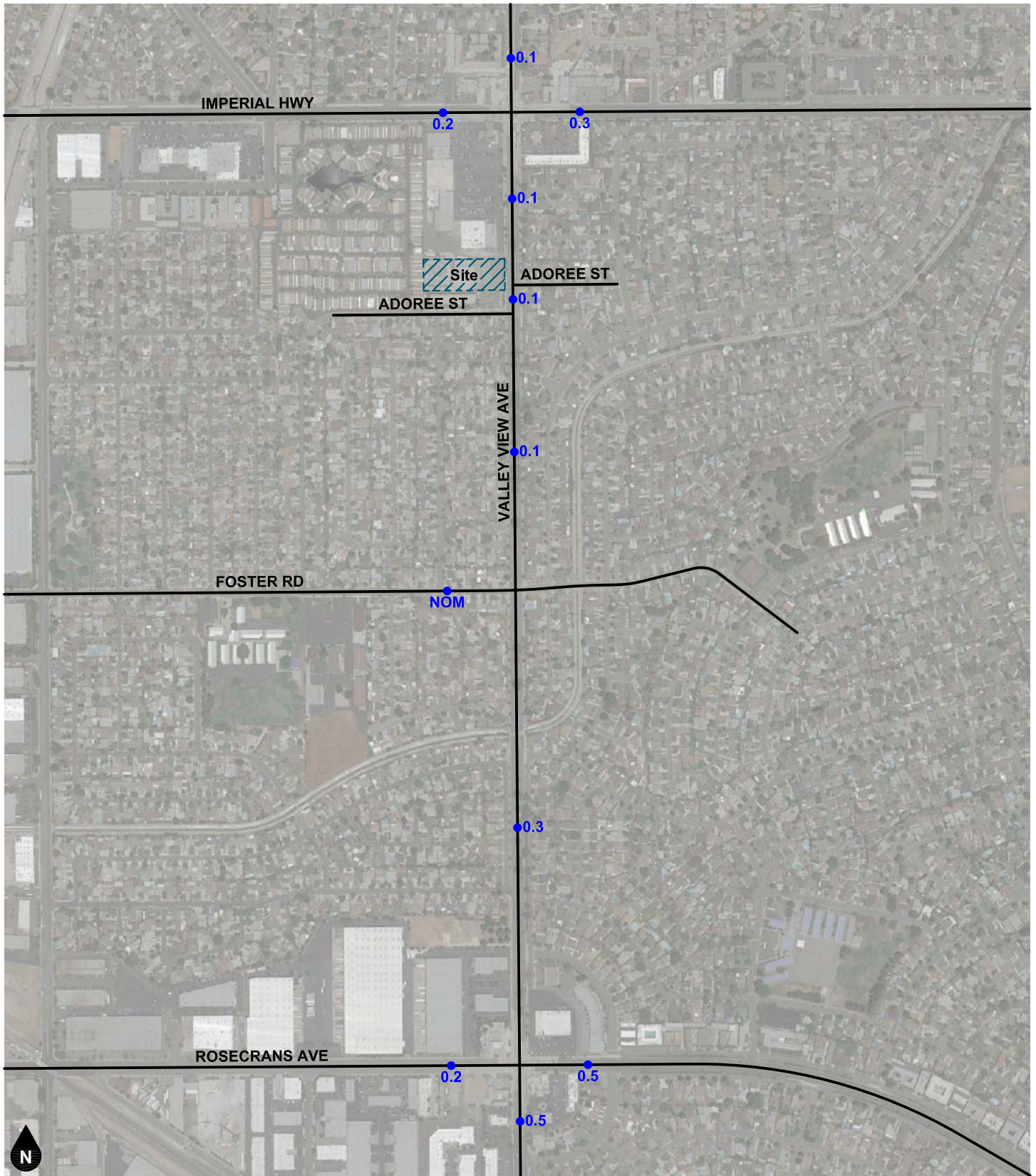
Trip Generation Rates									
Land Use	Source <sup>1</sup>	Units <sup>2</sup>	AM Peak Hour			PM Peak Hour			Daily Rate
			% In	% Out	Rate	% In	% Out	Rate	
Single-Family Detached Housing	ITE 210	DU	25%	75%	0.74	63%	37%	0.99	9.44
Multifamily Housing (Low-Rise)	ITE 220	DU	23%	77%	0.46	63%	37%	0.56	7.32
Movie Theater	ITE 222	DU	-	-	-	55%	45%	0.09	1.76

Trips Generated									
Land Use	Quantity	Units <sup>2</sup>	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single-Family Detached Housing	6	DU	1	3	4	4	2	6	57
Multifamily Housing (Low-Rise)	56	DU	6	20	26	20	12	32	410
Multifamily Housing (Low-Rise)	28	DU	3	10	13	10	6	16	205
Movie Theater	1,000	Seats	-	-	-	50	41	91	1,760
Movie Theater	300	Seats	-	-	-	15	12	27	528
Total			10	33	43	99	73	172	2,960

Notes:

(1) ITE = Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017; XXX= Land Use Code

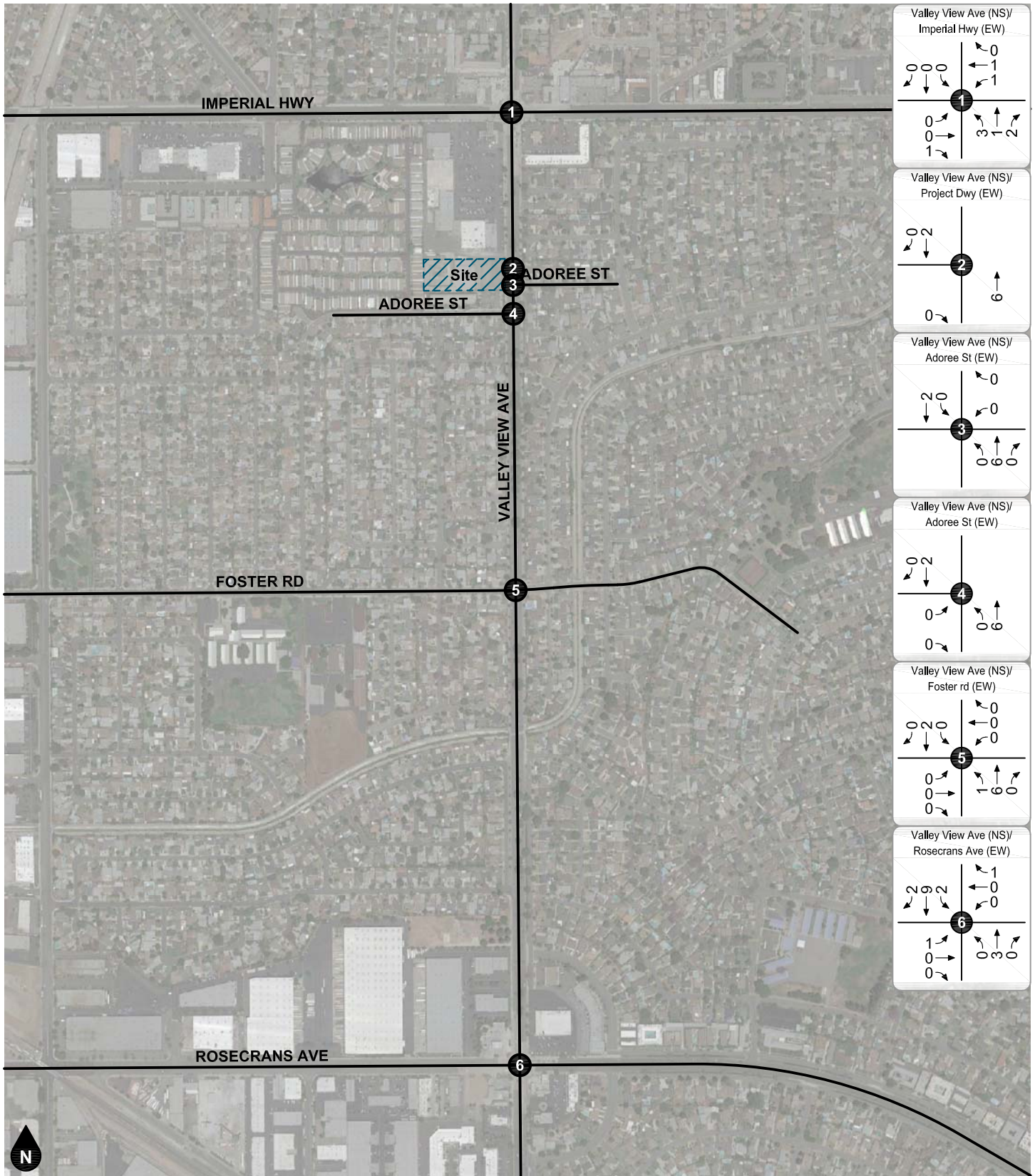
(2) DU = Dwelling Units



**Legend**

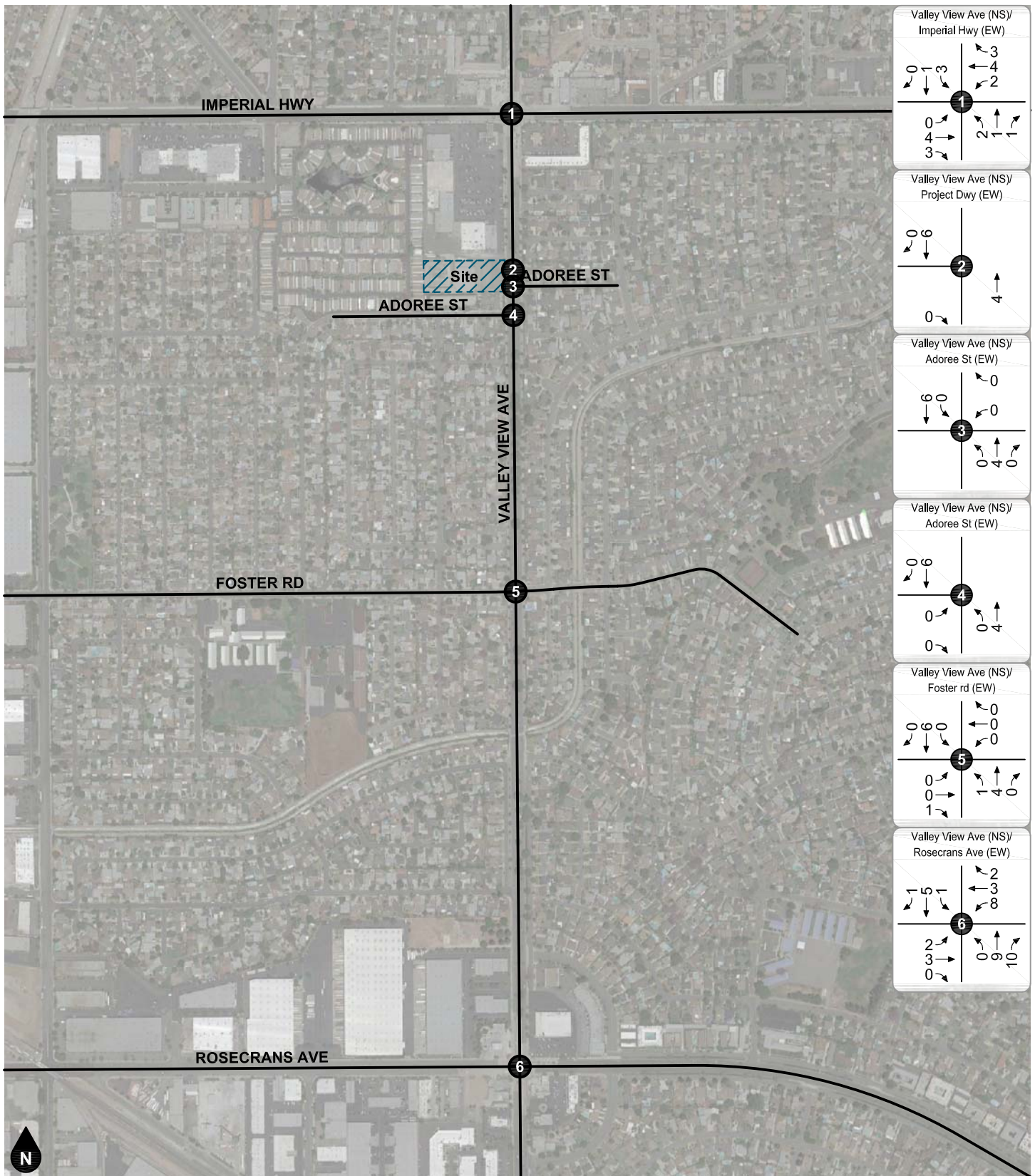
- ## Vehicles Per Day (1,000's)
- NOM Nominal; Less Than 50 Vehicles Per Day

