

TRAFFIC IMPACT STUDY  
**6265 SAN FERNANDO ROAD OFFICE PROJECT**  
City of Glendale, California  
October 7, 2019

*Prepared for:*

**37 SFR Owner, LLC**  
5017 Ambrose Avenue  
Los Angeles, CA 90027

LLG Ref. 5-19-0469-1



*Prepared by:*



Jason A. Shender  
Transportation Planner II

*Under the Supervision of:*



David S. Shender, P.E.  
Principal

**Linscott, Law &  
Greenspan, Engineers**

20931 Burbank Boulevard  
Suite C  
Woodland Hills, CA 91367

818.835.8648 T  
818.835.8649 F

[www.llgengineers.com](http://www.llgengineers.com)

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#### APPENDIX

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- A. Manual Traffic Count Data
- B. ICU and Levels of Service Explanation  
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**TRAFFIC IMPACT STUDY**  
**6265 SAN FERNANDO ROAD OFFICE PROJECT**  
City of Glendale, California  
October 7, 2019

## 1.0 INTRODUCTION

This traffic analysis has been conducted to identify and evaluate the potential traffic impacts of the proposed office project (the “Project”) located at 6265-6325 San Fernando Road (the “Project Site”) in the City of Glendale. The Project applicant proposes a mixture of tenant improvements and new construction resulting in 89,980 square feet of office building floor area. The Project Site is bounded by San Fernando Road to the north, railroad tracks to the south, an automotive service center to the east, and commercial uses to the west. The Project Site location and general vicinity are shown in **Figure 1–1**.

The traffic analysis follows City of Glendale traffic study guidelines<sup>1</sup> and is consistent with traffic impact assessment guidelines set forth in the Los Angeles County Congestion Management Program<sup>2</sup>. This traffic analysis evaluates potential Project-related impacts at seven key intersections in the vicinity of the Project Site. The study intersections were determined in consultation with City of Glendale (the “City”) staff. The Intersection Capacity Utilization (ICU) method was used to determine Volume-to-Capacity (*v/c*) ratios and corresponding Levels of Service (LOS) at the study intersections. In addition, a review of potential impacts to local residential street segments was prepared one residential street segment in the vicinity of the Project Site: Rosedale Avenue between Glenoaks Avenue and San Fernando Road. A review also was conducted of Los Angeles County Metropolitan Transportation Authority (Metro) freeway and intersection monitoring stations to determine if a Congestion Management Program transportation impact assessment analysis is required for the proposed Project.

This study (i) presents existing traffic volumes, (ii) includes existing traffic volumes with the forecast net new traffic volumes from the proposed Project, (iii) recommends mitigation measures, where necessary, (iv) forecasts future cumulative baseline traffic volumes, (v) forecasts future traffic volumes with the proposed Project, (vi) determines future forecast with Project-related impacts, and (vii) recommends mitigation measures, where necessary.

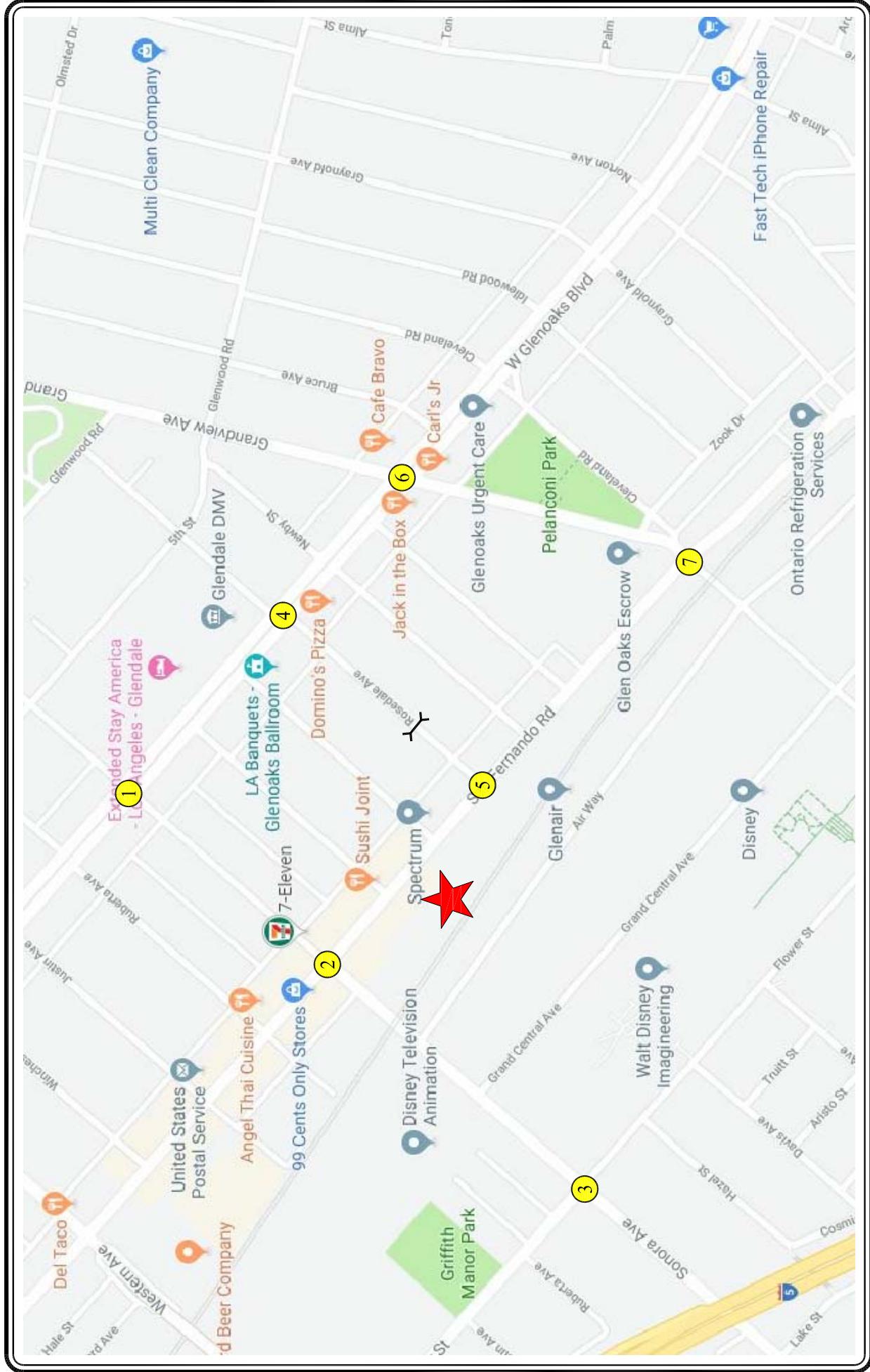
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<sup>1</sup> *City of Glendale Circulation Element of the General Plan*, City of Glendale Planning and Public Works Divisions, August 25, 1998 and *City of Glendale TIA and LOS Guidelines* (undated).

<sup>2</sup> *2010 Congestion Management Program for Los Angeles County*, Los Angeles County Metropolitan Transportation Authority, 2010.

# FIGURE 1-1 VICINITY MAP

6265 SAN FERNANDO ROAD OFFICE PROJECT



MAP SOURCE: GOOGLE MAPS  
 PROJECT SITE  
★ STUDY INTERSECTION  
● STUDY STREET SEGMENT

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## **1.1 Study Area**

Upon coordination with City staff, seven study intersections have been identified for evaluation during the weekday morning and afternoon peak hours. The study intersections were evaluated from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM to determine the respective peak commuter hours. The seven study intersections provide local access to the study area and define the extent of the boundaries for this traffic impact analysis. Further discussion of the existing street system and study area is provided in Section 4.0.

The general location of the Project in relation to the study locations and surrounding street system is presented in *Figure 1–1*. The traffic analysis study area is generally comprised of those locations which have the greatest potential to experience significant traffic impacts due to the proposed Project as defined by the Lead Agency. In the traffic engineering practice, the study area generally includes those intersections that are:

- a. Immediately adjacent or in close proximity to the Project Site;
- b. In the vicinity of the Project Site that are documented to have current or projected future adverse operational issues; and
- c. In the vicinity of the Project Site that are forecast to experience a relatively greater percentage of Project-related vehicular turning movements (e.g., at freeway ramp intersections).

The locations selected for analysis were based on the above criteria, the peak-hour vehicle trip generation associated with the proposed Project, the anticipated distribution of Project vehicular trips, and existing intersection/corridor operations.

## **2.0 PROJECT DESCRIPTION**

### **2.1 Site Location**

The proposed Project Site is located at 6265-6325 San Fernando Road in the City of Glendale. The Project Site is bounded by San Fernando Road to the north, railroad tracks to the south, an automotive service center to the east, and commercial uses to the west. The Project Site location and general vicinity are shown in *Figure 1–1*.