**Figure 17**  
**Other Development Average Daily Traffic Volumes**



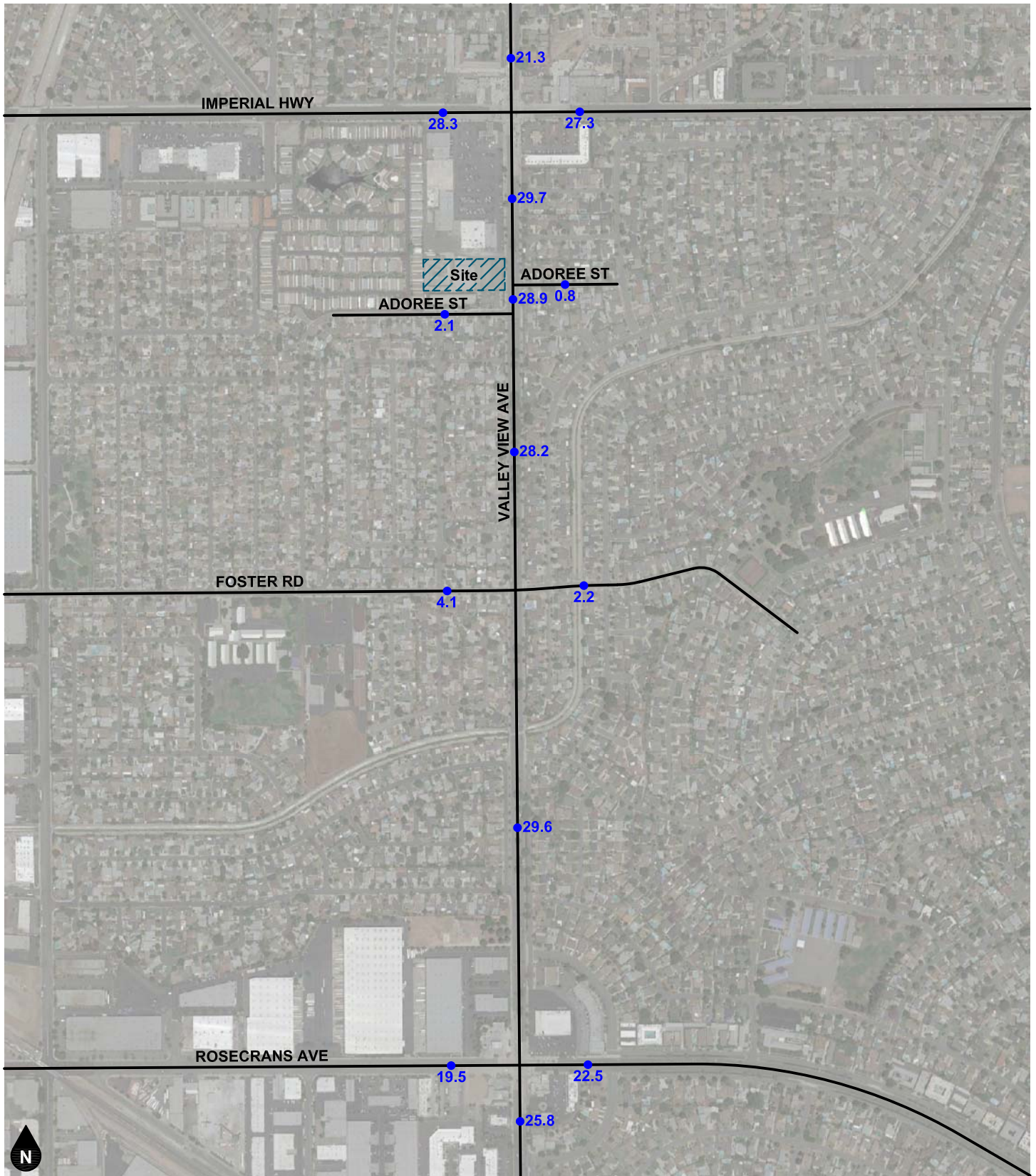
Legend  
 # Study Intersection

**Figure 18**  
**Other Development**  
**AM Peak Hour Intersection Turning Movement Volumes**



Legend  
 # Study Intersection

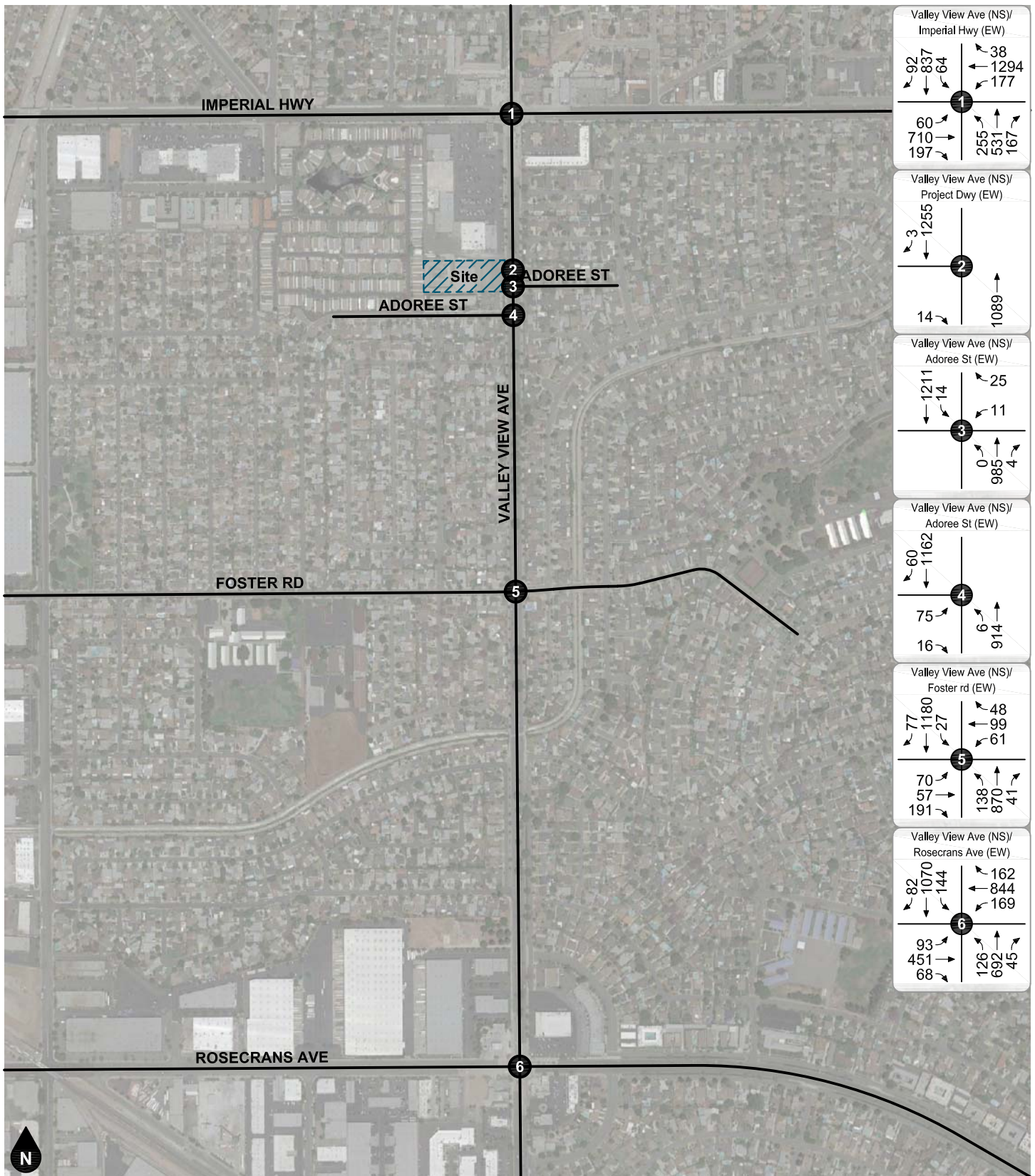
**Figure 19**  
**Other Development**  
**PM Peak Hour Intersection Turning Movement Volumes**



Legend

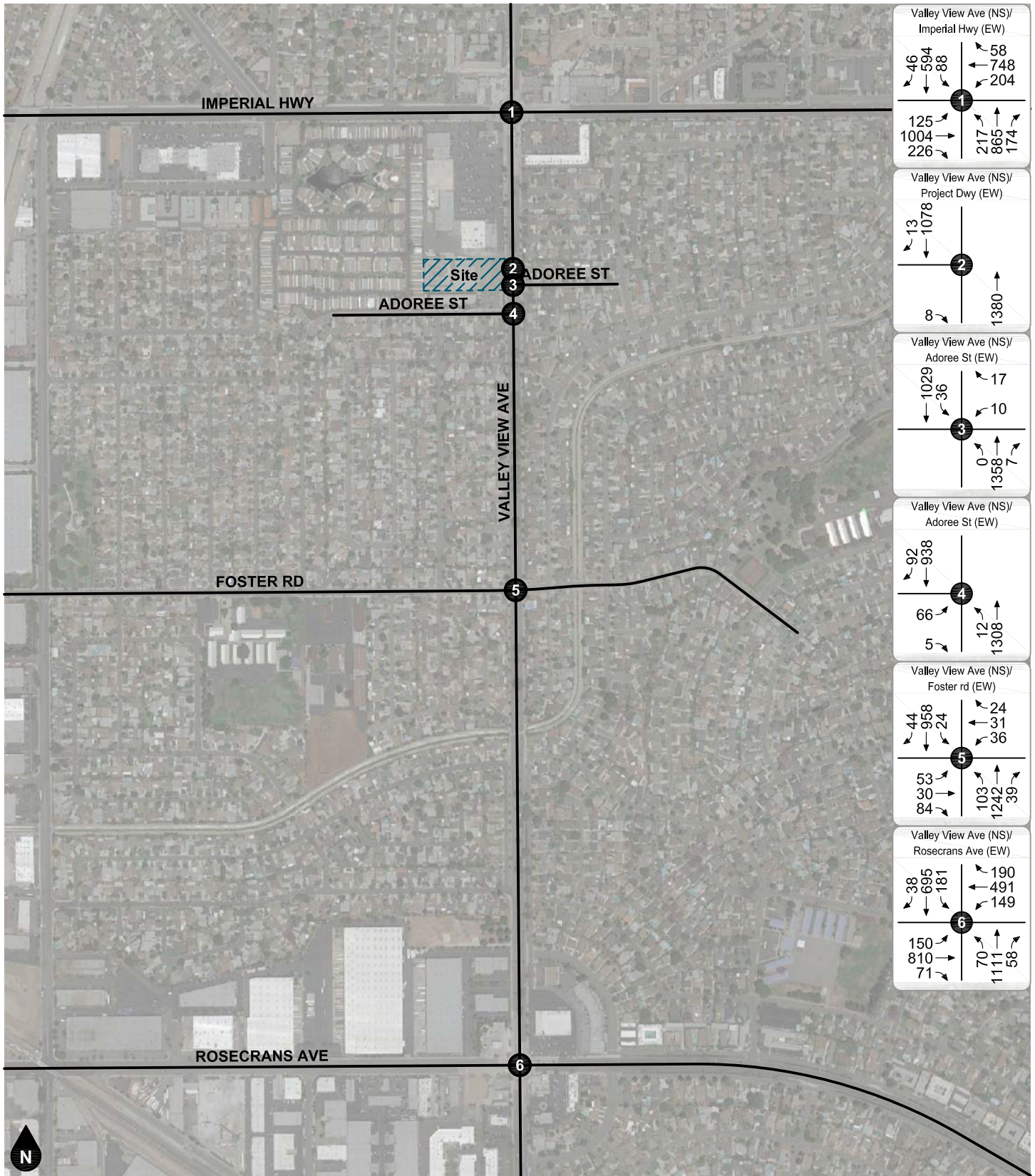
●## Vehicles Per Day (1,000's)

**Figure 20**  
**Existing Plus Project Average Daily Traffic Volumes**



Legend  
 Study Intersection

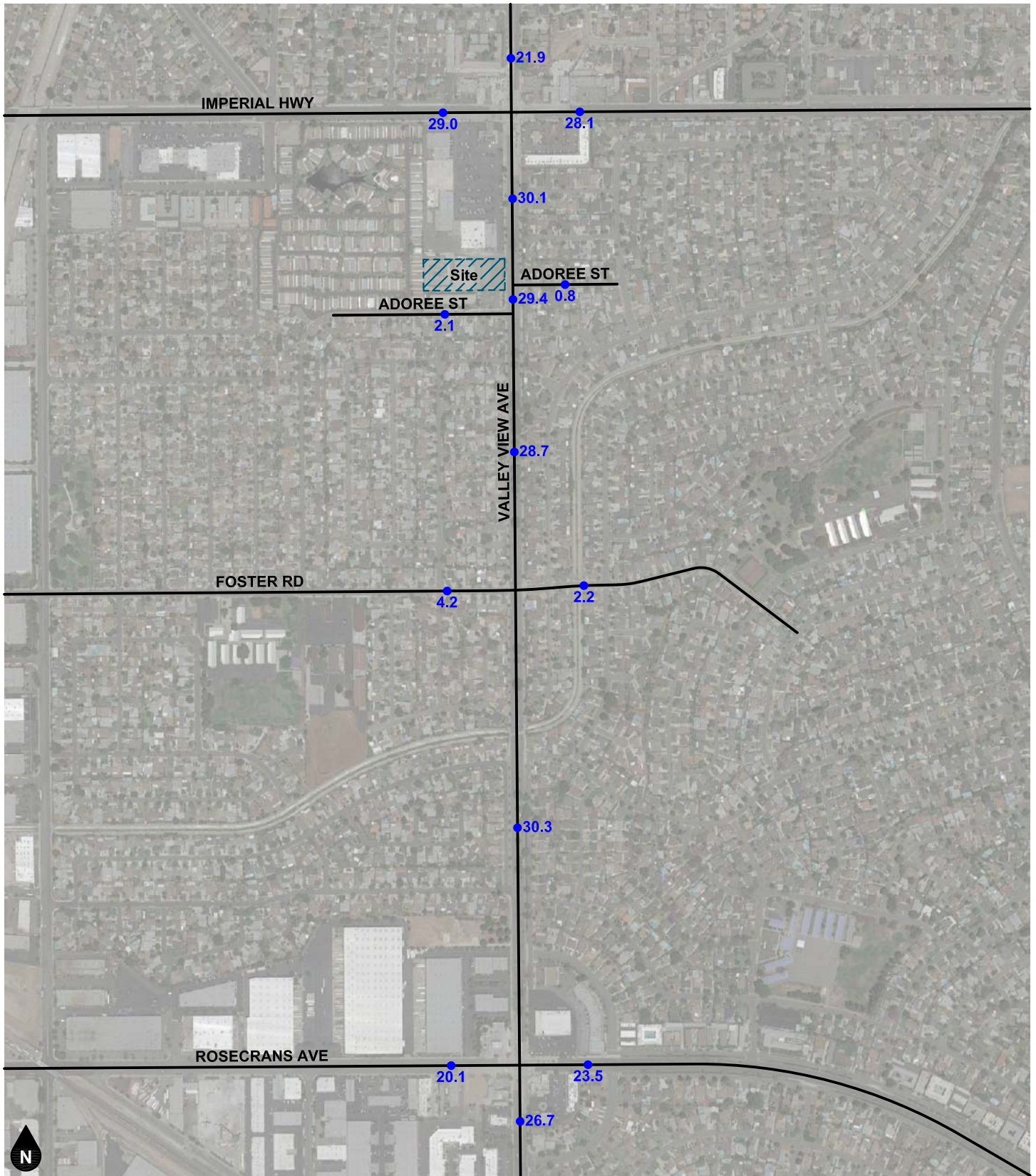
**Figure 21**  
**Existing Plus Project**  
**AM Peak Hour Intersection Turning Movement Volumes**



Legend  
 # Study Intersection

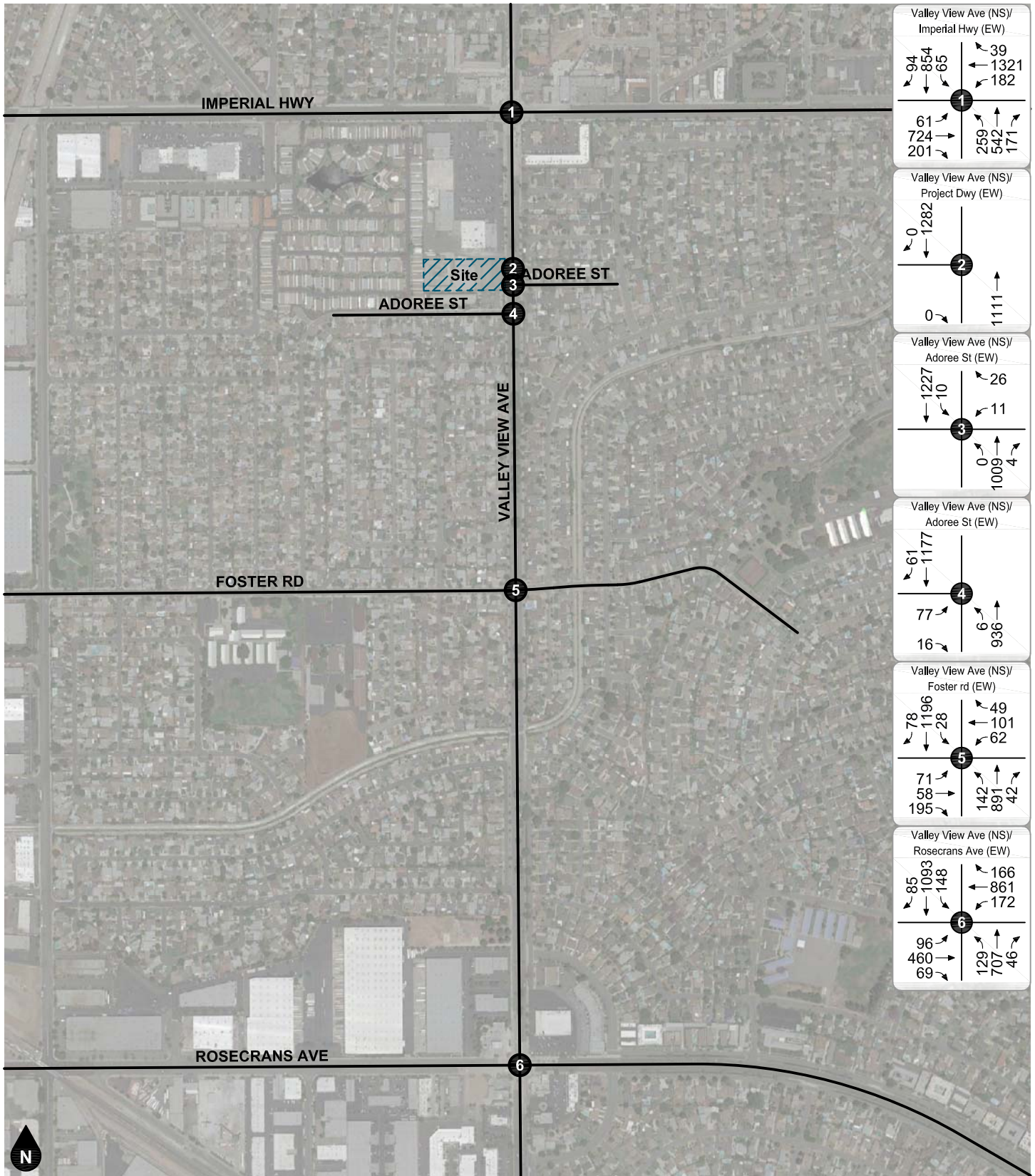
**Figure 22**  
**Existing Plus Project**  
**PM Peak Hour Intersection Turning Movement Volumes**