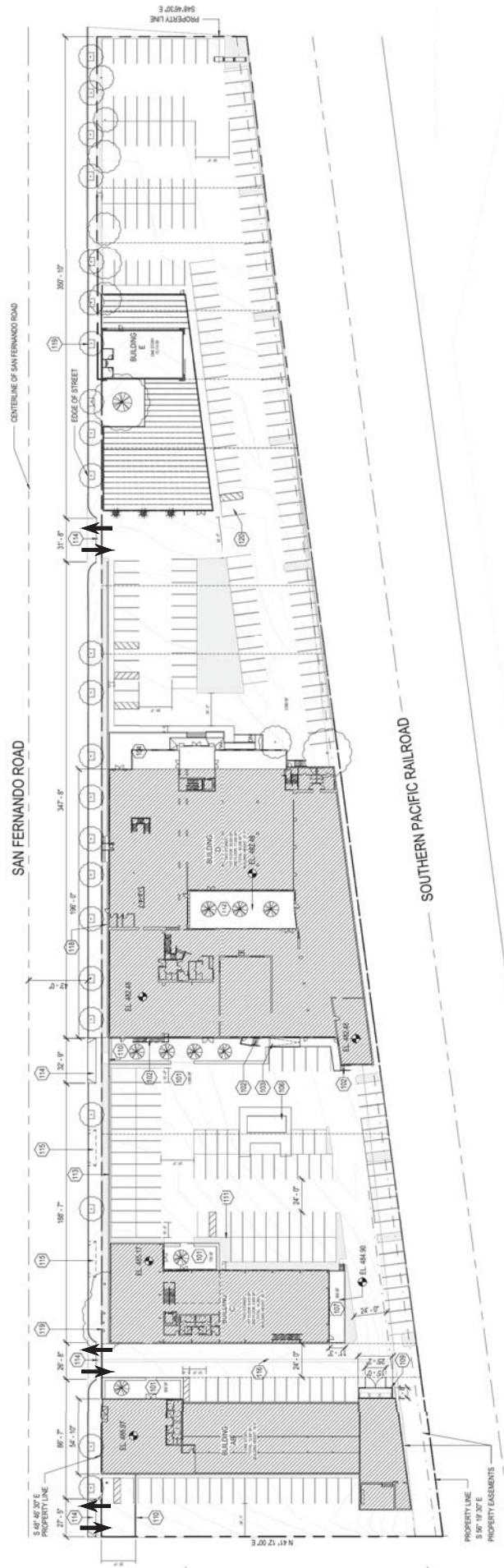
### **2.2 Existing Project Site**

The existing Project Site is currently occupied by a mixture of commercial buildings including an office building providing 50,200 square feet of floor area, as well as additional buildings providing a total of 12,066 square feet of building floor area previously containing uses such as a bread shop, storage facility, factory, and conference center. The office building was recently used and occupied and as discussed in a following section, this traffic study only takes existing use “credit” for the 50,200 square feet of office floor area on the Project Site. Vehicular access to the existing Project Site is currently provided via San Fernando Road.

### **2.3 Project Description**

The Project applicant proposes a mixture of tenant improvements and new construction resulting in 89,980 square feet of office floor area. Construction and occupancy of the proposed Project is planned to be completed by the year 2020. The site plan for the proposed Project is illustrated in *Figure 2–1*.

Vehicular access to the Project Site will be provided via San Fernando Road, along the Project Site’s northerly frontage. Further discussion of the Project Site access and circulation schemes is provided in Section 3.0.



**FIGURE 2-1**  
**PROJECT SITE PLAN**

MAP SOURCE: RIOS CLEMENTI HALE STUDIOS



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## **3.0 SITE ACCESS AND CIRCULATION**

The proposed site access scheme for the Project is displayed in *Figure 2–1*. A description of the proposed site access and circulation scheme is provided in the following subsections.

### **3.1 Existing Vehicular Site Access**

Vehicular access to the existing Project Site is currently provided via four driveways along the south side of San Fernando Road. This includes the primary office driveway at Rosedale Avenue, which is under traffic signal control, as well as three non-signalized driveways located along San Fernando Road between Rosedale Avenue and Sonora Avenue

### **3.2 Vehicular Project Site Access**

Vehicular access to the Project Site will be provided via three driveways along the south side of San Fernando Road. The driveways will provide access to the Project's surface parking lot. The Project driveways include retention of the existing signalized driveway at Rosedale Avenue, as well as retention of the existing two driveways located at the westerly portion of the Project site (i.e., the existing site driveway near Davis Avenue would be removed as part of the Project). All site driveways are proposed to accommodate full vehicular access (i.e., left-turn and right-turn ingress and egress movements).

## **4.0 EXISTING STREET SYSTEM**

### **4.1 Regional Highway System**

Regional access to the Project Site is provided by the I-5 (Golden State) Freeway and SR-134 (Ventura) Freeway. Brief descriptions of the I-5 and SR-134 Freeways are provided in the following paragraphs.

*I-5 (Golden State) Freeway* is a north-south freeway that spans the entirety of California. In the Project vicinity, four mixed-flow freeway lanes are provided in each direction on the I-5 Freeway. Northbound and southbound ramps are provided on the I-5 Freeway at Western Avenue in the Project vicinity, which are located approximately 0.7 miles west of the Project Site.

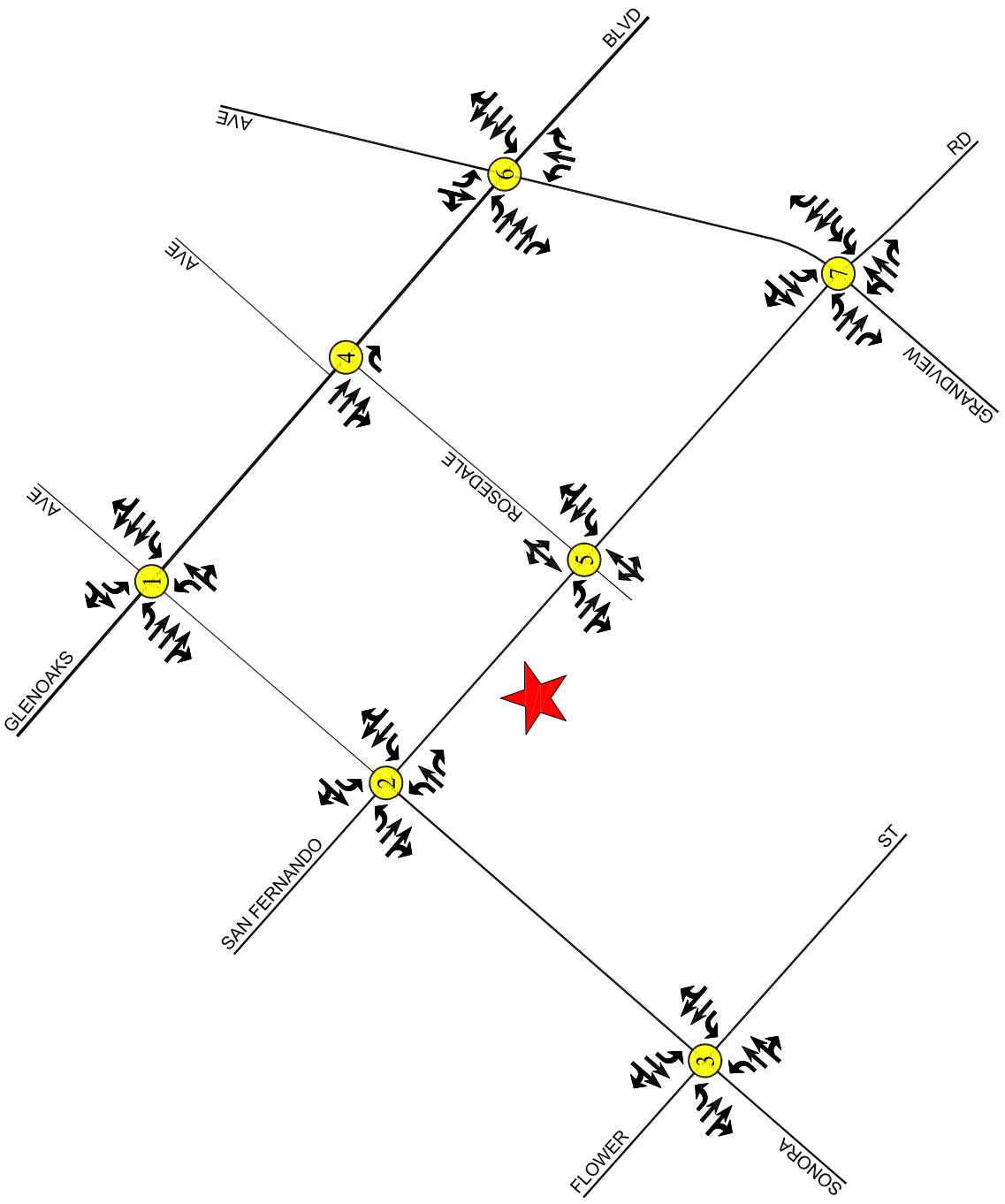
*SR-134 (Ventura) Freeway* is an east-west freeway that extends from Pasadena to the Toluca Lake area of the City of Los Angeles. In the Project vicinity, five freeway lanes (four mixed-flow freeway lanes and one carpool express lanes) are provided in each direction on the SR-134 Freeway. Eastbound and westbound ramps are provided on the SR-134 Freeway at San Fernando Road in the Project vicinity, which are located approximately 1.2 miles south of the Project Site.

### **4.2 Local Roadway System**

The following intersections were selected in consultation with City staff for analysis of potential traffic impacts due to the proposed Project:

1. Sonora Avenue / Glenoaks Boulevard
2. Sonora Avenue / San Fernando Road
3. Sonora Avenue / Flower Street
4. Rosedale Avenue / Glenoaks Boulevard
5. Rosedale Avenue / San Fernando Road
6. Grandview Avenue / Glenoaks Boulevard
7. Grandview Avenue / San Fernando Road

All seven intersections selected for analysis are presently controlled by traffic signals. The existing lane configurations at the study intersections are displayed in **Figure 4-1**.



**FIGURE 4-1  
EXISTING LANE CONFIGURATIONS**

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PROJECT SITE  
X STUDY INTERSECTION



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### **4.3 Roadway Descriptions**

A brief description of the roadways in the Project vicinity is provided in the following paragraphs.

*Sonora Avenue* is a north-south oriented roadway located west of the Project Site. North of Glenoaks Boulevard, Sonora Avenue is designated as a Community Collector by the City of Glendale. South of Glenoaks Boulevard, Sonora Avenue is designated as a Neighborhood Collector in the northbound direction and as a Minor Arterial in the southbound direction by the City of Glendale. North of San Fernando Road, one through travel lane is provided in each direction on Sonora Avenue within the Project study area. South of San Fernando Road, two through travel lanes are provided in each direction on Sonora Avenue within the Project study area. Separate exclusive left-turn lanes are provided in each direction on Sonora Avenue at major intersections within the Project study area. North of San Fernando Road, Sonora Avenue is posted for a speed limit of 25 miles per hour within the Project study area. South of San Fernando Road, Sonora Avenue is posted for a speed limit of 35 miles per hour within the Project study area.

*Rosedale Avenue* is a north-south oriented roadway that provides direct access to the Project Site at the San Fernando Road intersection. Within the Project study area, Rosedale Avenue is designated as Local Street by the City of Glendale. One through travel lane is provided in each direction on Rosedale Avenue within the Project study area. There is no speed limit posted on Rosedale Avenue within the Project study area, thus a *prima facie* speed limit of 25 miles per hour is assumed, consistent with the State of California Vehicle Code.

*Grandview Avenue* is a north-south oriented roadway located east of the Project Site. North of Glenoaks Boulevard, Grandview Avenue is designated as a Community Collector by the City of Glendale. South of Glenoaks Boulevard, Grandview Avenue is designated as a Minor Arterial by the City of Glendale. North of Glenoaks Boulevard, one through travel lane is provided in each direction on Grandview Avenue within the Project study area. South of Glenoaks Boulevard, two through travel lanes are provided in each direction on Grandview Avenue within the Project study area. Separate exclusive left-turn lanes are provided in each direction on Grandview Avenue at the Glenoaks Boulevard intersection, and in the southbound direction at the San Fernando Road intersection within the Project study area. Grandview Avenue is posted for a speed limit of 25 miles per hour within the Project study area.

*Glenoaks Boulevard* is an east-west oriented roadway located north of the Project Site. Within the Project study area, Glenoaks Boulevard is designated as Major Arterial by the City of Glendale. Three through travel lanes are provided on Glenoaks Boulevard within the Project study area. Separate exclusive left-turn lanes are provided in each direction on Glenoaks Boulevard at major intersections within the Project study area. Glenoaks Boulevard is posted for a speed limit of 40 miles per hour within the Project study area.

*San Fernando Road* is an east-west oriented roadway that borders the Project Site to the north. Within the Project study area, San Fernando Road is designated as Major Arterial by the City of Glendale. Two through travel lanes are provided on San Fernando Road within the Project study area. Separate exclusive left-turn lanes are provided in each direction on San Fernando Road at major intersections within the Project study area. San Fernando Road is posted for a speed limit of 35 miles per hour within the Project study area.

*Flower Street* is an east-west oriented roadway located south of the Project Site. Within the Project study area, Flower Street is designated as Minor Arterial by the City of Glendale. Two through travel lanes are provided on San Fernando Road within the Project study area. Separate exclusive left-turn lanes are provided in each direction on Flower Street at major intersections within the Project study area. Flower Street is posted for a speed limit of 30 miles per hour within the Project study area.

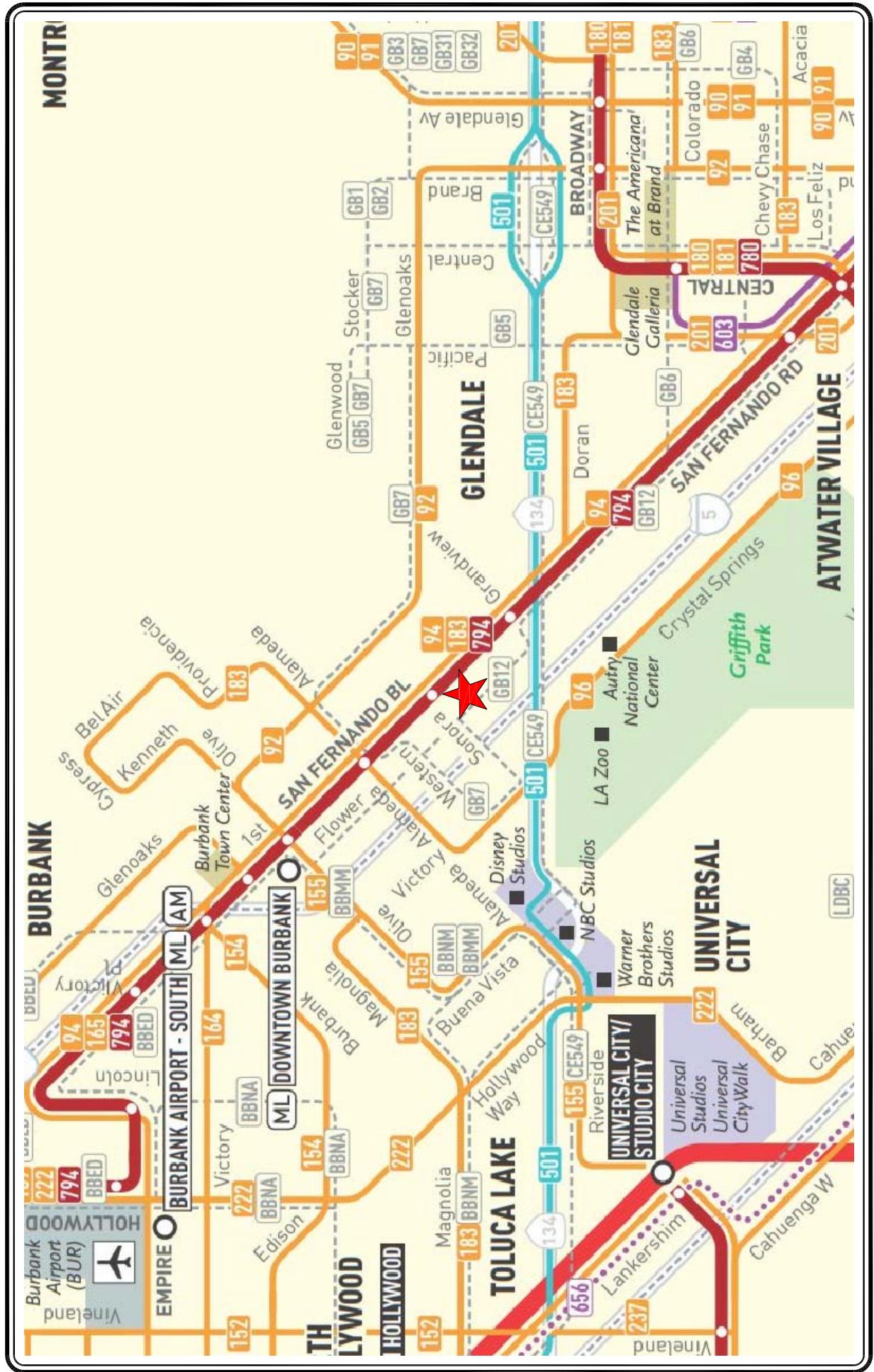
#### **4.4 Public Transit Services**

Public transit service within the Project study area is currently provided by the Los Angeles County Metropolitan Transit Authority (Metro) and the City of Glendale. A summary of the existing transit service, including the transit route, destinations and peak hour headways is presented in **Table 4-1**. The existing public transit routes in the Project Site vicinity are illustrated in **Figure 4-2**.

**Table 4-1**  
**EXISTING PUBLIC TRANSIT ROUTES [1]**

ROUTE	DESTINATIONS	ROADWAY(S) NEAR SITE	NO. OF BUSES DURING PEAK HOUR		
			DIR	AM	PM
Metro 92	Sylmar to Downtown Los Angeles (via Glendale Boulevard, Brand Boulevard, and Glenoaks Boulevard)	Glenoaks Boulevard	NB SB	3 3	3 2
Metro 94	Sylmar to Downtown Los Angeles (via San Fernando Road)	San Fernando Road	NB SB	4 4	3 3
Metro 183	Glendale to Sherman Oaks (via Magnolia Boulevard)	San Fernando Road	EB WB	1 2	1 2
Metro Rapid 794	Sylmar to Downtown Los Angeles (via San Fernando Road)	San Fernando Road	NB SB	3 3	3 2
Glendale Beeline Route 7	Glendale Community College to Riverside Rancho (via Glendale Avenue, Stocker Street, Glenoaks Boulevard, and Western Avenue)	Glenoaks Boulevard	EB WB	3 2	2 2
Glendale Beeline Route 12	Burbank Regional Intermodal Transportation Center to Glendale Transportation Center (via San Fernando Road)	San Fernando Road, Flower Street	NB SB	3 4	2 2
		Total	35	27	

[1] Sources: Los Angeles County Metropolitan Transportation Authority (Metro) website, 2019.  
City of Glendale (Beeline) website, 2019.



## FIGURE 4-2 EXISTING PUBLIC TRANSIT ROUTES

MAP SOURCE: METROPOLITAN TRANSPORTATION AUTHORITY

PROJECT SITE



NOT TO SCALE

## 5.0 TRAFFIC COUNTS

Manual traffic counts of vehicular turning movements were conducted at each of the study intersections during the weekday morning and afternoon commuter periods to determine the peak hour traffic volumes. The counts were conducted at six of the seven study intersections on Thursday, September 12, 2019. Counts were conducted at the Sonora Avenue / Flower Street intersection on Thursday, September 19, 2019. The manual traffic counts at the study intersections were conducted from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM to determine the respective peak commuter hours.

The weekday AM and PM peak period manual counts of vehicle movements at the study intersections are summarized in **Table 5–1**. It is noted that estimated volumes that would have been generated by the former office use on the Project Site were added to the existing traffic count data to create the existing baseline conditions for this analysis. Further discussion about the trips forecasted to be generated from the existing uses is provided in Section 7.0.