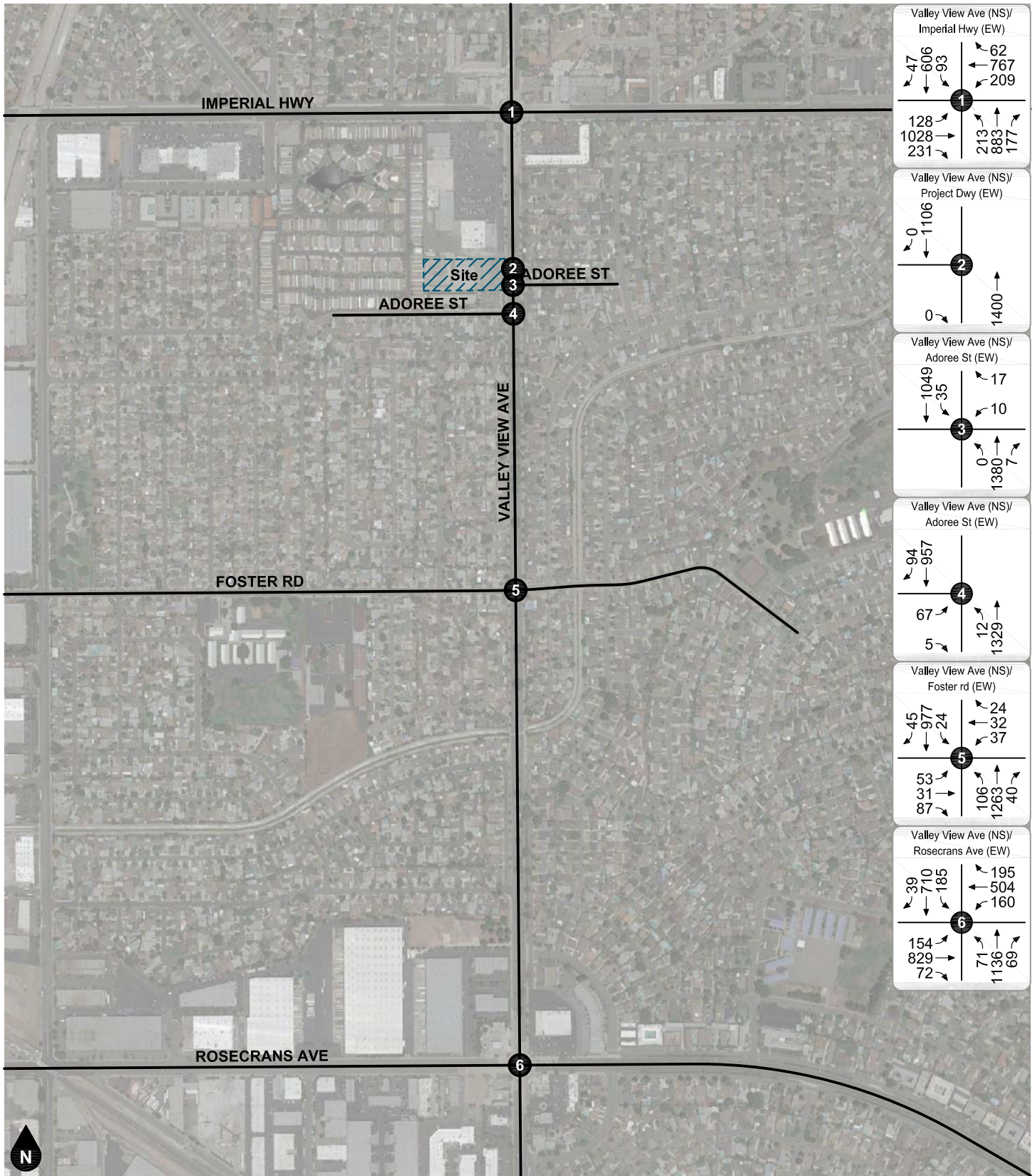
Legend  
 ●## Vehicles Per Day (1,000's)

**Figure 23**  
**Opening Year (2021) Without Project Average Daily Traffic Volumes**



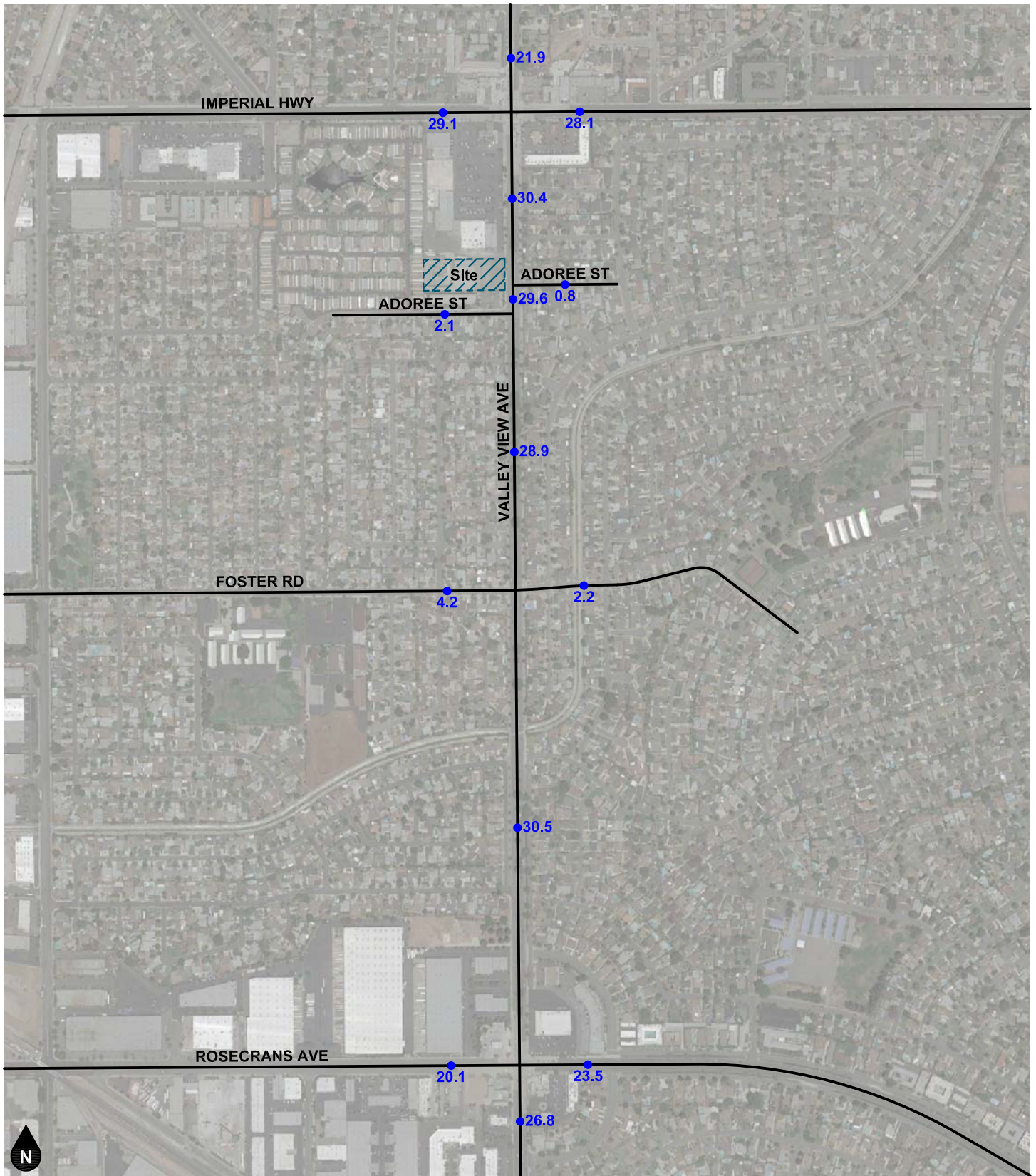
Legend  
 # Study Intersection

**Figure 24**  
**Opening Year (2021) Without Project**  
**AM Peak Hour Intersection Turning Movement Volumes**



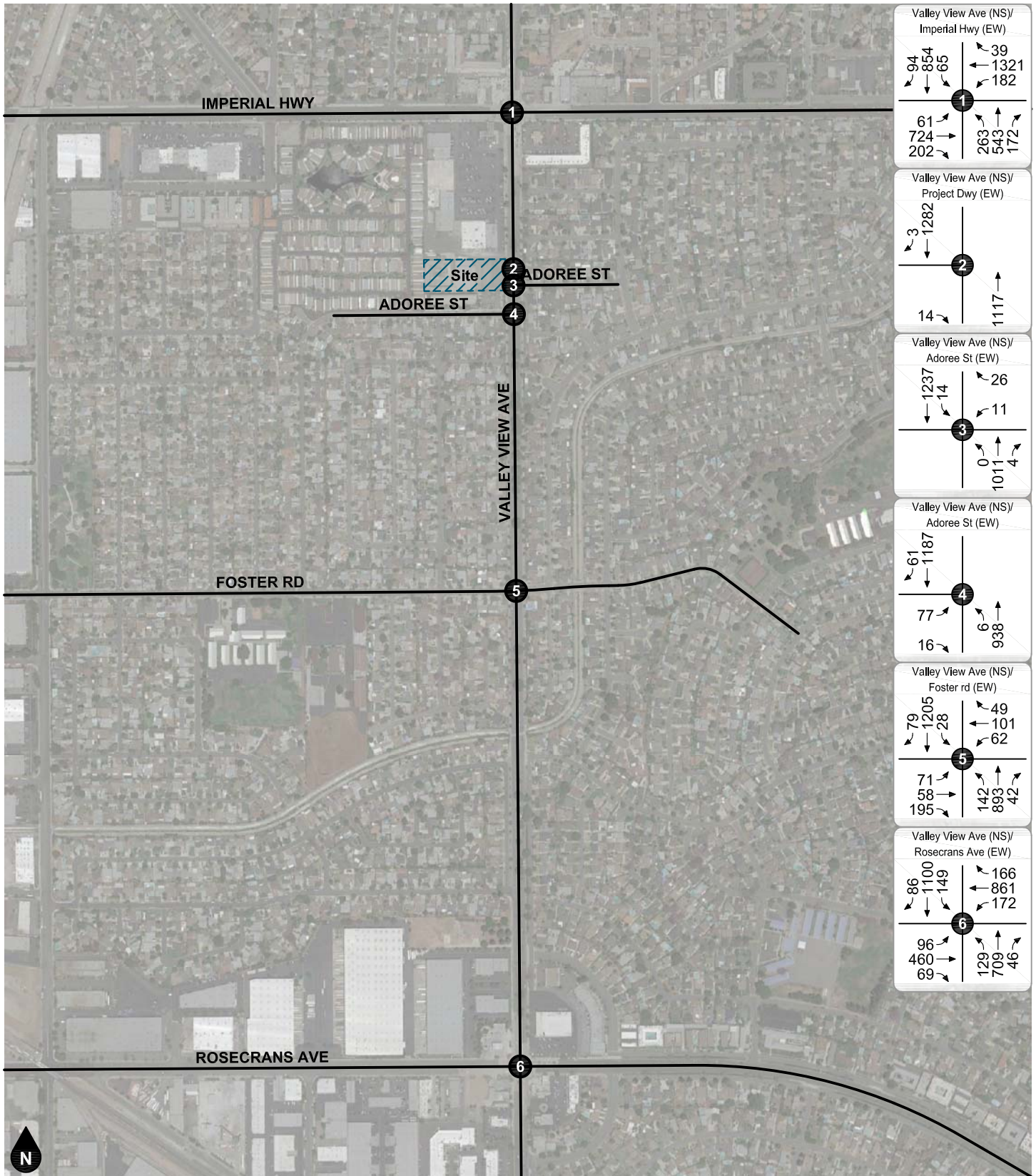
Legend  
 # Study Intersection

**Figure 25**  
**Opening Year (2021) Without Project**  
**PM Peak Hour Intersection Turning Movement Volumes**



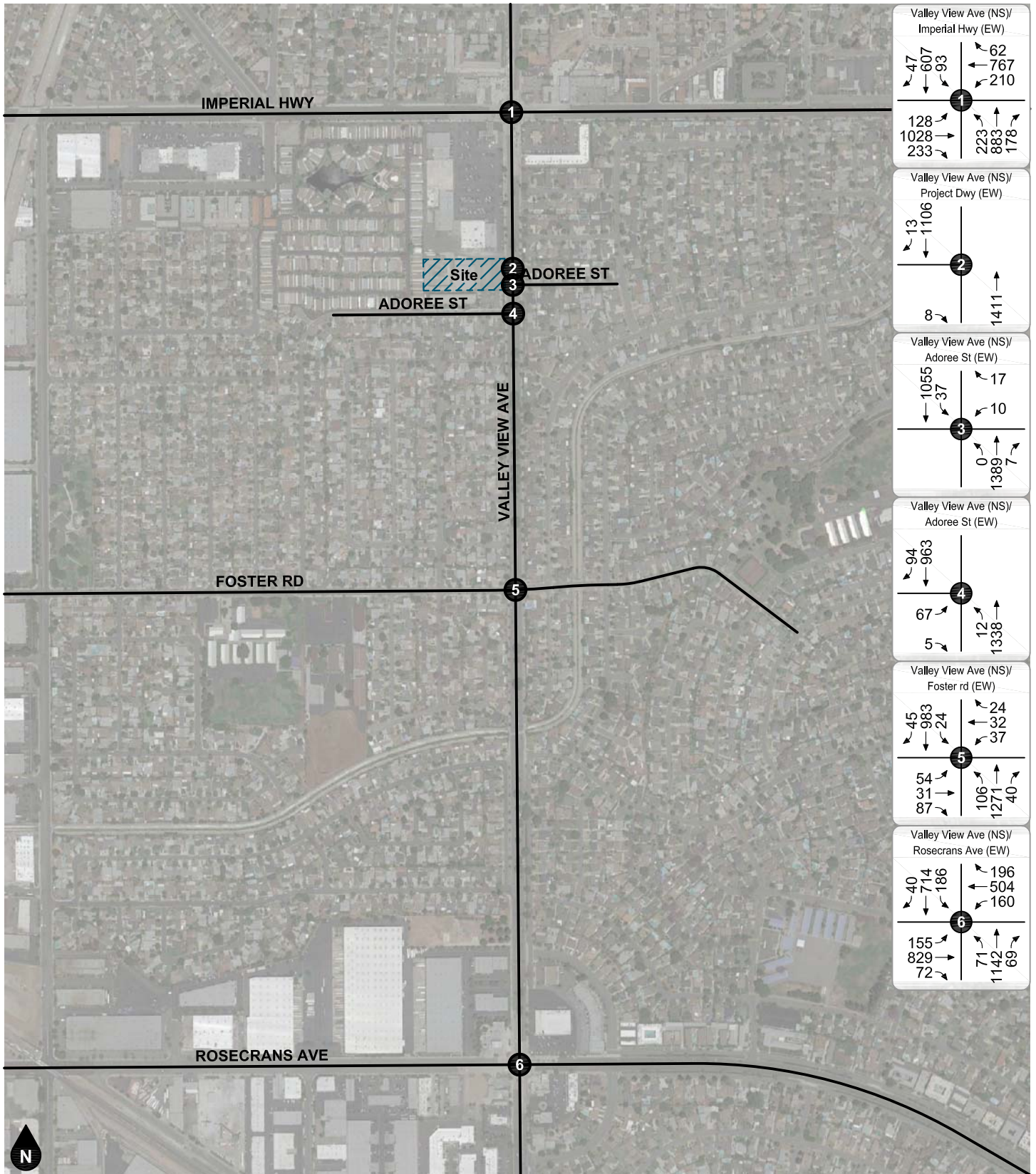
Legend  
 ●## Vehicles Per Day (1,000's)

**Figure 26**  
**Opening Year (2021) With Project Average Daily Traffic Volumes**



Legend  
 # Study Intersection

**Figure 27**  
**Opening Year (2021) With Project**  
**AM Peak Hour Intersection Turning Movement Volumes**



Legend

Study Intersection

**Figure 28**  
**Opening Year (2021) With Project**  
**PM Peak Hour Intersection Turning Movement Volumes**

## 6. FUTURE OPERATIONAL ANALYSIS

---

Detailed intersection Level of Service calculation worksheets for each of the following analysis scenarios are provided in Appendix D.