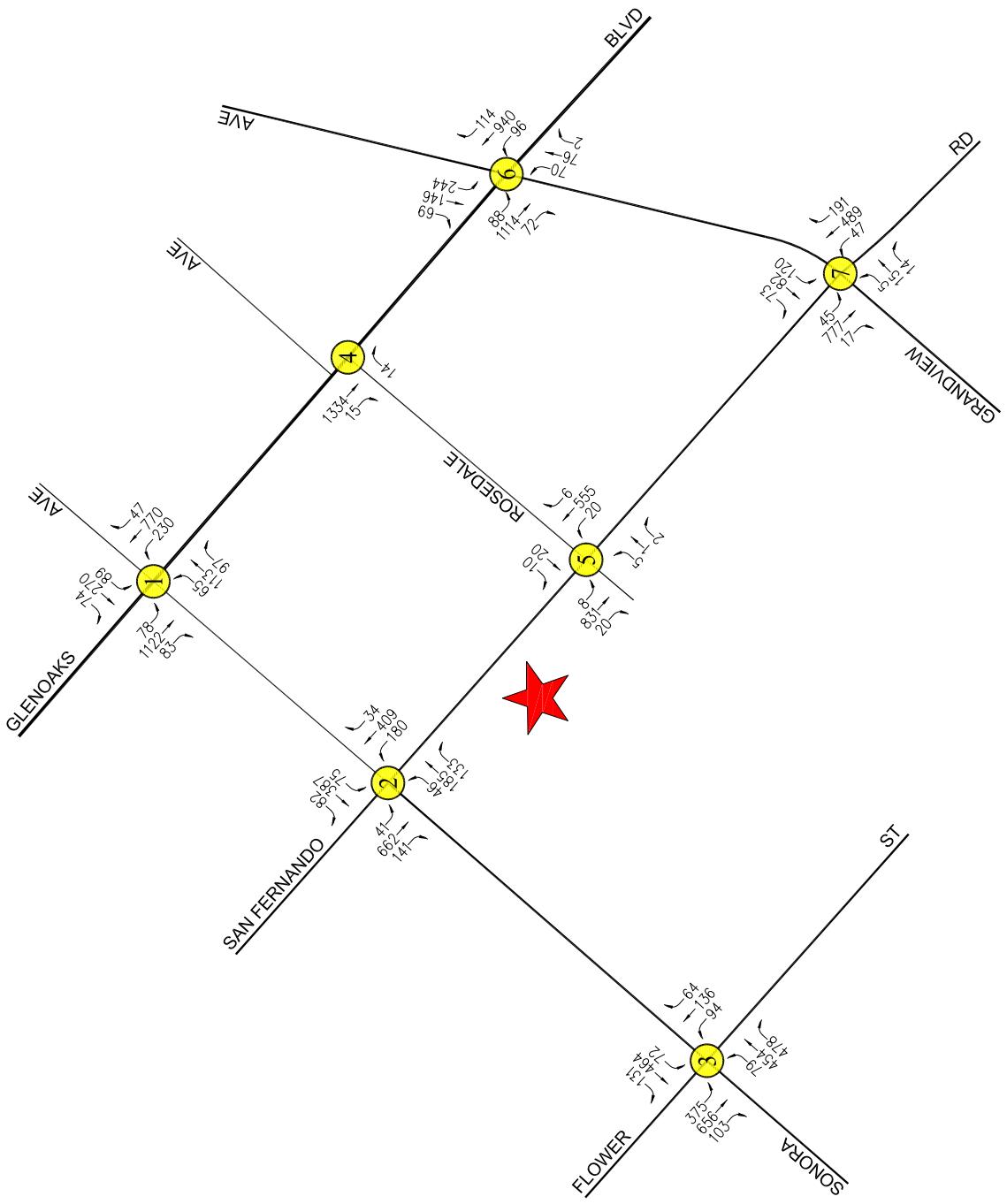
The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are shown in **Figures 5–1** and **5–2**, respectively. Summary data worksheets of the manual traffic counts at the study intersections and driveway are contained in **Appendix A**.

**Table 5-1**  
**EXISTING TRAFFIC VOLUMES [1]**

NO.	INTERSECTION	DATE	DIR	AM PEAK HOUR		PM PEAK HOUR	
				BEGAN	VOLUME	BEGAN	VOLUME
1	Sonora Avenue / Glenoaks Boulevard	09/12/2019	NB SB EB WB	7:45	275 433 1,283 1,047	5:00	574 282 1,436 1,399
2	Sonora Avenue / San Fernando Road	09/12/2019	NB SB EB WB	7:45	364 544 844 623	5:00	955 387 860 1,067
3	Sonora Avenue / Flower Street	09/19/2019	NB SB EB WB	8:00	1,011 667 1,134 294	5:00	977 767 401 1,200
4	Rosedale Avenue / Glenoaks Boulevard	09/12/2019	NB SB EB WB	7:45	14 0 1,349 0	5:00	49 0 1,664 0
5	Rosedale Avenue / San Fernando Road	09/12/2019	NB SB EB WB	7:45	4 20 845 581	5:00	26 31 1,091 1,028
6	Grandview Avenue / Glenoaks Boulevard	09/12/2019	NB SB EB WB	7:45	148 459 1,274 1,150	5:00	323 273 1,688 1,432
7	Grandview Avenue / San Fernando Road	09/12/2019	NB SB EB WB	8:00	34 275 839 727	5:00	176 278 1,049 1,121

[1] National Data & Surveying Services

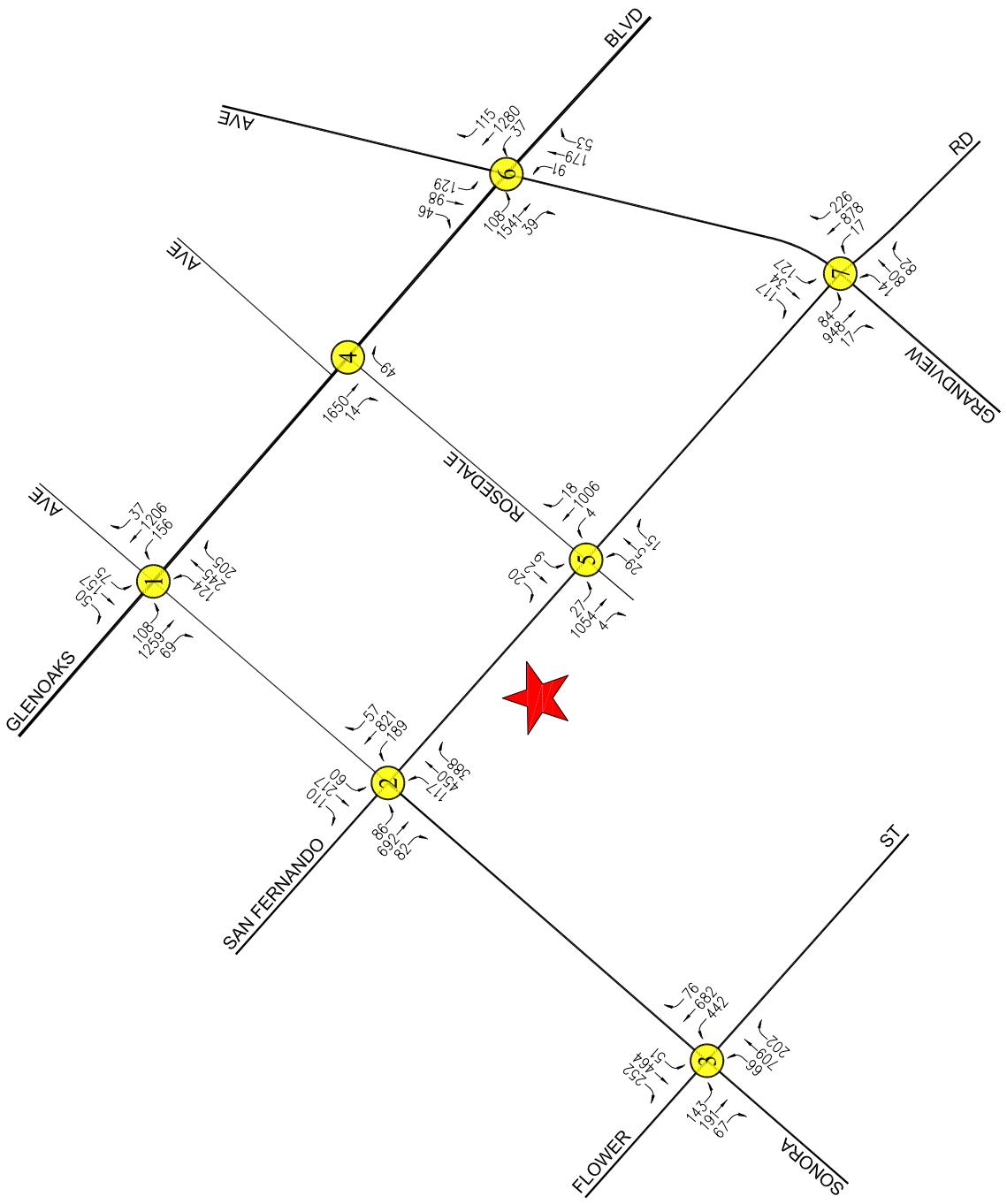
**FIGURE 5-1**  
**EXISTING TRAFFIC VOLUMES**  
**WEEKDAY AM PEAK HOUR**  
**6265 SAN FERNANDO ROAD OFFICE PROJECT**



**NOT TO SCALE**  
★ PROJECT SITE  
⊗ STUDY INTERSECTION  
 NOTE: INCLUDES ESTIMATED TRAFFIC GENERATED  
 BY EXISTING OFFICE USE ON-SITE  

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**LINSCOTT, LAW & GREENSPAN, engineers**

**FIGURE 5-2**  
**EXISTING TRAFFIC VOLUMES**  
**WEEKDAY PM PEAK HOUR**  
**6265 SAN FERNANDO ROAD OFFICE PROJECT**



**NOT TO SCALE**  
★ PROJECT SITE  
⊗ STUDY INTERSECTION  
 NOTE: INCLUDES ESTIMATED TRAFFIC GENERATED BY EXISTING OFFICE USE ON-SITE



**NOT TO SCALE**

## 6.0 CUMULATIVE DEVELOPMENT PROJECTS

The forecast of future pre-Project conditions was prepared in accordance to procedures outlined in Section 15130 of the CEQA Guidelines. Specifically, the CEQA Guidelines provide two options for developing the future traffic volume forecast:

“(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the [lead] agency, or

(B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.”