### EXISTING PLUS PROJECT

The ICU/delay and Levels of Service for Existing Plus Project conditions are shown in Table 4. As shown in Table 4, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Existing Plus Project traffic conditions, except for the following study intersection that is forecast to continue to operate at deficient Levels of Service (E or F):

- Valley View Avenue/Rosecrans Avenue - #6 (LOS E, PM peak hour)

It should be noted that this is a degradation of Level of Service for the already deficient intersection during the Existing conditions; the deficiency is not solely caused by the proposed project. Based on the City's guidelines, the project does not contribute to a significant traffic impact because the change in ICU is within the impact threshold.

### OPENING YEAR (2021) WITHOUT PROJECT

The ICU/delay and Levels of Service for Opening Year (2021) Without Project conditions are shown in Table 5. As shown in Table 5, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2021) Without Project conditions, except for the following study intersection that is projected to operate at deficient Levels of Service (E or F):

- Valley View Avenue/Rosecrans Avenue - #6 (LOS E, PM peak hour)

### OPENING YEAR (2021) WITH PROJECT

The ICU/delay and Levels of Service for Opening Year (2021) With Project conditions are shown in Table 6. As shown in Table 6, the study intersections are projected to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2021) With Project conditions, except for the following study intersection that is projected to continue to operate at deficient Levels of Service (E or F):

- Valley View Avenue/Rosecrans Avenue - #6 (LOS E, PM peak hour)

It should be noted that this is a degradation of Level of Service for the already deficient intersection during the Existing conditions. The deficiency is not solely caused by the proposed project. Based on the City's guidelines, the project does not contribute to a significant traffic impact because the change in ICU is within the impact threshold.

**Table 4**  
**Existing Plus Project Intersection Levels of Service and Significant Impact Evaluation**

ID	Study Intersection	Traffic Control <sup>1</sup>	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Project Change	Significant Impact?	Without Project		With Project		Project Change	Significant Impact?
			V/C <sup>2</sup> or [Delay] <sup>3</sup>	LOS <sup>4</sup>	V/C <sup>2</sup> or [Delay] <sup>3</sup>	LOS <sup>4</sup>			V/C <sup>2</sup> or [Delay] <sup>3</sup>	LOS <sup>4</sup>	V/C <sup>2</sup> or [Delay] <sup>3</sup>	LOS <sup>4</sup>		
1.	Valley View Ave at Imperial Hwy	TS	0.833	D	0.835	D	+0.002	No	0.808	D	0.809	D	+0.001	No
2.	Valley View Ave at Project Dwy	CSS	[0.0]	A	[13.7]	B	+[13.7]	No	[0.0]	A	[12.5]	B	+[12.5]	No
3.	Valley View Ave at Adoree St N	TS	0.498	A	0.501	A	+0.003	No	0.560	A	0.563	A	+0.003	No
4.	Valley View Ave at Adoree St S	TS	0.521	A	0.524	A	+0.003	No	0.550	A	0.553	A	+0.003	No
5.	Valley View Ave at Foster Rd	TS	0.789	C	0.792	C	+0.003	No	0.627	B	0.630	B	+0.003	No
6.	Valley View Ave at Rosecrans Ave	TS	0.798	C	0.800	C	+0.002	No	0.922	E	0.925	E	+0.003	No

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) V/C = Volume/Capacity

(3) Delay is shown in [seconds/vehicle]. Delay is reported for unsignalized study intersections. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

(4) LOS = Level of Service



**Table 5**  
**Opening Year (2021) Without Project Intersection Levels of Service**

ID	Study Intersection	Traffic Control <sup>1</sup>	AM Peak Hour		PM Peak Hour	
			V/C <sup>2</sup> or [Delay] <sup>3</sup>	LOS <sup>4</sup>	V/C <sup>2</sup> or [Delay] <sup>3</sup>	LOS <sup>4</sup>
1.	Valley View Ave at Imperial Hwy	TS	0.850	D	0.827	D
3.	Valley View Ave at Adoree St N	TS	0.507	A	0.570	A
4.	Valley View Ave at Adoree St S	TS	0.530	A	0.560	A
5.	Valley View Ave at Foster Rd	TS	0.804	D	0.640	B
6.	Valley View Ave at Rosecrans Ave	TS	0.815	D	0.951	E

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) V/C = Volume/Capacity

(3) Delay is shown in [seconds/vehicle]. Delay is reported for unsignalized study intersections. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

(4) LOS = Level of Service

**Table 6**  
**Opening Year (2021) With Project Intersection Levels of Service and Significant Impact Evaluation**

ID	Study Intersection	Traffic Control <sup>1</sup>	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Project Change	Significant Impact?	Without Project		With Project		Project Change	Significant Impact?
			V/C <sup>2</sup> or [Delay] <sup>3</sup>	LOS <sup>4</sup>	V/C <sup>2</sup> or [Delay] <sup>3</sup>	LOS <sup>4</sup>			V/C <sup>2</sup> or [Delay] <sup>3</sup>	LOS <sup>4</sup>	V/C <sup>2</sup> or [Delay] <sup>3</sup>	LOS <sup>4</sup>		
1.	Valley View Ave at Imperial Hwy	TS	0.850	D	0.851	D	+0.001	No	0.827	D	0.828	D	+0.001	No
2.	Valley View Ave at Project Dwy	CSS	[0.0]	A	[13.9]	B	+ [13.9]	No	[0.0]	A	[12.7]	B	+ [12.7]	No
3.	Valley View Ave at Adoree St N	TS	0.507	A	0.510	A	+0.003	No	0.570	A	0.573	A	+0.003	No
4.	Valley View Ave at Adoree St S	TS	0.530	A	0.533	A	+0.003	No	0.560	A	0.563	A	+0.003	No
5.	Valley View Ave at Foster Rd	TS	0.804	D	0.807	D	+0.003	No	0.640	B	0.643	B	+0.003	No
6.	Valley View Ave at Rosecrans Ave	TS	0.815	D	0.818	D	+0.003	No	0.951	E	0.954	E	+0.003	No

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) V/C = Volume/Capacity

(3) Delay is shown in [seconds/vehicle]. Delay is reported for unsignalized study intersections. For intersections with cross street stop control, Level of Service is based on average delay of the worst individual lane (or movements sharing a lane).

(4) LOS = Level of Service

## 7. CONCLUSIONS

---

### SITE ACCESS

This analysis assumes the following improvements will be constructed by the project to provide project site access:

#### Project Driveway at Valley View Avenue

- Install an eastbound cross street stop-control.
- Construct the eastbound approach to consist of one right-turn lane.

### MITIGATION MEASURES

No off-site mitigation measure are recommended for the intersection of Valley View Avenue and Rosecrans Avenue because this is a degradation of Level of Service for the already deficient intersection during the Existing conditions. The deficiency is not solely caused by the proposed project. Based on the City's guidelines, the project does not contribute to a significant traffic impact because the change in ICU is within the impact threshold.

### GENERAL RECOMMENDATIONS

Figure 29 summarizes the circulation recommendations for the proposed project.

All roadway design, traffic signing and striping, and traffic control improvements relating to the proposed project should be constructed in accordance with applicable engineering standards and to the satisfaction of the City of La Mirada Public Works Department.

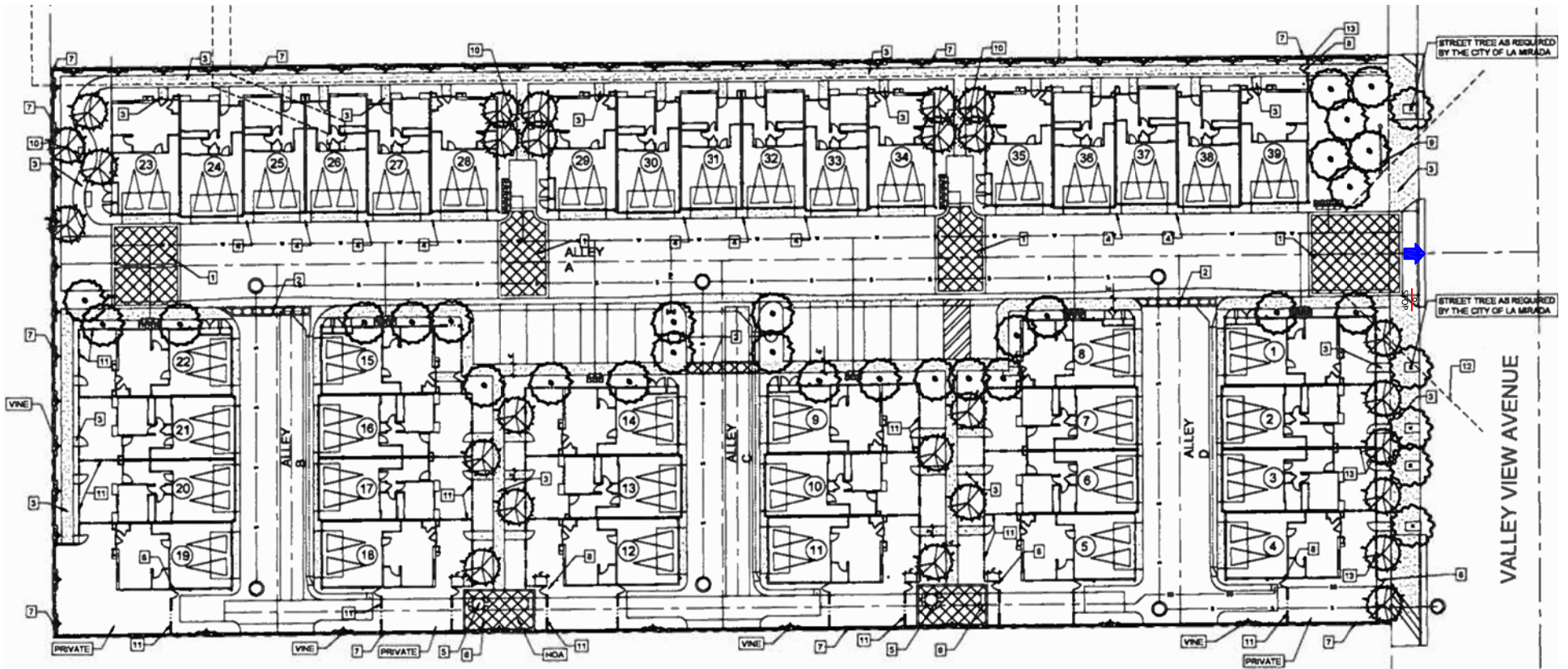
Site-adjacent roadways should be constructed or repaired at their ultimate half-section width, including landscaping and parkway improvements in conjunction with development, or as otherwise required by the City of La Mirada Public Works Department.

On-site traffic signing and striping plans should be submitted for City of La Mirada approval in conjunction with detailed construction plans for the project.

Off-street parking should be provided to meet City of La Mirada Municipal Code requirements.

The final grading, landscaping, and street improvement plans should demonstrate that sight distance standards are met in accordance with applicable City of La Mirada/California Department of Transportation sight distance standards.

As is the case for any roadway design, the City of La Mirada should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.



All roadway design, traffic signing and striping, and traffic control improvements relating to the proposed project should be constructed in accordance with applicable engineering standards and to the satisfaction of the City of La Mirada Public Works Department.

Site-adjacent roadways should be constructed or repaired at their ultimate half-section width, including landscaping and parkway improvements in conjunction with development, or as otherwise required by the City of La Mirada Public Works Department.

On-site traffic signing and striping plans should be submitted for City of La Mirada approval in conjunction with detailed construction plans for the project.

Off-street parking should be provided to meet City of La Mirada Municipal Code requirements.

The final grading, landscaping, and street improvement plans should demonstrate that sight distance standards are met in accordance with applicable City of La Mirada/California Department of Transportation sight distance standards.

As is the case for any roadway design, the City of La Mirada should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

**Legend**

-  Stop Sign
-  Right Turns In/Out Only Access Driveway



**Figure 29**  
**Circulation Recommendations**

## APPENDICES

---

Appendix A Glossary

Appendix B Scoping Agreement

Appendix C Volume Count Worksheets

Appendix D Level of Service Worksheets

## **APPENDIX A**

### **GLOSSARY**

# GLOSSARY OF TERMS

## ACRONYMS

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

## TERMS

**AVERAGE DAILY TRAFFIC:** The average 24-hour volume for a stated period divided by the number of days in that period. For example, Annual Average Daily Traffic is the total volume during a year divided by 365 days.

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

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

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

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

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

**CONTROL DELAY:** The component of delay, typically expressed in seconds per vehicle, resulting from the type of traffic control at an intersection. Control delay is measured by comparison with the uncontrolled condition; it includes delay incurred by slowing down, stopping/waiting, and speeding up.

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

**CORNER SIGHT DISTANCE:** The minimum sight distance required by the driver of a vehicle to cross or enter the lanes of the major roadway without requiring approaching traffic travelling at a given speed to radically alter their speed or trajectory. Corner sight distance is measured from the driver's eye at 42 inches above the pavement to an object height of 36 inches above the pavement in the center of the nearest approach lane.

**CYCLE LENGTH:** The time period in seconds required for a traffic signal to complete one full cycle of indications.

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

**DAILY CAPACITY:** A theoretical value representing the daily traffic volume that will typically result in a peak hour volume equal to the capacity of the roadway.

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

**DEMAND RESPONSIVE SIGNAL:** Same as traffic-actuated signal.

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

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

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

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

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

**FORCED FLOW:** Opposite of free flow.

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

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

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

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

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

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

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

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

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

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



**PASSENGER CAR EQUIVALENT (PCE):** A metric used to assess the impact of larger vehicles, such as trucks, recreational vehicles, and buses, by converting the traffic volume of larger vehicles to an equivalent number of passenger cars.

**PEAK HOUR:** The 60 consecutive minutes with the highest number of vehicles.

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

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

**QUEUE:** The number of vehicles waiting at a service area such as a traffic signal, stop sign, or access gate.

**QUEUE LENGTH:** The length of vehicle queue, typically expressed in feet, waiting at a service area such as a traffic signal, stop sign, or access gate.

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

**SHARED/RECIPROCAL PARKING AGREEMENT:** A written binding document executed between property owners to provide a designated number of off-street parking stalls within a designated area to be available for specified businesses or land uses.

**SIGHT DISTANCE:** The continuous length of roadway visible to a driver or roadway user.

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

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

**STACKING DISTANCE:** The length of area available behind a service area, such as a traffic signal or gate, for vehicle queuing to occur.

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

**STOPPING SIGHT DISTANCE:** The minimum distance required by the driver of a vehicle on the major roadway travelling at a given speed to bring the vehicle to a stop after an object on the road becomes visible. Stopping sight distance is measured from the driver's eye at 42 inches above the pavement to an object height of 6 inches above the pavement.

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

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

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

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

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

**TURNING RADIUS:** The circular arc formed by the smallest turning path radius of the front outside tire of a vehicle, such as that performed by a U-turn maneuver. This is based on the length and width of the wheel base as well as the steering mechanism of the vehicle.

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

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

**APPENDIX B**  
**SCOPING AGREEMENT**

**SCOPING AGREEMENT FOR CITY OF LA MIRADA TRAFFIC IMPACT ANALYSIS**

This Memorandum of Understanding acknowledges the City of La Mirada Traffic Impact Analysis requirements for the following project. The Traffic Impact Analysis will be completed in accordance with Los Angeles TIA guidelines.

Project Name: 12841 Valley View Avenue Project  
 Project Address/Location: 12841 Valley View Avenue  
 Governmental Jurisdiction: City of La Mirada  
 Project Description and Land Use: 39 Multifamily Housing (Low-Rise) – see attached Figure 2

Consultant

Developer

Name:	<u>Tom Huang, Senior Traffic Engineer</u>	<u>Phil Martin, President</u>
Firm:	<u>Ganddini Group, INC.</u>	<u>PHIL MARTIN &amp; ASSOCIATES</u>
Address:	<u>550 Parkcenter Drive, Suite 202</u> <u>Santa Ana, CA 92705</u>	<u>4860 Irvine Boulevard, Suite 203</u> <u>Irvine, CA 92620</u>
Telephone:	<u>714-795-3100 x 102</u>	<u>949-454-1800</u>
E-mail:	<u><a href="mailto:tom@ganddini.com">tom@ganddini.com</a></u>	<u><a href="mailto:pmartin@philmartinassociates.com">pmartin@philmartinassociates.com</a></u>

**Trip Generation Source:** Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017.

	<u>Morning</u>		<u>Evening</u>		
	<u>In</u>	<u>Out</u>	<u>In</u>	<u>Out</u>	<u>Daily</u>
Total	<u>4</u>	<u>14</u>	<u>14</u>	<u>5</u>	<u>285</u>

Internal Trip Capture Allowance	<table border="1"><tr><td>NO</td></tr></table>	NO	( <u>    </u> - <u>    </u> Trip Discount)
NO			
Pass-By Trip Allowance	<table border="1"><tr><td>NO</td></tr></table>	NO	( <u>    </u> - <u>    </u> Trip Discount)
NO			

Project Full Occupancy Year: 2021  
 Annual Background Growth Rate: 1.0% [LA 2010 CMP, RSA #22, 5-Year Growth = 5.2%]

Other area projects to be considered: To be provided by the City of La Mirada, if any

**Trip Geographic Distribution: (see attached Figure 3 and Figure 4)**

North: 30%                      South: 45%                      East: 15%                      West: 10%

**Analysis Conditions:**

1. Existing
2. Existing + Project
3. Existing + Ambient (2021) + Project
4. Existing + Ambient (2021) + Cumulative + Project

**Study Intersections: (See attached Figure 1)**

1. Valley View Avenue (NS) at Imperial Highway (EW)
2. Valley View Avenue (NS) at Commercial Driveway
3. Valley View Avenue (NS) at Project Driveway – future
4. Valley View Avenue (NS) at Adoree Street (EW)
5. Valley View Avenue (NS) at Foster Road
6. Valley View Avenue (NS) at Rosecrans Avenue

Approved by:

\_\_\_\_\_  
Consultant's Representative

05.10.2019  
Date

\_\_\_\_\_  
City of La Mirada Representative

\_\_\_\_\_  
Date

19-0060

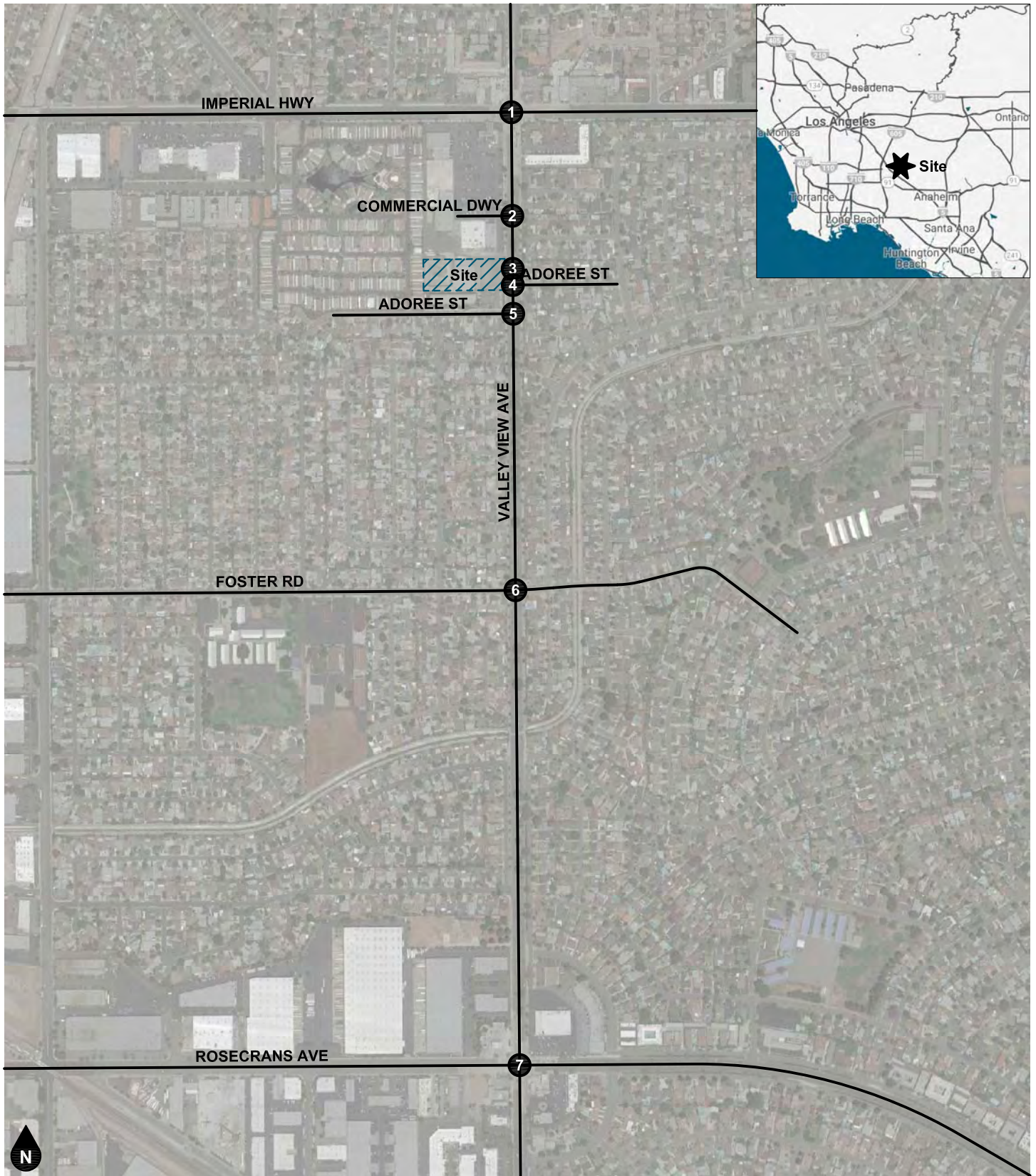
**Table 1  
Project Trip Generation**

Trip Generation Rates									
Land Use	Source <sup>1</sup>	Units <sup>2</sup>	AM Peak Hour			PM Peak Hour			Daily Rate
			% In	% Out	Rate	% In	% Out	Rate	
Multifamily Housing (Low-Rise)	ITE 220	DU	23%	77%	0.46	63%	37%	0.56	7.32

Trips Generated									
Land Use	Quantity	Units <sup>2</sup>	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Multifamily Housing (Low-Rise)	39	DU	4	14	18	14	8	22	285

Notes:

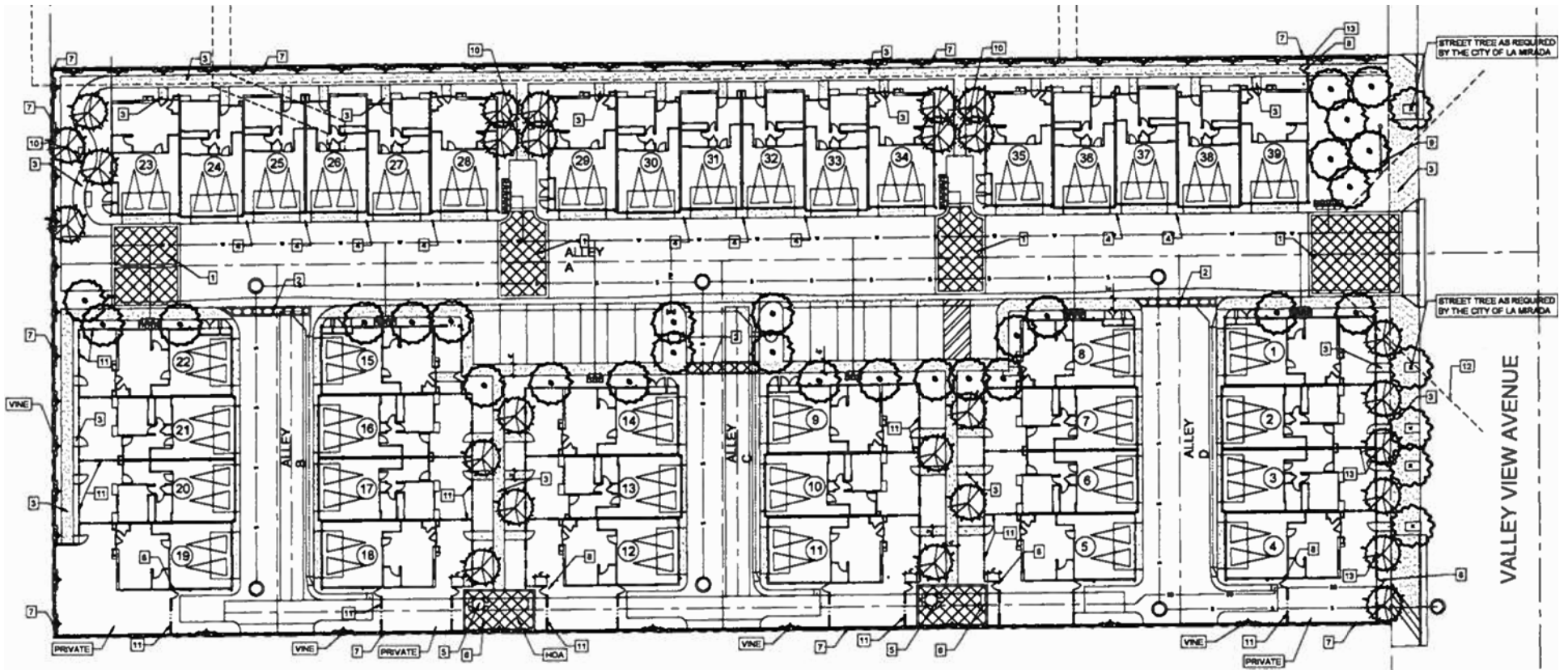
- 1) ITE = Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017; XXX= Land Use Code
- 2) DU = Dwelling Units