Accordingly, the traffic analysis provides a highly conservative estimate of future pre-Project traffic volumes as it incorporates both the “A” and “B” options outlined in CEQA Guidelines for purposes of developing the forecast.

### 6.1 Related Projects

A forecast of on-street traffic conditions prior to occupancy of the proposed Project was prepared by incorporating the potential trips associated with other known development projects (related projects) in the area. With this information, the potential impact of the proposed Project can be evaluated within the context of the cumulative impact of all ongoing development. The related projects research was based on information on file at the City of Glendale Planning Division. The list of related projects in the Project Site area is presented in **Table 6-1**. The location of the related projects is shown in **Figure 6-1**.

Traffic volumes expected to be generated by the related projects were calculated using rates provided in the Institute of Transportation Engineers’ (ITE) *Trip Generation Manual*<sup>3</sup>. The related projects’ respective traffic generation for the weekday AM and PM peak hours, as well as on a daily basis for a typical weekday, is summarized in *Table 6-1*. The distribution of the related projects traffic volumes to the study intersections during the weekday AM and PM peak hours are displayed in **Figures 6-2** and **6-3**, respectively.

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<sup>3</sup> Institute of Transportation Engineers *Trip Generation Manual*, 10<sup>th</sup> Edition, Washington, D.C., 2017.

**Table 6:1**  
**RELATED PROJECTS LIST AND TRIP GENERATION [1]**

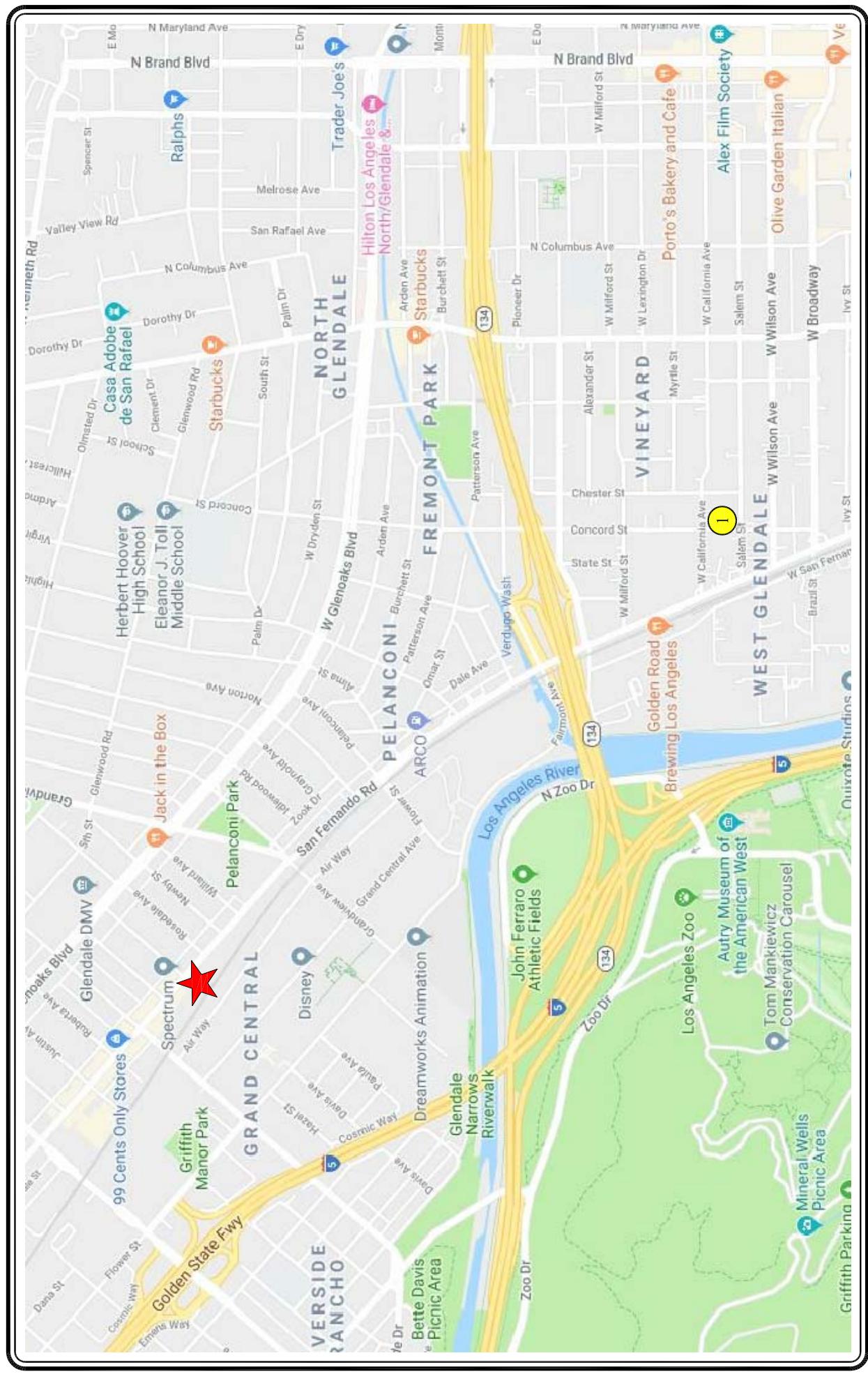
MAP NO.	PROJECT NAME/PROJECT NUMBER	PROJECT STATUS	ADDRESS/ LOCATION	LAND USE DATA		PROJECT DATA SOURCE	DAILY TRIP ENDS [2]	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
				LAND USE	SIZE			IN	OUT	TOTAL	IN	OUT	TOTAL
1	PDBP1805977	Proposed	238 Concord Street Apartments	13	DU	[2]	95	1	5	6	4	3	7
<b>TOTAL</b>							95	1	5	6	4	3	7

[1] Source: City of Glendale Planning Division. Trip generation for the related projects are based on the ITE "Trip Generation Manual", 10th Edition, 2017

[2] Trips are one-way movements, entering or leaving.

[3] ITE Land Use Code 220 (Multifamily Housing [Low-Rise]) trip generation average rates.