Legend

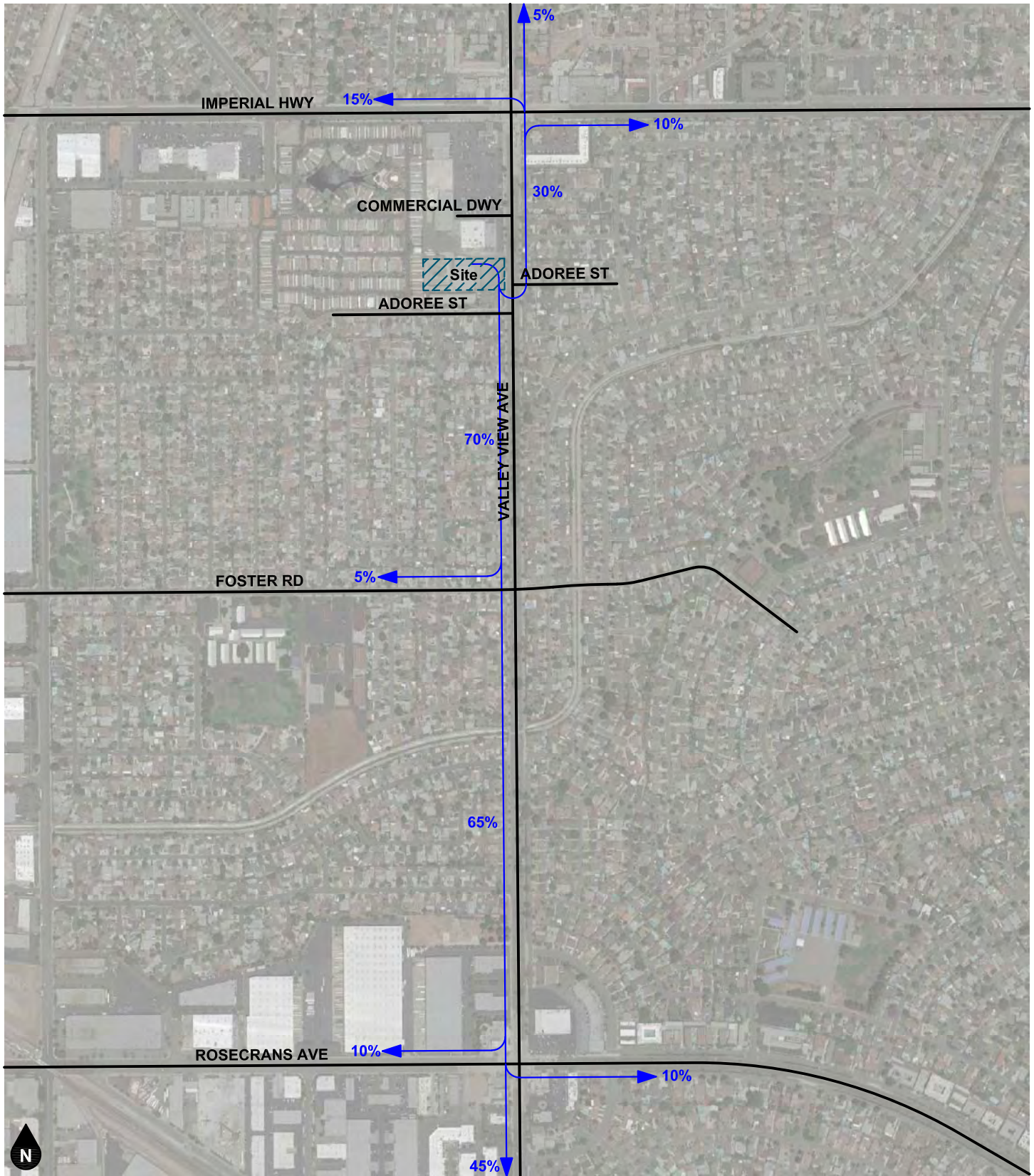
 Study Intersection

**Figure 1**  
**Project Location Map**



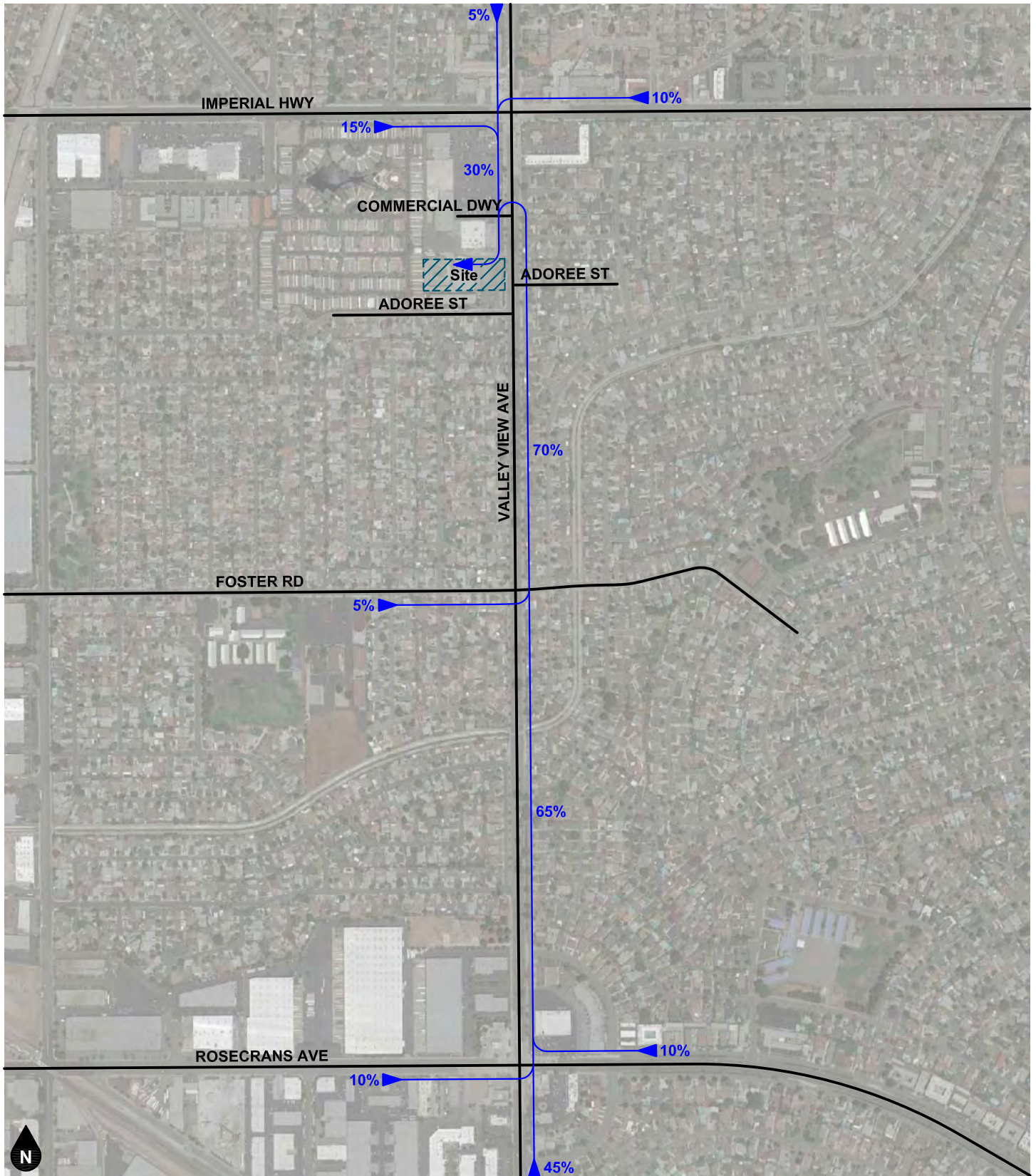
**Figure 2**  
**Site Plan**





Legend  
 ← 10% Percent From Project

**Figure 3**  
**Project Outbound Trip Distribution**



Legend  
 ← 10% Percent To Project

**Figure 4**  
**Project Inbound Trip Distribution**

**APPENDIX C**  
**VOLUME COUNT WORKSHEETS**





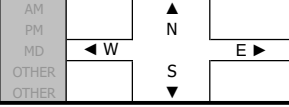


# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

<b>DATE:</b> Tue, May 7, 19	<b>LOCATION:</b> NORTH & SOUTH: La Mirada EAST & WEST: Valley View Rosecrans	<b>PROJECT #:</b> SC2184 <b>LOCATION #:</b> 4 <b>CONTROL:</b> SIGNAL	<b>NOTES:</b>
--------------------------------	---------------------------------------------------------------------------------------	----------------------------------------------------------------------------	---------------

Add U-Turns to Left Turns



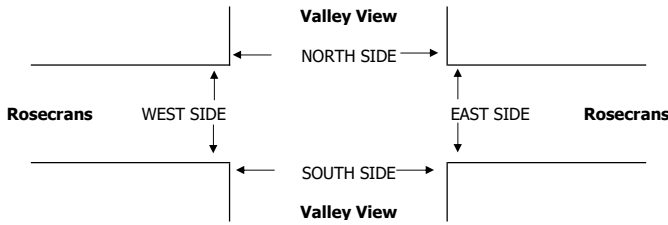
LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	

U-TURNS				
NB	SB	EB	WB	TTL

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
<b>AM</b>	30	157	11	16	239	27	14	74	8	36	210	23	845
7:00 AM	39	148	12	24	295	21	22	83	21	35	203	30	933
7:15 AM	28	210	10	38	253	8	25	158	18	45	210	37	1,040
7:30 AM	29	185	11	39	278	28	28	96	13	45	222	52	1,026
7:45 AM	30	147	12	42	237	24	18	114	16	44	209	43	936
8:00 AM	25	151	14	28	251	18	21	85	14	45	202	37	891
8:15 AM	28	135	9	21	200	16	11	84	24	39	151	31	749
8:30 AM	25	119	7	20	169	14	17	95	25	39	149	36	715
8:45 AM	VOLUMES												7,135
	234	1,252	86	228	1,922	156	156	789	139	328	1,556	289	
	APPROACH %												
	15%	80%	5%	10%	83%	7%	14%	73%	13%	15%	72%	13%	
	APP/DEPART												0
	1,572	/	1,688	2,306	/	2,422	1,084	/	1,114	2,173	/	1,911	
	BEGIN PEAK HR												
	7:15 AM												
	126	690	45	143	1,063	81	93	451	68	169	844	162	3,935
	APPROACH %												
	15%	80%	5%	11%	83%	6%	15%	74%	11%	14%	72%	14%	
	PEAK HR FACTOR												0.946
	0.868												
	APP/DEPART												0
	861	/	938	1,287	/	1,322	612	/	645	1,175	/	1,030	
<b>PM</b>	28	249	7	40	154	15	37	170	23	37	137	36	933
4:00 PM	18	265	19	43	147	8	38	124	16	33	126	41	878
4:15 PM	26	260	15	35	204	16	37	150	18	33	124	26	944
4:30 PM	20	242	11	51	171	18	30	200	18	27	122	41	951
4:45 PM	18	290	9	42	186	3	32	204	20	38	114	36	992
5:00 PM	20	238	12	60	173	11	35	222	21	21	146	55	1,014
5:15 PM	16	302	15	37	175	12	43	203	16	53	108	56	1,036
5:30 PM	16	275	22	41	157	11	39	181	14	37	123	42	958
5:45 PM	VOLUMES												7,706
	162	2,121	110	349	1,367	94	291	1,454	146	279	1,000	333	
	APPROACH %												
	7%	89%	5%	19%	76%	5%	15%	77%	8%	17%	62%	21%	
	APP/DEPART												0
	2,393	/	2,744	1,810	/	1,792	1,891	/	1,928	1,612	/	1,242	
	BEGIN PEAK HR												
	5:00 PM												
	70	1,105	58	180	691	37	149	810	71	149	491	189	4,000
	APPROACH %												
	6%	90%	5%	20%	76%	4%	14%	79%	7%	18%	59%	23%	
	PEAK HR FACTOR												0.965
	0.926												
	APP/DEPART												0
	1,233	/	1,444	908	/	908	1,030	/	1,056	829	/	592	

2	0	0	1	3
7	0	2	0	9
7	0	2	3	12
6	0	3	3	12
8	0	0	0	8
4	0	0	1	5
5	0	1	2	8
5	0	1	1	7
44	0	9	11	64

5	0	1	4	10
3	3	4	2	12
2	1	0	1	4
4	0	1	4	9
2	1	0	1	4
2	0	2	4	8
3	2	0	4	9
2	1	1	3	7
23	8	9	23	63



	PEDESTRIAN + BIKE CROSSINGS				
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
<b>AM</b>	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL	0	0	0	0	0
AM BEGIN PEAK HR	7:15 AM				
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL	0	0	0	0	0
PM BEGIN PEAK HR	5:00 PM				

	PEDESTRIAN CROSSINGS				
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
<b>AM</b>	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL	0	0	0	0	0
AM BEGIN PEAK HR	7:15 AM				
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL	0	0	0	0	0
PM BEGIN PEAK HR	5:00 PM				

	BICYCLE CROSSINGS				
	NS	SS	ES	WS	TOTAL
<b>AM</b>	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL	0	0	0	0	0
AM BEGIN PEAK HR	7:15 AM				
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL	0	0	0	0	0
PM BEGIN PEAK HR	5:00 PM				

	BICYCLE CROSSINGS				
	NS	SS	ES	WS	TOTAL
<b>AM</b>	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL	0	0	0	0	0
AM BEGIN PEAK HR	7:15 AM				
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL	0	0	0	0	0
PM BEGIN PEAK HR	5:00 PM				

**APPENDIX D**  
**LEVEL OF SERVICE WORKSHEETS**



**Existing**

12841 Valley View Avenue Project

Vistro File: G:\...\IAM E.vistro  
 Report File: G:\...\IAM E.pdf

Scenario 1 Existing  
 8/16/2019

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	WB Thru	0.833	-	D
3	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	SB Thru	0.498	-	A
4	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	SB Thru	0.521	-	A
5	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	SB Thru	0.789	-	C
6	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	SB Thru	0.798	-	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report**  
**Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.833

**Intersection Setup**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵				↵↵↵			↵↵↵			↵↵↵		
Turning Movement	U-tu	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	12.00
No. of Lanes in Pocket	1	0	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.0	100.0	100.0	100.0	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00				40.00			45.00			45.00		
Grade [%]	0.00				0.00			0.00			0.00		
Crosswalk	Yes				Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	0	251	530	166	64	837	92	60	710	196	177	1294	38
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	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	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	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	0
Diverted Trips [veh/h]	0	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	0
Existing Site Adjustment Volume [veh/h]	0	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	0
Total Hourly Volume [veh/h]	0	251	530	166	64	837	92	60	710	196	177	1294	38
Peak Hour Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	63	133	42	16	209	23	15	178	49	44	324	10
Total Analysis Volume [veh/h]	0	251	530	166	64	837	92	60	710	196	177	1294	38
Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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




**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.16	0.17	0.10	0.04	0.26	0.06	0.04	0.19	0.19	0.11	0.28	0.28
Intersection LOS	D												
Intersection V/C	0.833												

**Intersection Level Of Service Report**  
**Intersection 3: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.498

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Adoree St	
Approach	Northbound			Southbound			Westbound	
Lane Configuration								
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	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
Pocket Length [ft]	83.00	100.00	100.00	60.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00	
Grade [%]	0.00			0.00			0.00	
Crosswalk	No			Yes			Yes	

**Volumes**

Name	Valley View Ave			Valley View Ave			Adoree St	
Base Volume Input [veh/h]	0	983	4	0	10	1201	11	25
Base Volume Adjustment Factor	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
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	983	4	0	10	1201	11	25
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	0	246	1	0	3	300	3	6
Total Analysis Volume [veh/h]	0	983	4	0	10	1201	11	25
Pedestrian Volume [ped/h]	0			0			0	
Bicycle Volume [bicycles/h]	0			0			0	

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	5	2	0	0	1	6	7	0
Auxiliary Signal Groups								
Lead / Lag	Lead	-	-	-	Lead	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.31	0.00	0.00	0.01	0.38	0.01	0.02
Intersection LOS	A							
Intersection V/C	0.498							

**Intersection Level Of Service Report**  
**Intersection 4: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.521

**Intersection Setup**

Name	Valley View Ave		Valley View Ave		Adoree St	
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	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

**Volumes**

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	6	912	1152	60	75	16
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 Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	6	912	1152	60	75	16
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]	2	228	288	15	19	4
Total Analysis Volume [veh/h]	6	912	1152	60	75	16
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.29	0.36	0.04	0.05	0.06
Intersection LOS	A					
Intersection V/C	0.521					



**Intersection Level Of Service Report**  
**Intersection 5: Valley View Ave (NS) at Foster Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.789

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
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]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	138	868	41	27	1171	76	70	57	191	61	99	48
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 Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	138	868	41	27	1171	76	70	57	191	61	99	48
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	217	10	7	293	19	18	14	48	15	25	12
Total Analysis Volume [veh/h]	138	868	41	27	1171	76	70	57	191	61	99	48
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.09	0.27	0.03	0.02	0.37	0.05	0.04	0.20	0.20	0.04	0.13	0.13
Intersection LOS	C											
Intersection V/C	0.789											

**Intersection Level Of Service Report**  
**Intersection 6: Valley View Ave (NS) at Rosecrans Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.798

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
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	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	126	690	45	143	1063	81	93	451	68	169	844	162
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 Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	126	690	45	143	1063	81	93	451	68	169	844	162
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]	32	173	11	36	266	20	23	113	17	42	211	41
Total Analysis Volume [veh/h]	126	690	45	143	1063	81	93	451	68	169	844	162
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.04	0.23	0.23	0.09	0.33	0.05	0.06	0.14	0.04	0.11	0.26	0.10
Intersection LOS	C											
Intersection V/C	0.798											

12841 Valley View Avenue Project

Vistro File: G:\...\PM E.vistro  
Report File: G:\...\PM E.pdf

Scenario 1 Existing  
8/16/2019

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	NB Thru	0.808	-	D
3	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	NB Thru	0.560	-	A
4	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	NB Thru	0.550	-	A
5	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	NB Thru	0.627	-	B
6	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	NB Thru	0.922	-	E

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report**  
**Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.808

**Intersection Setup**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration	↔ ↔ ↔ ↔				↔ ↔ ↔			↔ ↔ ↔			↔ ↔ ↔		
Turning Movement	U-tu	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	12.00
No. of Lanes in Pocket	1	0	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.0	100.0	100.0	100.0	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00				40.00			45.00			45.00		
Grade [%]	0.00				0.00			0.00			0.00		
Crosswalk	Yes				Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	0	207	865	173	88	593	46	125	1004	224	203	748	58
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	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	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	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	0
Diverted Trips [veh/h]	0	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	0
Existing Site Adjustment Volume [veh/h]	0	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	0
Total Hourly Volume [veh/h]	0	207	865	173	88	593	46	125	1004	224	203	748	58
Peak Hour Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	52	216	43	22	148	12	31	251	56	51	187	15
Total Analysis Volume [veh/h]	0	207	865	173	88	593	46	125	1004	224	203	748	58
Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.13	0.27	0.11	0.06	0.19	0.03	0.08	0.26	0.26	0.13	0.17	0.17
Intersection LOS	D												
Intersection V/C	0.808												

**Intersection Level Of Service Report**  
**Intersection 3: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.560

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Adoree St	
Approach	Northbound			Southbound			Westbound	
Lane Configuration								
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	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
Pocket Length [ft]	83.00	100.00	100.00	60.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00	
Grade [%]	0.00			0.00			0.00	
Crosswalk	No			Yes			Yes	

**Volumes**

Name	Valley View Ave			Valley View Ave			Adoree St	
Base Volume Input [veh/h]	0	1349	7	0	34	1023	10	17
Base Volume Adjustment Factor	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
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1349	7	0	34	1023	10	17
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	0	337	2	0	9	256	3	4
Total Analysis Volume [veh/h]	0	1349	7	0	34	1023	10	17
Pedestrian Volume [ped/h]	0			0			0	
Bicycle Volume [bicycles/h]	0			0			0	



**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	5	2	0	0	1	6	7	0
Auxiliary Signal Groups								
Lead / Lag	Lead	-	-	-	Lead	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.42	0.00	0.00	0.02	0.32	0.01	0.02
Intersection LOS	A							
Intersection V/C	0.560							

**Intersection Level Of Service Report**  
**Intersection 4: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.550

**Intersection Setup**

Name	Valley View Ave		Valley View Ave		Adoree St	
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	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

**Volumes**

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	12	1299	932	92	66	5
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 Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	12	1299	932	92	66	5
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]	3	325	233	23	17	1
Total Analysis Volume [veh/h]	12	1299	932	92	66	5
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.41	0.29	0.06	0.04	0.04
Intersection LOS	A					
Intersection V/C	0.550					

**Intersection Level Of Service Report**  
**Intersection 5: Valley View Ave (NS) at Foster Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.627

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
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]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	103	1234	39	24	952	44	52	30	84	36	31	24
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 Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	103	1234	39	24	952	44	52	30	84	36	31	24
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]	26	309	10	6	238	11	13	8	21	9	8	6
Total Analysis Volume [veh/h]	103	1234	39	24	952	44	52	30	84	36	31	24
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.06	0.39	0.02	0.02	0.30	0.03	0.03	0.10	0.10	0.02	0.06	0.06
Intersection LOS	B											
Intersection V/C	0.627											

**Intersection Level Of Service Report**  
**Intersection 6: Valley View Ave (NS) at Rosecrans Ave (EW)**

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	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
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	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	70	1105	58	180	691	37	149	810	71	149	491	189
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 Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	70	1105	58	180	691	37	149	810	71	149	491	189
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]	18	276	15	45	173	9	37	203	18	37	123	47
Total Analysis Volume [veh/h]	70	1105	58	180	691	37	149	810	71	149	491	189
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.02	0.36	0.36	0.11	0.22	0.02	0.09	0.25	0.04	0.09	0.15	0.12
Intersection LOS	E											
Intersection V/C	0.922											

## Existing Plus Project



12841 Valley View Avenue Project

Vistro File: G:\...\IAM E.vistro  
Report File: G:\...\IAM EP.pdf

Scenario 2 Existing Plus Project  
8/16/2019

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	WB Thru	0.835	-	D
2	Valley View Ave (NS) at Project Dwy (EW)	Two-way stop	HCM 6th Edition	EB Right	0.033	13.7	B
3	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	SB Thru	0.501	-	A
4	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	SB Thru	0.524	-	A
5	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	SB Thru	0.792	-	C
6	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	SB Thru	0.800	-	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report**  
**Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.835

**Intersection Setup**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]				[Diagram]			[Diagram]			[Diagram]		
Turning Movement	U-tu	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	12.00
No. of Lanes in Pocket	1	0	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.0	100.0	100.0	100.0	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00				40.00			45.00			45.00		
Grade [%]	0.00				0.00			0.00			0.00		
Crosswalk	Yes				Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	0	251	530	166	64	837	92	60	710	196	177	1294	38
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	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	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	2	1	1	0	0	0	0	0	1	0	0	0
Diverted Trips [veh/h]	0	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	0
Existing Site Adjustment Volume [veh/h]	0	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	0
Total Hourly Volume [veh/h]	2	253	531	167	64	837	92	60	710	197	177	1294	38
Peak Hour Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	63	133	42	16	209	23	15	178	49	44	324	10
Total Analysis Volume [veh/h]	2	253	531	167	64	837	92	60	710	197	177	1294	38
Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.16	0.17	0.10	0.04	0.26	0.06	0.04	0.19	0.19	0.11	0.28	0.28
Intersection LOS	D												
Intersection V/C	0.835												

**Intersection Level Of Service Report**  
**Intersection 2: Valley View Ave (NS) at Project Dwy (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	13.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.033

**Intersection Setup**

Name	Valley View Ave		Valley View Ave		Project Dwy	
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]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Valley View Ave		Valley View Ave		Project Dwy	
Base Volume Input [veh/h]	0	1083	1255	0	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 Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	0	3	0	14
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	1089	1255	3	0	14
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	272	314	1	0	4
Total Analysis Volume [veh/h]	0	1089	1255	3	0	14
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	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	13.74
Movement LOS		A	A	A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.10
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	2.54
d_A, Approach Delay [s/veh]	0.00		0.00		13.74	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.08					
Intersection LOS	B					

**Intersection Level Of Service Report**  
**Intersection 3: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.501

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Adoree St	
Approach	Northbound			Southbound			Westbound	
Lane Configuration								
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	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
Pocket Length [ft]	83.00	100.00	100.00	60.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00	
Grade [%]	0.00			0.00			0.00	
Crosswalk	No			Yes			Yes	

**Volumes**

Name	Valley View Ave			Valley View Ave			Adoree St	
Base Volume Input [veh/h]	0	983	4	0	10	1201	11	25
Base Volume Adjustment Factor	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
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	4	0	10	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	985	4	4	10	1211	11	25
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	0	246	1	1	3	303	3	6
Total Analysis Volume [veh/h]	0	985	4	4	10	1211	11	25
Pedestrian Volume [ped/h]	0			0			0	
Bicycle Volume [bicycles/h]	0			0			0	

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	5	2	0	0	1	6	7	0
Auxiliary Signal Groups								
Lead / Lag	Lead	-	-	-	Lead	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.31	0.00	0.00	0.01	0.38	0.01	0.02
Intersection LOS	A							
Intersection V/C	0.501							

**Intersection Level Of Service Report**  
**Intersection 4: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.524

**Intersection Setup**

Name	Valley View Ave		Valley View Ave		Adoree St	
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	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

**Volumes**

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	6	912	1152	60	75	16
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 Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	10	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]	6	914	1162	60	75	16
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]	2	229	291	15	19	4
Total Analysis Volume [veh/h]	6	914	1162	60	75	16
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	



**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.29	0.36	0.04	0.05	0.06
Intersection LOS	A					
Intersection V/C	0.524					

**Intersection Level Of Service Report**  
**Intersection 5: Valley View Ave (NS) at Foster Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.792

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
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]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	138	868	41	27	1171	76	70	57	191	61	99	48
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 Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	0	9	1	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]	138	870	41	27	1180	77	70	57	191	61	99	48
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	218	10	7	295	19	18	14	48	15	25	12
Total Analysis Volume [veh/h]	138	870	41	27	1180	77	70	57	191	61	99	48
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.09	0.27	0.03	0.02	0.37	0.05	0.04	0.20	0.20	0.04	0.13	0.13
Intersection LOS	C											
Intersection V/C	0.792											

**Intersection Level Of Service Report**  
**Intersection 6: Valley View Ave (NS) at Rosecrans Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.800

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	TUT			TUT			TUT			TUT		
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	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	126	690	45	143	1063	81	93	451	68	169	844	162
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 Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	1	7	1	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]	126	692	45	144	1070	82	93	451	68	169	844	162
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]	32	173	11	36	268	21	23	113	17	42	211	41
Total Analysis Volume [veh/h]	126	692	45	144	1070	82	93	451	68	169	844	162
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.04	0.23	0.23	0.09	0.33	0.05	0.06	0.14	0.04	0.11	0.26	0.10
Intersection LOS	C											
Intersection V/C	0.800											

12841 Valley View Avenue Project

Vistro File: G:\...\IPM E.vistro  
Report File: G:\...\IPM EP.pdf

Scenario 2 Existing Plus Project  
8/16/2019

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	NB Thru	0.809	-	D
2	Valley View Ave (NS) at Project Dwy (EW)	Two-way stop	HCM 6th Edition	EB Right	0.016	12.5	B
3	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	NB Thru	0.563	-	A
4	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	NB Thru	0.553	-	A
5	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	NB Thru	0.630	-	B
6	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	NB Thru	0.925	-	E

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report**  
**Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.809

**Intersection Setup**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]				[Diagram]			[Diagram]			[Diagram]		
Turning Movement	U-tu	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	12.00
No. of Lanes in Pocket	1	0	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.0	100.0	100.0	100.0	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00				40.00			45.00			45.00		
Grade [%]	0.00				0.00			0.00			0.00		
Crosswalk	Yes				Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	0	207	865	173	88	593	46	125	1004	224	203	748	58
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	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	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	1	0	1	0	1	0	0	0	2	1	0	0
Diverted Trips [veh/h]	0	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	0
Existing Site Adjustment Volume [veh/h]	0	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	0
Total Hourly Volume [veh/h]	9	208	865	174	88	594	46	125	1004	226	204	748	58
Peak Hour Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	52	216	44	22	149	12	31	251	57	51	187	15
Total Analysis Volume [veh/h]	9	208	865	174	88	594	46	125	1004	226	204	748	58
Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.13	0.27	0.11	0.06	0.19	0.03	0.08	0.26	0.26	0.13	0.17	0.17
Intersection LOS	D												
Intersection V/C	0.809												



**Intersection Level Of Service Report**  
**Intersection 2: Valley View Ave (NS) at Project Dwy (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	12.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

**Intersection Setup**

Name	Valley View Ave		Valley View Ave		Project Dwy	
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]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Valley View Ave		Valley View Ave		Project Dwy	
Base Volume Input [veh/h]	0	1369	1078	0	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 Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	11	0	13	0	8
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	1380	1078	13	0	8
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	345	270	3	0	2
Total Analysis Volume [veh/h]	0	1380	1078	13	0	8
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	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	12.52
Movement LOS		A	A	A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.05
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	1.25
d_A, Approach Delay [s/veh]	0.00		0.00		12.52	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.04					
Intersection LOS	B					

**Intersection Level Of Service Report**  
**Intersection 3: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.563

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Adoree St	
Approach	Northbound			Southbound			Westbound	
Lane Configuration								
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	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
Pocket Length [ft]	83.00	100.00	100.00	60.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00	
Grade [%]	0.00			0.00			0.00	
Crosswalk	No			Yes			Yes	

**Volumes**

Name	Valley View Ave			Valley View Ave			Adoree St	
Base Volume Input [veh/h]	0	1349	7	0	34	1023	10	17
Base Volume Adjustment Factor	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
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	0	2	0	6	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1358	7	2	34	1029	10	17
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	0	340	2	1	9	257	3	4
Total Analysis Volume [veh/h]	0	1358	7	2	34	1029	10	17
Pedestrian Volume [ped/h]	0			0			0	
Bicycle Volume [bicycles/h]	0			0			0	

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	5	2	0	0	1	6	7	0
Auxiliary Signal Groups								
Lead / Lag	Lead	-	-	-	Lead	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.42	0.00	0.00	0.02	0.32	0.01	0.02
Intersection LOS	A							
Intersection V/C	0.563							

**Intersection Level Of Service Report**  
**Intersection 4: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.553

**Intersection Setup**

Name	Valley View Ave		Valley View Ave		Adoree St	
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	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

**Volumes**

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	12	1299	932	92	66	5
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 Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	6	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]	12	1308	938	92	66	5
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]	3	327	235	23	17	1
Total Analysis Volume [veh/h]	12	1308	938	92	66	5
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.41	0.29	0.06	0.04	0.04
Intersection LOS	A					
Intersection V/C	0.553					

**Intersection Level Of Service Report**  
**Intersection 5: Valley View Ave (NS) at Foster Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.630

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
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]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	103	1234	39	24	952	44	52	30	84	36	31	24
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 Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	8	0	0	6	0	1	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]	103	1242	39	24	958	44	53	30	84	36	31	24
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]	26	311	10	6	240	11	13	8	21	9	8	6
Total Analysis Volume [veh/h]	103	1242	39	24	958	44	53	30	84	36	31	24
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.06	0.39	0.02	0.02	0.30	0.03	0.03	0.10	0.10	0.02	0.06	0.06
Intersection LOS	B											
Intersection V/C	0.630											



**Intersection Level Of Service Report**  
**Intersection 6: Valley View Ave (NS) at Rosecrans Ave (EW)**

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	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	TUT			TUT			TUT			TUT		
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	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	70	1105	58	180	691	37	149	810	71	149	491	189
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 Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	0	1	4	1	1	0	0	0	0	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]	70	1111	58	181	695	38	150	810	71	149	491	190
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]	18	278	15	45	174	10	38	203	18	37	123	48
Total Analysis Volume [veh/h]	70	1111	58	181	695	38	150	810	71	149	491	190
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.02	0.37	0.37	0.11	0.22	0.02	0.09	0.25	0.04	0.09	0.15	0.12
Intersection LOS	E											
Intersection V/C	0.925											

## **Opening Year (2021) Without Project**

## 12841 Valley View Avenue Project

Vistro File: G:\...\IAM OY.vistro

Scenario 1 Opening Year (2021) Without Project

Report File: G:\...\IAM OY.pdf

8/16/2019

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	WB Right	0.850	-	D
3	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	SB Thru	0.507	-	A
4	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	SB Thru	0.530	-	A
5	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	SB Thru	0.804	-	D
6	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	SB Thru	0.815	-	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report**  
**Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.850

**Intersection Setup**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]				[Diagram]			[Diagram]			[Diagram]		
Turning Movement	U-tu	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	12.00
No. of Lanes in Pocket	1	0	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.0	100.0	100.0	100.0	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00				40.00			45.00			45.00		
Grade [%]	0.00				0.00			0.00			0.00		
Crosswalk	Yes				Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	0	251	530	166	64	837	92	60	710	196	177	1294	38
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	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	2.00
Growth Rate	1.00	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	1	2	0	0	0	0	0	1	1	1	0
Diverted Trips [veh/h]	0	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	0
Existing Site Adjustment Volume [veh/h]	0	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	0
Total Hourly Volume [veh/h]	0	259	542	171	65	854	94	61	724	201	182	1321	39
Peak Hour Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	65	136	43	16	214	24	15	181	50	46	330	10
Total Analysis Volume [veh/h]	0	259	542	171	65	854	94	61	724	201	182	1321	39
Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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




**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.16	0.17	0.11	0.04	0.27	0.06	0.04	0.19	0.19	0.11	0.28	0.28
Intersection LOS	D												
Intersection V/C	0.850												

**Intersection Level Of Service Report**  
**Intersection 3: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.507

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Adoree St	
Approach	Northbound			Southbound			Westbound	
Lane Configuration								
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	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
Pocket Length [ft]	83.00	100.00	100.00	60.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00	
Grade [%]	0.00			0.00			0.00	
Crosswalk	No			Yes			Yes	

**Volumes**

Name	Valley View Ave			Valley View Ave			Adoree St	
Base Volume Input [veh/h]	0	983	4	0	10	1201	11	25
Base Volume Adjustment Factor	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
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	0	0	0	2	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1009	4	0	10	1227	11	26
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	0	252	1	0	3	307	3	7
Total Analysis Volume [veh/h]	0	1009	4	0	10	1227	11	26
Pedestrian Volume [ped/h]	0			0			0	
Bicycle Volume [bicycles/h]	0			0			0	

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	5	2	0	0	1	6	7	0
Auxiliary Signal Groups								
Lead / Lag	Lead	-	-	-	Lead	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.32	0.00	0.00	0.01	0.38	0.01	0.02
Intersection LOS	A							
Intersection V/C	0.507							



**Intersection Level Of Service Report**  
**Intersection 4: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.530

**Intersection Setup**

Name	Valley View Ave		Valley View Ave		Adoree St	
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	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

**Volumes**

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	6	912	1152	60	75	16
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 Rate	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	2	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]	6	936	1177	61	77	16
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]	2	234	294	15	19	4
Total Analysis Volume [veh/h]	6	936	1177	61	77	16
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.29	0.37	0.04	0.05	0.06
Intersection LOS	A					
Intersection V/C	0.530					

**Intersection Level Of Service Report**  
**Intersection 5: Valley View Ave (NS) at Foster Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.804

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
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]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	138	868	41	27	1171	76	70	57	191	61	99	48
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 Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	6	0	0	2	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]	142	891	42	28	1196	78	71	58	195	62	101	49
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]	36	223	11	7	299	20	18	15	49	16	25	12
Total Analysis Volume [veh/h]	142	891	42	28	1196	78	71	58	195	62	101	49
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.09	0.28	0.03	0.02	0.37	0.05	0.04	0.20	0.20	0.04	0.13	0.13
Intersection LOS	D											
Intersection V/C	0.804											

**Intersection Level Of Service Report**  
**Intersection 6: Valley View Ave (NS) at Rosecrans Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.815

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
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	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	126	690	45	143	1063	81	93	451	68	169	844	162
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 Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	0	2	9	2	1	0	0	0	0	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]	129	707	46	148	1093	85	96	460	69	172	861	166
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]	32	177	12	37	273	21	24	115	17	43	215	42
Total Analysis Volume [veh/h]	129	707	46	148	1093	85	96	460	69	172	861	166
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.04	0.24	0.24	0.09	0.34	0.05	0.06	0.14	0.04	0.11	0.27	0.10
Intersection LOS	D											
Intersection V/C	0.815											

## 12841 Valley View Avenue Project

Vistro File: G:\...\IPM OY.vistro

Scenario 1 Opening Year (2021) Without Project

Report File: G:\...\IPM OY.pdf

8/16/2019

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	NB Thru	0.827	-	D
3	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	NB Thru	0.570	-	A
4	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	NB Thru	0.560	-	A
5	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	NB Thru	0.640	-	B
6	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	NB Thru	0.951	-	E

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report**  
**Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.827