## FIGURE 6-1 LOCATION OF RELATED PROJECTS



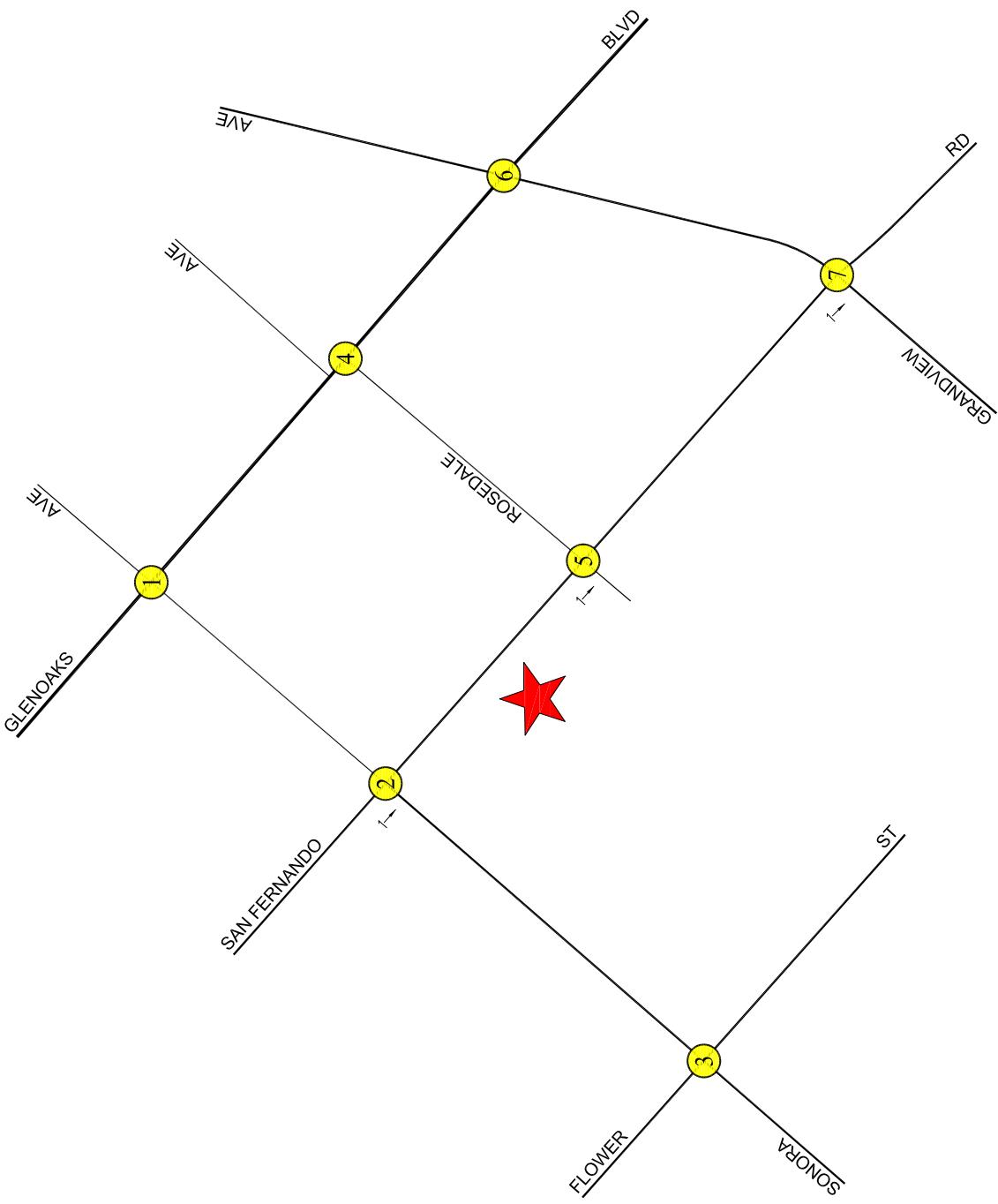
MAP SOURCE: GOOGLE MAPS

★ PROJECT SITE

● RELATED PROJECT



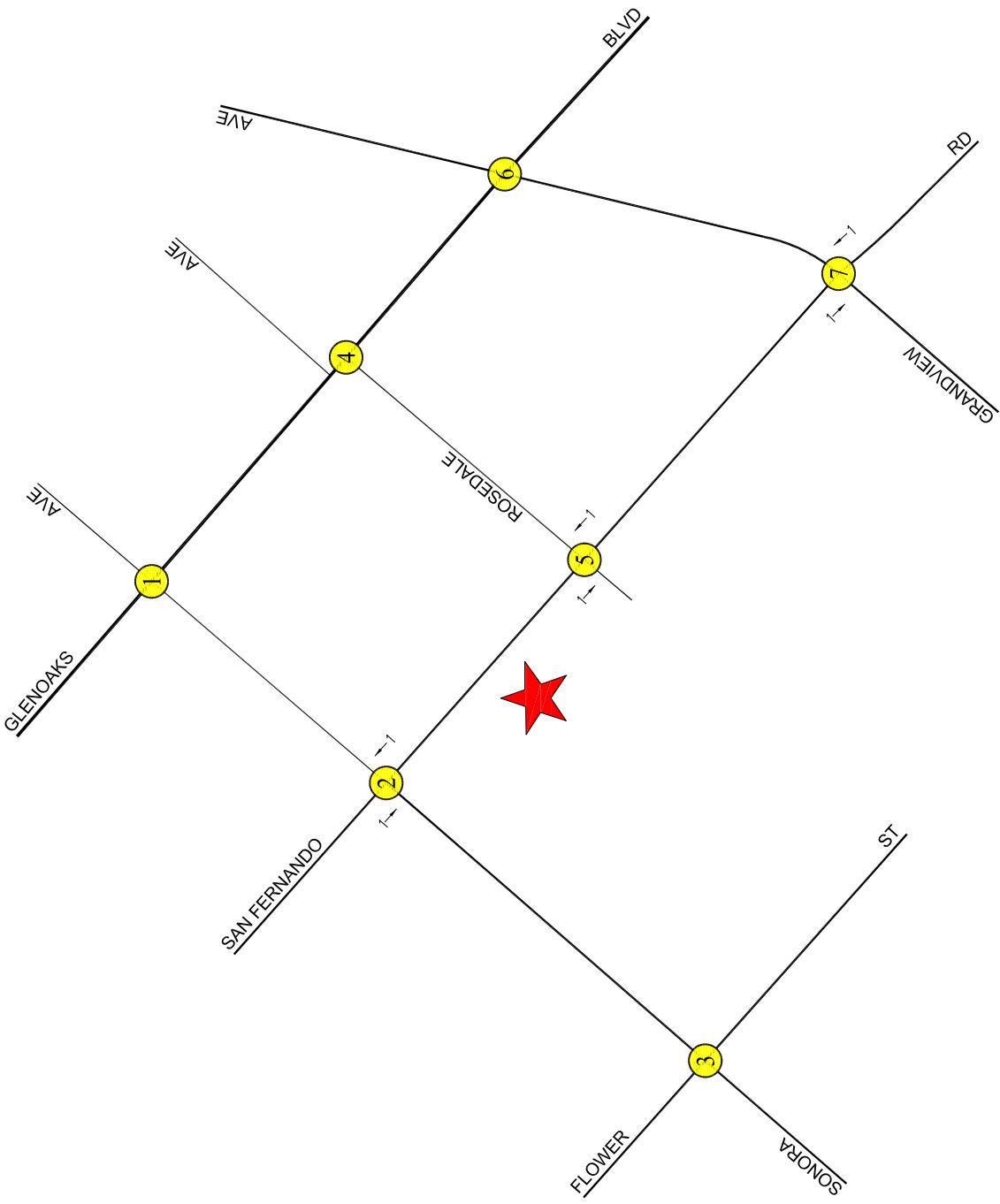
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FIGURE 6-2  
RELATED PROJECTS TRAFFIC VOLUMES  
WEEKDAY AM PEAK HOUR  
6265 SAN FERNANDO ROAD OFFICE PROJECT

PROJECT SITE  
STUDY INTERSECTION

NOT TO SCALE



**FIGURE 6-3  
RELATED PROJECTS TRAFFIC VOLUMES**

WEEKDAY PM PEAK HOUR  
6265 SAN FERNANDO ROAD OFFICE PROJECT

PROJECT SITE  
★ STUDY INTERSECTION

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## **6.2 Ambient Traffic Growth Factor**

In order to account for unknown related projects not included in this analysis, the existing traffic volumes were increased at an annual rate of 1.0 percent (1.0%) per year to and including the year 2020 (i.e., the anticipated year of Project build-out). The ambient growth factor was based on general traffic growth factors provided in the *2010 Congestion Management Program for Los Angeles County* (“CMP manual”) and determined in consultation with City staff. It is noted that based on review of the general traffic growth factors provided in the CMP manual for the Project study area (i.e., RSA 24, Glendale) it is anticipated that the existing traffic volumes are expected to increase at an annual rate of approximately 0.26% per year between the years 2015 and 2020. Thus, application of an annual growth factor of 1.0% annual growth provides a conservative, worst case forecast of future traffic volumes in the area as it substantially exceeds the annual traffic growth rate published in the CMP manual. Further, it is noted that the CMP manual’s traffic growth rate is intended to anticipate future traffic generated by development projects in the Project vicinity. Thus, the inclusion in this traffic analysis of both a forecast of traffic generated by known related projects plus the use of an ambient growth traffic factor based on CMP traffic model data results in a conservative estimate of future traffic volumes at the study intersections.

## **7.0 TRAFFIC FORECASTING METHODOLOGY**

In order to estimate the traffic impact characteristics of the proposed Project, a multi-step process has been utilized. The first step is trip generation, which estimates the total arriving and departing traffic volumes on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations or rates to the Project development tabulation.

The second step of the forecasting process is trip distribution, which identifies the origins and destinations of inbound and outbound Project traffic volumes. These origins and destinations are typically based on demographics and existing/anticipated travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of Project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area.

With the forecasting process complete and Project traffic assignments developed, the impact of the proposed Project is isolated by comparing operational (i.e., Levels of Service) conditions at the selected key intersections using existing and expected future traffic volumes without and with forecast Project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated and the significance of the Project's impacts identified.

### **7.1 Project Traffic Generation**

Traffic volumes expected to be generated by the proposed Project during the weekday AM and PM peak hours, as well as on a daily basis, were estimated using rates published in the ITE *Trip Generation Manual*. ITE Land Use Code 710 (General Office Building) trip generation average rates were used to forecast the traffic volumes expected to be generated by the Project.

In addition to the trip generation forecasts for the proposed Project (which are essentially an estimate of the number of vehicles that could be expected to enter and exit the Project Site access points), an adjustment was made to the trip generation forecast based on the Project Site's existing land use. The existing land use is 50,200 square feet of office floor area. ITE Land Use Code 710 trip generation average rates also were used to estimate the trip reduction related to the existing use from the Project Site.

The trip generation forecast for the Project was submitted for review and approval by City staff. As shown in **Table 7-1**, the Project is expected to generate 46 net new vehicle trips (39 inbound trips and 7 outbound trips) during the AM peak hour. During the PM peak hour, the proposed Project is expected to generate 45 net new vehicle trips (7 inbound trips and 38 outbound trips). Over a 24-hour period, the proposed Project is forecast to generate 387 daily trips ends (approximately 194 inbound trips and 193 outbound trips) during a typical weekday.

**Table 7-1**  
**PROJECT TRIP GENERATION [1]**

27-Aug-19

LAND USE	SIZE	DAILY TRIP ENDS [2]	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
			IN	OUT	TOTAL	IN	OUT	TOTAL
<i>Proposed Project</i>								
Office [3]	89,980 GSF	876	89	15	104	16	87	103
<b>Subtotal</b>		876	89	15	104	16	87	103
<b>Subtotal Project Driveway Trips</b>		<b>876</b>	<b>89</b>	<b>15</b>	<b>104</b>	<b>16</b>	<b>87</b>	<b>103</b>
<i>Existing Site</i>								
Office [3]	(50,200) GSF	(489)	(50)	(8)	(58)	(9)	(49)	(58)
<b>Subtotal</b>		(489)	(50)	(8)	(58)	(9)	(49)	(58)
<b>Subtotal Existing Driveway Trips</b>		<b>(489)</b>	<b>(50)</b>	<b>(8)</b>	<b>(58)</b>	<b>(9)</b>	<b>(49)</b>	<b>(58)</b>
<b>NET INCREASE DRIVEWAY TRIPS</b>		<b>387</b>	<b>39</b>	<b>7</b>	<b>46</b>	<b>7</b>	<b>38</b>	<b>45</b>

[1] Source: ITE "Trip Generation Manual", 10th Edition, 2017.

[2] Trips are one-way traffic movements, entering or leaving.

[3] ITE Land Use Code 710 (General Office Building) trip generation average rates.