**Intersection Setup**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]				[Diagram]			[Diagram]			[Diagram]		
Turning Movement	U-tu	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	12.00
No. of Lanes in Pocket	1	0	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.0	100.0	100.0	100.0	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00				40.00			45.00			45.00		
Grade [%]	0.00				0.00			0.00			0.00		
Crosswalk	Yes				Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	0	207	865	173	88	593	46	125	1004	224	203	748	58
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	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	2.00
Growth Rate	1.00	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	1	1	3	1	0	0	4	3	2	4	3
Diverted Trips [veh/h]	0	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	0
Existing Site Adjustment Volume [veh/h]	0	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	0
Total Hourly Volume [veh/h]	0	213	883	177	93	606	47	128	1028	231	209	767	62
Peak Hour Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	53	221	44	23	152	12	32	257	58	52	192	16
Total Analysis Volume [veh/h]	0	213	883	177	93	606	47	128	1028	231	209	767	62
Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		



**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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




**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.13	0.28	0.11	0.06	0.19	0.03	0.08	0.26	0.26	0.13	0.17	0.17
Intersection LOS	D												
Intersection V/C	0.827												

**Intersection Level Of Service Report**  
**Intersection 3: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.570

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Adoree St	
Approach	Northbound			Southbound			Westbound	
Lane Configuration								
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	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
Pocket Length [ft]	83.00	100.00	100.00	60.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00	
Grade [%]	0.00			0.00			0.00	
Crosswalk	No			Yes			Yes	

**Volumes**

Name	Valley View Ave			Valley View Ave			Adoree St	
Base Volume Input [veh/h]	0	1349	7	0	34	1023	10	17
Base Volume Adjustment Factor	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
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	0	6	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1380	7	0	35	1049	10	17
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	0	345	2	0	9	262	3	4
Total Analysis Volume [veh/h]	0	1380	7	0	35	1049	10	17
Pedestrian Volume [ped/h]	0			0			0	
Bicycle Volume [bicycles/h]	0			0			0	

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	5	2	0	0	1	6	7	0
Auxiliary Signal Groups								
Lead / Lag	Lead	-	-	-	Lead	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.43	0.00	0.00	0.02	0.33	0.01	0.02
Intersection LOS	A							
Intersection V/C	0.570							

**Intersection Level Of Service Report**  
**Intersection 4: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.560

**Intersection Setup**

Name	Valley View Ave		Valley View Ave		Adoree St	
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	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

**Volumes**

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	12	1299	932	92	66	5
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 Rate	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	6	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]	12	1329	957	94	67	5
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]	3	332	239	24	17	1
Total Analysis Volume [veh/h]	12	1329	957	94	67	5
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.42	0.30	0.06	0.04	0.05
Intersection LOS	A					
Intersection V/C	0.560					

**Intersection Level Of Service Report**  
**Intersection 5: Valley View Ave (NS) at Foster Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.640

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
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]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	103	1234	39	24	952	44	52	30	84	36	31	24
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 Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	4	0	0	6	0	0	0	1	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]	106	1263	40	24	977	45	53	31	87	37	32	24
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]	27	316	10	6	244	11	13	8	22	9	8	6
Total Analysis Volume [veh/h]	106	1263	40	24	977	45	53	31	87	37	32	24
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.07	0.39	0.03	0.02	0.31	0.03	0.03	0.11	0.11	0.02	0.06	0.06
Intersection LOS	B											
Intersection V/C	0.640											

**Intersection Level Of Service Report**  
**Intersection 6: Valley View Ave (NS) at Rosecrans Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.951

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	TUT			TUT			TUT			TUT		
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	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	70	1105	58	180	691	37	149	810	71	149	491	189
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 Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	10	1	5	1	2	3	0	8	3	2
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]	71	1136	69	185	710	39	154	829	72	160	504	195
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]	18	284	17	46	178	10	39	207	18	40	126	49
Total Analysis Volume [veh/h]	71	1136	69	185	710	39	154	829	72	160	504	195
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		



**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.02	0.38	0.38	0.12	0.22	0.02	0.10	0.26	0.05	0.10	0.16	0.12
Intersection LOS	E											
Intersection V/C	0.951											

## **Opening Year (2021) With Project**

## 12841 Valley View Avenue Project

Vistro File: G:\...\IAM OY.vistro

Scenario 2 Opening Year (2021) With Project

Report File: G:\...\IAM OYP.pdf

8/16/2019

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	WB Right	0.851	-	D
2	Valley View Ave (NS) at Project Dwy (EW)	Two-way stop	HCM 6th Edition	EB Right	0.034	13.9	B
3	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	SB Thru	0.510	-	A
4	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	SB Thru	0.533	-	A
5	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	SB Thru	0.807	-	D
6	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	SB Thru	0.818	-	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report**  
**Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.851

**Intersection Setup**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration	[Diagram]				[Diagram]			[Diagram]			[Diagram]		
Turning Movement	U-tu	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	12.00
No. of Lanes in Pocket	1	0	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.0	100.0	100.0	100.0	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00				40.00			45.00			45.00		
Grade [%]	0.00				0.00			0.00			0.00		
Crosswalk	Yes				Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	0	251	530	166	64	837	92	60	710	196	177	1294	38
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	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	2.00
Growth Rate	1.00	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	5	2	3	0	0	0	0	0	2	1	1	0
Diverted Trips [veh/h]	0	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	0
Existing Site Adjustment Volume [veh/h]	0	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	0
Total Hourly Volume [veh/h]	2	261	543	172	65	854	94	61	724	202	182	1321	39
Peak Hour Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	65	136	43	16	214	24	15	181	51	46	330	10
Total Analysis Volume [veh/h]	2	261	543	172	65	854	94	61	724	202	182	1321	39
Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.16	0.17	0.11	0.04	0.27	0.06	0.04	0.19	0.19	0.11	0.28	0.28
Intersection LOS	D												
Intersection V/C	0.851												

**Intersection Level Of Service Report**  
**Intersection 2: Valley View Ave (NS) at Project Dwy (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	13.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.034

**Intersection Setup**

Name	Valley View Ave		Valley View Ave		Project Dwy	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration			r		r	
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]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Valley View Ave		Valley View Ave		Project Dwy	
Base Volume Input [veh/h]	0	1083	1255	0	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 Rate	1.00	1.02	1.02	1.02	1.00	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	12	2	3	0	14
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	1117	1282	3	0	14
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	279	321	1	0	4
Total Analysis Volume [veh/h]	0	1117	1282	3	0	14
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	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	13.92
Movement LOS		A	A	A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.10
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	2.60
d_A, Approach Delay [s/veh]	0.00		0.00		13.92	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.08					
Intersection LOS	B					

**Intersection Level Of Service Report**  
**Intersection 3: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.510

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Adoree St	
Approach	Northbound			Southbound			Westbound	
Lane Configuration								
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	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
Pocket Length [ft]	83.00	100.00	100.00	60.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00	
Grade [%]	0.00			0.00			0.00	
Crosswalk	No			Yes			Yes	

**Volumes**

Name	Valley View Ave			Valley View Ave			Adoree St	
Base Volume Input [veh/h]	0	983	4	0	10	1201	11	25
Base Volume Adjustment Factor	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
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	8	0	4	0	12	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1011	4	4	10	1237	11	26
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	0	253	1	1	3	309	3	7
Total Analysis Volume [veh/h]	0	1011	4	4	10	1237	11	26
Pedestrian Volume [ped/h]	0			0			0	
Bicycle Volume [bicycles/h]	0			0			0	



**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	5	2	0	0	1	6	7	0
Auxiliary Signal Groups								
Lead / Lag	Lead	-	-	-	Lead	-	Lead	-




**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.32	0.00	0.00	0.01	0.39	0.01	0.02
Intersection LOS	A							
Intersection V/C	0.510							

**Intersection Level Of Service Report**  
**Intersection 4: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.533

**Intersection Setup**

Name	Valley View Ave		Valley View Ave		Adoree St	
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	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

**Volumes**

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	6	912	1152	60	75	16
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 Rate	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	8	12	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]	6	938	1187	61	77	16
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]	2	235	297	15	19	4
Total Analysis Volume [veh/h]	6	938	1187	61	77	16
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.29	0.37	0.04	0.05	0.06
Intersection LOS	A					
Intersection V/C	0.533					

**Intersection Level Of Service Report**  
**Intersection 5: Valley View Ave (NS) at Foster Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.807

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
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]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	138	868	41	27	1171	76	70	57	191	61	99	48
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 Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	8	0	0	11	1	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]	142	893	42	28	1205	79	71	58	195	62	101	49
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]	36	223	11	7	301	20	18	15	49	16	25	12
Total Analysis Volume [veh/h]	142	893	42	28	1205	79	71	58	195	62	101	49
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.09	0.28	0.03	0.02	0.38	0.05	0.04	0.20	0.20	0.04	0.13	0.13
Intersection LOS	D											
Intersection V/C	0.807											

**Intersection Level Of Service Report**  
**Intersection 6: Valley View Ave (NS) at Rosecrans Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.818

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
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	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	126	690	45	143	1063	81	93	451	68	169	844	162
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 Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	5	0	3	16	3	1	0	0	0	0	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]	129	709	46	149	1100	86	96	460	69	172	861	166
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]	32	177	12	37	275	22	24	115	17	43	215	42
Total Analysis Volume [veh/h]	129	709	46	149	1100	86	96	460	69	172	861	166
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.04	0.24	0.24	0.09	0.34	0.05	0.06	0.14	0.04	0.11	0.27	0.10
Intersection LOS	D											
Intersection V/C	0.818											

## 12841 Valley View Avenue Project

Vistro File: G:\...\IPM OY.vistro

Scenario 2 Opening Year (2021) With Project

Report File: G:\...\IPM OYP.pdf

8/16/2019

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Valley View Ave (NS) at Imperial Hwy (EW)	Signalized	ICU 1	NB Thru	0.828	-	D
2	Valley View Ave (NS) at Project Dwy (EW)	Two-way stop	HCM 6th Edition	EB Right	0.017	12.7	B
3	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	NB Thru	0.573	-	A
4	Valley View Ave (NS) at Adoree St (EW)	Signalized	ICU 1	NB Thru	0.563	-	A
5	Valley View Ave (NS) at Foster Rd (EW)	Signalized	ICU 1	NB Thru	0.643	-	B
6	Valley View Ave (NS) at Rosecrans Ave (EW)	Signalized	ICU 1	NB Thru	0.954	-	E

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.



**Intersection Level Of Service Report**  
**Intersection 1: Valley View Ave (NS) at Imperial Hwy (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.828

**Intersection Setup**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration	↵ ↵ ↵ ↵				↵ ↵ ↵			↵ ↵ ↵			↵ ↵ ↵		
Turning Movement	U-tu	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	12.00
No. of Lanes in Pocket	1	0	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	293.0	100.0	100.0	100.0	204.00	100.00	100.00	150.00	100.00	100.00	195.00	100.00	100.00
Speed [mph]	45.00				40.00			45.00			45.00		
Grade [%]	0.00				0.00			0.00			0.00		
Crosswalk	Yes				Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave				Valley View Ave			Imperial Hwy			Imperial Hwy		
Base Volume Input [veh/h]	0	207	865	173	88	593	46	125	1004	224	203	748	58
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	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	2.00
Growth Rate	1.00	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	3	1	2	3	2	0	0	4	5	3	4	3
Diverted Trips [veh/h]	0	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	0
Existing Site Adjustment Volume [veh/h]	0	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	0
Total Hourly Volume [veh/h]	9	214	883	178	93	607	47	128	1028	233	210	767	62
Peak Hour Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	54	221	45	23	152	12	32	257	58	53	192	16
Total Analysis Volume [veh/h]	9	214	883	178	93	607	47	128	1028	233	210	767	62
Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.13	0.28	0.11	0.06	0.19	0.03	0.08	0.26	0.26	0.13	0.17	0.17
Intersection LOS	D												
Intersection V/C	0.828												

**Intersection Level Of Service Report**  
**Intersection 2: Valley View Ave (NS) at Project Dwy (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	12.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

**Intersection Setup**

Name	Valley View Ave		Valley View Ave		Project Dwy	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration			r		r	
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]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Valley View Ave		Valley View Ave		Project Dwy	
Base Volume Input [veh/h]	0	1369	1078	0	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 Rate	1.00	1.02	1.02	1.02	1.00	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	15	6	13	0	8
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	1411	1106	13	0	8
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	353	277	3	0	2
Total Analysis Volume [veh/h]	0	1411	1106	13	0	8
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	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	12.68
Movement LOS		A	A	A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.05
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	1.28
d_A, Approach Delay [s/veh]	0.00		0.00		12.68	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.04					
Intersection LOS	B					

**Intersection Level Of Service Report**  
**Intersection 3: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.573

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Adoree St	
Approach	Northbound			Southbound			Westbound	
Lane Configuration								
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	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
Pocket Length [ft]	83.00	100.00	100.00	60.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00	
Grade [%]	0.00			0.00			0.00	
Crosswalk	No			Yes			Yes	

**Volumes**

Name	Valley View Ave			Valley View Ave			Adoree St	
Base Volume Input [veh/h]	0	1349	7	0	34	1023	10	17
Base Volume Adjustment Factor	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
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	13	0	2	0	12	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1389	7	2	35	1055	10	17
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	0	347	2	1	9	264	3	4
Total Analysis Volume [veh/h]	0	1389	7	2	35	1055	10	17
Pedestrian Volume [ped/h]	0			0			0	
Bicycle Volume [bicycles/h]	0			0			0	

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	5	2	0	0	1	6	7	0
Auxiliary Signal Groups								
Lead / Lag	Lead	-	-	-	Lead	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.00	0.43	0.00	0.00	0.02	0.33	0.01	0.02
Intersection LOS	A							
Intersection V/C	0.573							

**Intersection Level Of Service Report**  
**Intersection 4: Valley View Ave (NS) at Adoree St (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.563

**Intersection Setup**

Name	Valley View Ave		Valley View Ave		Adoree St	
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	1	0	0	0	0	0
Pocket Length [ft]	105.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

**Volumes**

Name	Valley View Ave		Valley View Ave		Adoree St	
Base Volume Input [veh/h]	12	1299	932	92	66	5
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 Rate	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	13	12	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]	12	1338	963	94	67	5
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]	3	335	241	24	17	1
Total Analysis Volume [veh/h]	12	1338	963	94	67	5
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	5	2	6	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.42	0.30	0.06	0.04	0.05
Intersection LOS	A					
Intersection V/C	0.563					



**Intersection Level Of Service Report**  
**Intersection 5: Valley View Ave (NS) at Foster Rd (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.643

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
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]	160.00	100.00	100.00	160.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Foster Rd			Foster Rd		
Base Volume Input [veh/h]	103	1234	39	24	952	44	52	30	84	36	31	24
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 Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	12	0	0	12	0	1	0	1	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]	106	1271	40	24	983	45	54	31	87	37	32	24
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]	27	318	10	6	246	11	14	8	22	9	8	6
Total Analysis Volume [veh/h]	106	1271	40	24	983	45	54	31	87	37	32	24
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.07	0.40	0.03	0.02	0.31	0.03	0.03	0.11	0.11	0.02	0.06	0.06
Intersection LOS	B											
Intersection V/C	0.643											

**Intersection Level Of Service Report**  
**Intersection 6: Valley View Ave (NS) at Rosecrans Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.954

**Intersection Setup**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
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	2	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.00	100.00	100.00	176.00	100.00	100.00	195.00	100.00	100.00	85.00	100.00	100.00
Speed [mph]	40.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Valley View Ave			Valley View Ave			Rosecrans Ave			Rosecrans Ave		
Base Volume Input [veh/h]	70	1105	58	180	691	37	149	810	71	149	491	189
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 Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	15	10	2	9	2	3	3	0	8	3	3
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]	71	1142	69	186	714	40	155	829	72	160	504	196
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]	18	286	17	47	179	10	39	207	18	40	126	49
Total Analysis Volume [veh/h]	71	1142	69	186	714	40	155	829	72	160	504	196
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Cycle Length [s]	100
Lost time [s]	10.00

**Phasing & Timing**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.02	0.38	0.38	0.12	0.22	0.03	0.10	0.26	0.05	0.10	0.16	0.12
Intersection LOS	E											
Intersection V/C	0.954											



**GANDDINI GROUP, INC.**

550 Parkcenter Drive, Suite 202, Santa Ana, CA 92705  
714.795.3100 | [www.ganddini.com](http://www.ganddini.com)