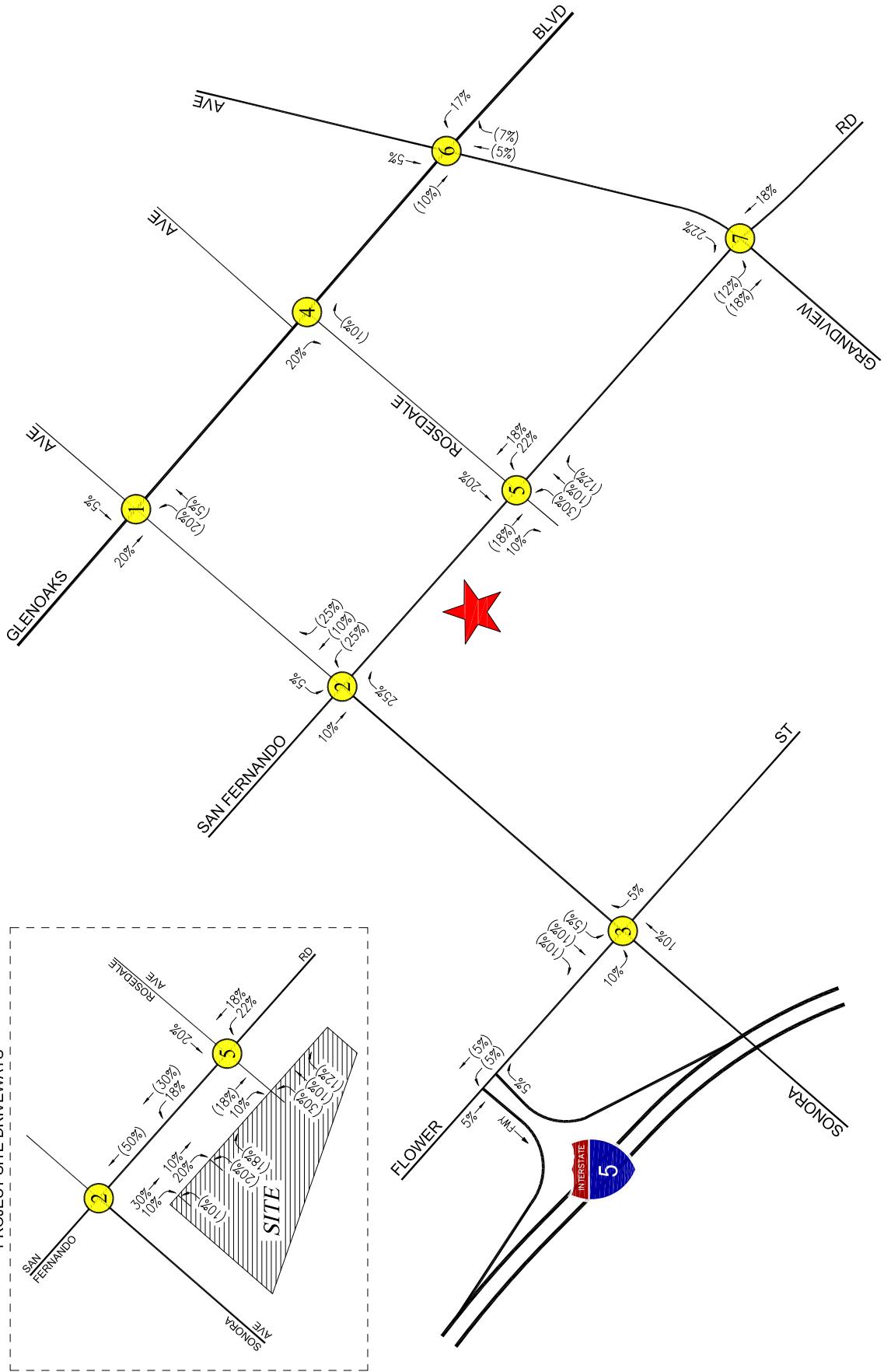
- Daily Trip Rate: 9.74 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 1.16 trips/1,000 SF of floor area; 86% inbound/14% outbound
- PM Peak Hour Trip Rate: 1.15 trips/1,000 SF of floor area; 16% inbound/84% outbound

## 7.2 Project Traffic Distribution and Assignment

Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

- The site's proximity to major traffic corridors (i.e., San Fernando Road, Glenoaks Boulevard, I-5 Freeway, SR-134 Freeway, etc.);
- Expected localized traffic flow patterns based on adjacent roadway channelization and presence of traffic signals;
- Existing intersection traffic volumes;
- Ingress/egress availability at the Project Site assuming the site access and circulation scheme described in Section 3.0;
- The location of existing and proposed parking areas;
- Nearby population and employment centers as well as adjacent residential neighborhoods; and
- Input from City staff.

The general, directional traffic distribution patterns for the proposed Project are presented in **Figure 7-1**. The forecast net new weekday AM and PM peak hour Project traffic volumes at the study intersections associated with the proposed Project are presented in **Figures 7-2** and **7-3**, respectively. The traffic volume assignments presented in **Figures 7-2** and **7-3** reflect the traffic distribution characteristics shown in **Figure 7-1** and the Project traffic generation forecast presented in **Table 7-1**.



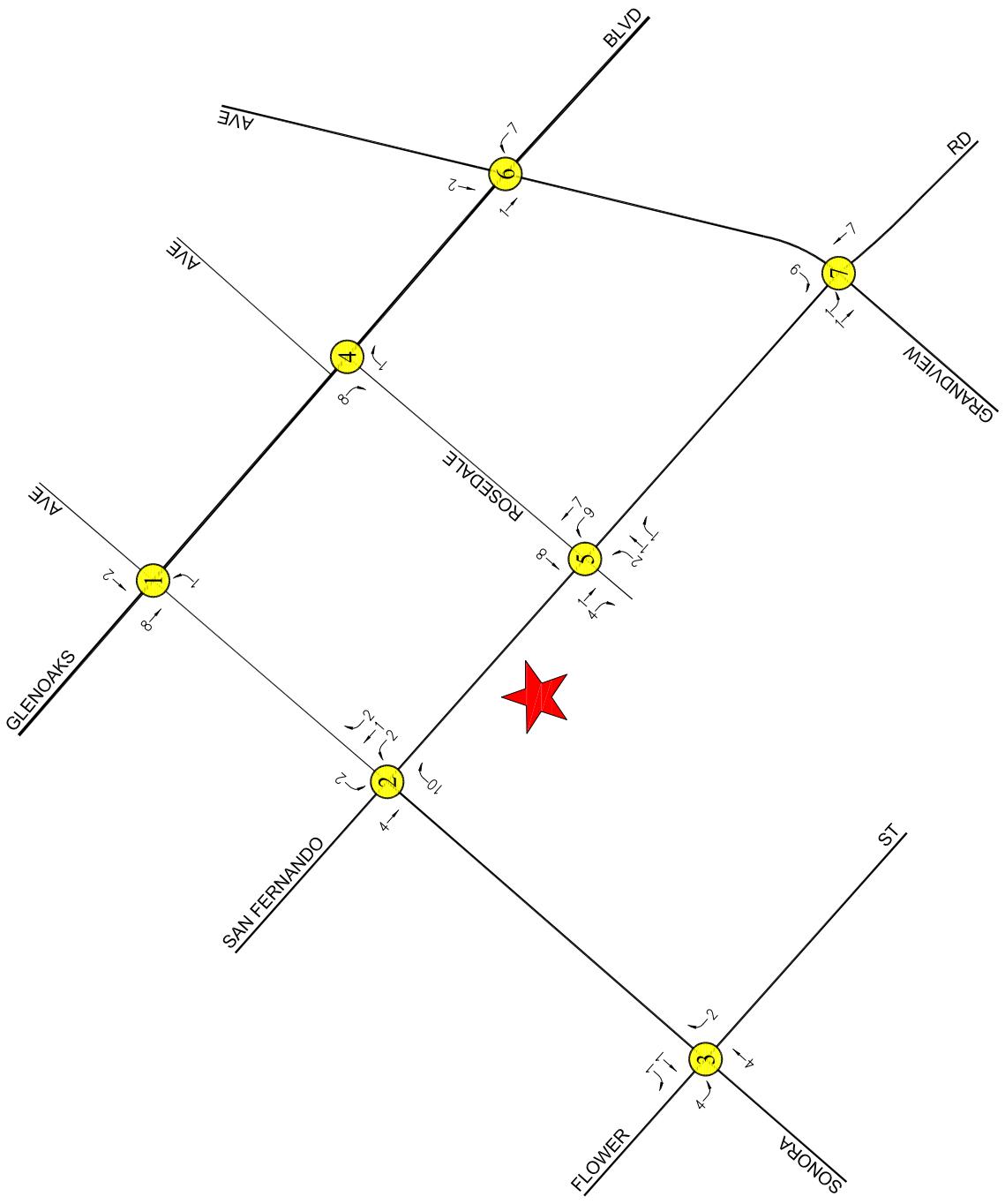
**FIGURE 7-1  
PROJECT TRIP DISTRIBUTION**

6265 SAN FERNANDO ROAD OFFICE PROJECT

★ PROJECT SITE  
● STUDY INTERSECTION  
## = INBOUND PERCENTAGES  
### = OUTBOUND PERCENTAGES

**NOT TO SCALE**  
 N

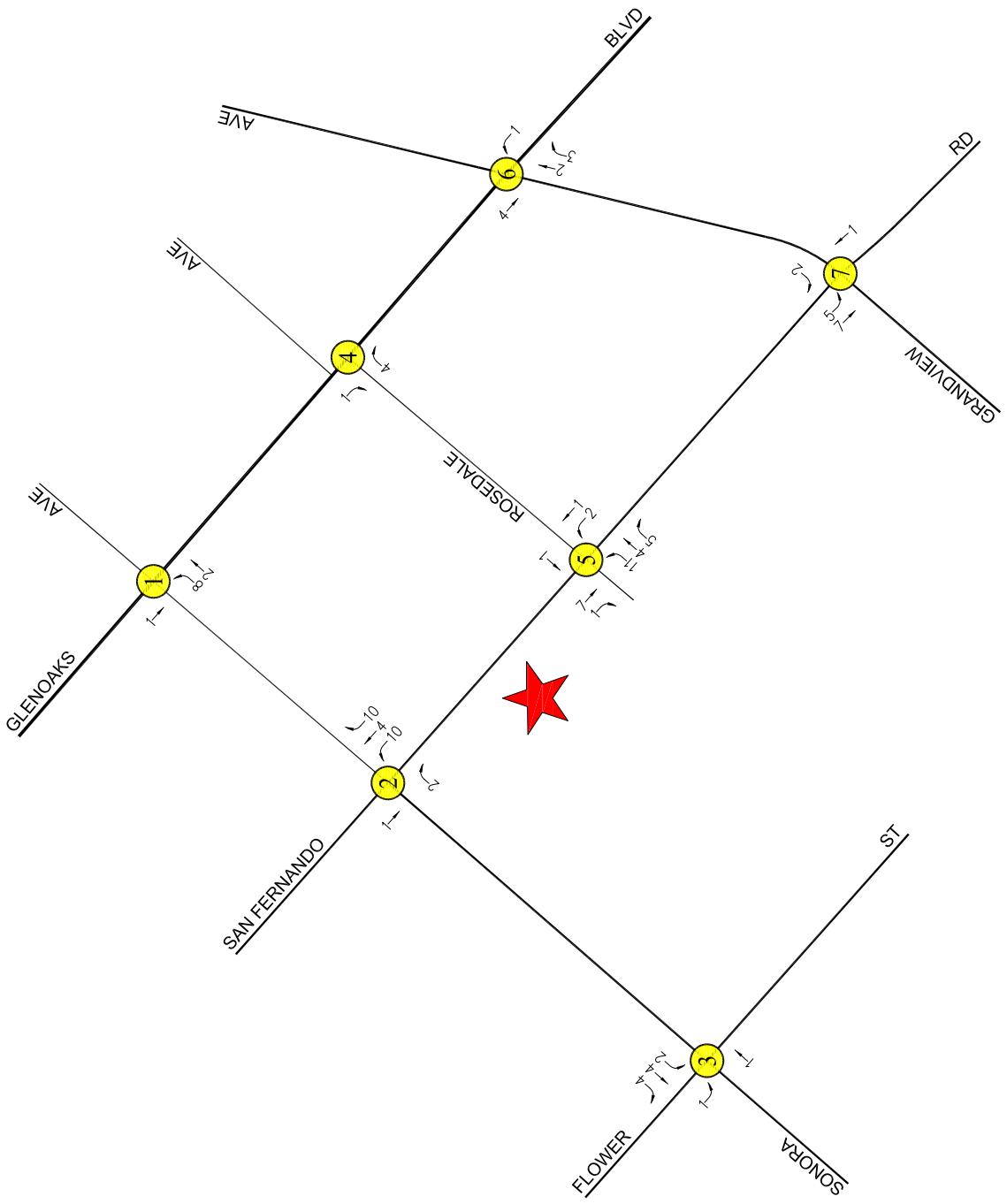
**FIGURE 7-2**  
**NET NEW PROJECT TRAFFIC VOLUMES**  
**WEEKDAY AM PEAK HOUR**  
**6265 SAN FERNANDO ROAD OFFICE PROJECT**



PROJECT SITE  
★ STUDY INTERSECTION  
⊗

**NOT TO SCALE**  


**FIGURE 7-3**  
**NET NEW PROJECT TRAFFIC VOLUMES**  
**WEEKDAY PM PEAK HOUR**  
**6265 SAN FERNANDO ROAD OFFICE PROJECT**



PROJECT SITE  
★  
 STUDY INTERSECTION  
⊗

**NOT TO SCALE**  


## **8.0 TRAFFIC IMPACT ANALYSIS METHODOLOGY**

Operations at the seven study intersections were evaluated using the ICU method of analysis based on the direction from the respective jurisdictions. Specifically, the ICU method was used to determine *v/c* ratios. The ICU calculations uses a lane capacity of 1,600 vehicles per hour (vph) for left-turn, through, and right-turn lanes, and dual left-turn capacity of 2,880 vph. The overall intersection *v/c* ratio is subsequently assigned a LOS value to describe intersection operations. LOS varies from LOS A (free flow) to LOS F (jammed condition). A description of the CMA method and corresponding LOS is provided in *Appendix B*.

### **8.1 Impact Criteria and Thresholds**

The relative impact of the added Project traffic volumes to be generated by the proposed Project during the AM and PM peak hours was evaluated based on analysis of future operating conditions at the study intersections, without and with the proposed Project. The previously discussed capacity analysis procedures were utilized to evaluate the future *v/c* relationships and service level characteristics at each study intersection.

The significance of the potential impacts of Project generated traffic was identified using the traffic impact criteria set forth in City of Glendale's TIA and LOS Guidelines. According to the respective published guidelines, an intersection traffic impact is considered significant if the Project-related increase in the *v/c* ratio is equal to or exceeds the thresholds presented in **Table 8-1**.

<b>Table 8-1</b> <b>CITY OF GLENDALE</b> <b>SIGNALIZED INTERSECTION IMPACT THRESHOLD CRITERIA</b>		
<b>Final <i>v/c</i></b>	<b>Level of Service</b>	<b>Project Related Increase in <i>v/c</i></b>
> 0.800	D, E or F	equal to or greater than 0.020

As required by the City of Glendale, feasible mitigation measures are required to be identified if traffic generated by the proposed development causes a significant traffic impact at an intersection, defined by an increase of the analyzed intersection *v/c* ratio by an amount equal to or greater than the values shown above.

## **8.2 Traffic Impact Analysis Scenarios**

Pursuant to the City's traffic study guidelines, LOS calculations have been prepared for the following scenarios for the study intersections:

- (a) Existing (2019) conditions (including estimated traffic associated with the existing office use).
- (b) Condition (a) with completion and occupancy of the Project.
- (c) Condition (b) with implementation of Project mitigation measures where necessary.
- (d) Condition (a) plus one percent (1.0%) annual ambient traffic growth through year 2020 and with completion and occupancy of the related projects (i.e., future cumulative baseline)
- (e) Condition (d) with completion and occupancy of the Project.
- (f) Condition (e) with implementation of Project mitigation measures where necessary.

The traffic volumes for each new condition were added to the volumes in the prior condition to determine the change in capacity utilization at the study intersections.

## **9.0 TRAFFIC ANALYSIS**

The traffic impact analysis prepared for the study intersections using the ICU methodology and application of the City's significant traffic impact criteria is summarized in *Table 9–1*. The ICU data worksheets for the analyzed intersections are contained in *Appendix B*.

### **9.1 Existing Conditions**

#### **9.1.1 *Existing Conditions***

As indicated in column [1] of *Table 9–1*, the seven study intersections are presently operating at LOS D or better during the weekday AM and PM peak hours under existing conditions. The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in *Figures 5–1* and *5–2*, respectively. As previously noted, this condition includes the estimated traffic associated with the existing office use at the study intersections.

#### **9.1.2 *Existing with Project Conditions***

As shown in column [2] of *Table 9–1*, application of the City's threshold criteria to the "Existing with Project" scenario indicates that the Project is not expected to create significant impacts at any of the seven study intersections. Incremental, but not significant, impacts are noted at the study intersections. Therefore, no mitigation measures are required or recommended with respect to these intersections under the "Existing with Project" conditions. The "Existing with Project" traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in *Figures 9–1* and *9–2*, respectively.

## **9.2 Future Conditions**

### **9.2.1 *Future Cumulative Baseline Conditions***

The future cumulative baseline conditions were forecast based on the addition of traffic generated by the completion and occupancy of the related projects, as well as the growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors (i.e., ambient growth). The v/c ratios at the study intersections are incrementally increased with the addition of ambient traffic and traffic generated by the related projects listed in *Table 6–1*.

As presented in column [3] of *Table 9–1*, the seven study intersections are expected to operate at LOS D or better during the weekday AM and PM peak hours with the addition of growth in ambient traffic and related project traffic under the future cumulative baseline conditions. The future cumulative baseline (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in *Figures 9–3* and *9–4*, respectively.

**Table 9-1**  
**SUMMARY OF VOLUME TO CAPACITY RATIOS**  
**AND LEVELS OF SERVICE**  
**AM AND PM PEAK HOURS**

NO.	INTERSECTION	PEAK HOUR	2019 EXISTING LOS V/C	2019		[2]		[3]		[4]	
				EXISTING W/ PROJECT LOS V/C	CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT [a]	FUTURE PRE-PROJECT V/C LOS	YEAR 2020 FUTURE W/ PROJECT V/C LOS	CHANGE V/C [(4)-(3)]	SIGNIF. IMPACT [a]	
1	Sonora Avenue / Glenoaks Boulevard	AM PM	0.750 0.802	C D	0.754 0.804	C D	0.004 0.002	NO NO	0.757 0.809	C D	0.760 0.811
2	Sonora Avenue / San Fernando Road	AM PM	0.785 0.779	C C	0.788 0.785	C C	0.003 0.006	NO NO	0.792 0.786	C C	0.795 0.792
3	Sonora Avenue / Flower Street	AM PM	0.733 0.773	C C	0.738 0.775	C C	0.005 0.002	NO NO	0.739 0.780	C C	0.744 0.782
4	Rosedale Avenue / Glenoaks Boulevard	AM PM	0.390 0.477	A A	0.392 0.480	A A	0.002 0.003	NO NO	0.393 0.481	A A	0.395 0.484
5	Rosedale Avenue / San Fernando Road	AM PM	0.400 0.474	A A	0.414 0.486	A A	0.014 0.012	NO NO	0.403 0.478	A A	0.417 0.490
6	Grandview Avenue / Glenoaks Boulevard	AM PM	0.592 0.651	A B	0.597 0.652	A B	0.005 0.001	NO NO	0.597 0.656	A B	0.602 0.657
7	Grandview Avenue / San Fernando Road	AM PM	0.443 0.558	A A	0.443 0.561	A A	0.000 0.003	NO NO	0.446 0.562	A A	0.447 0.566

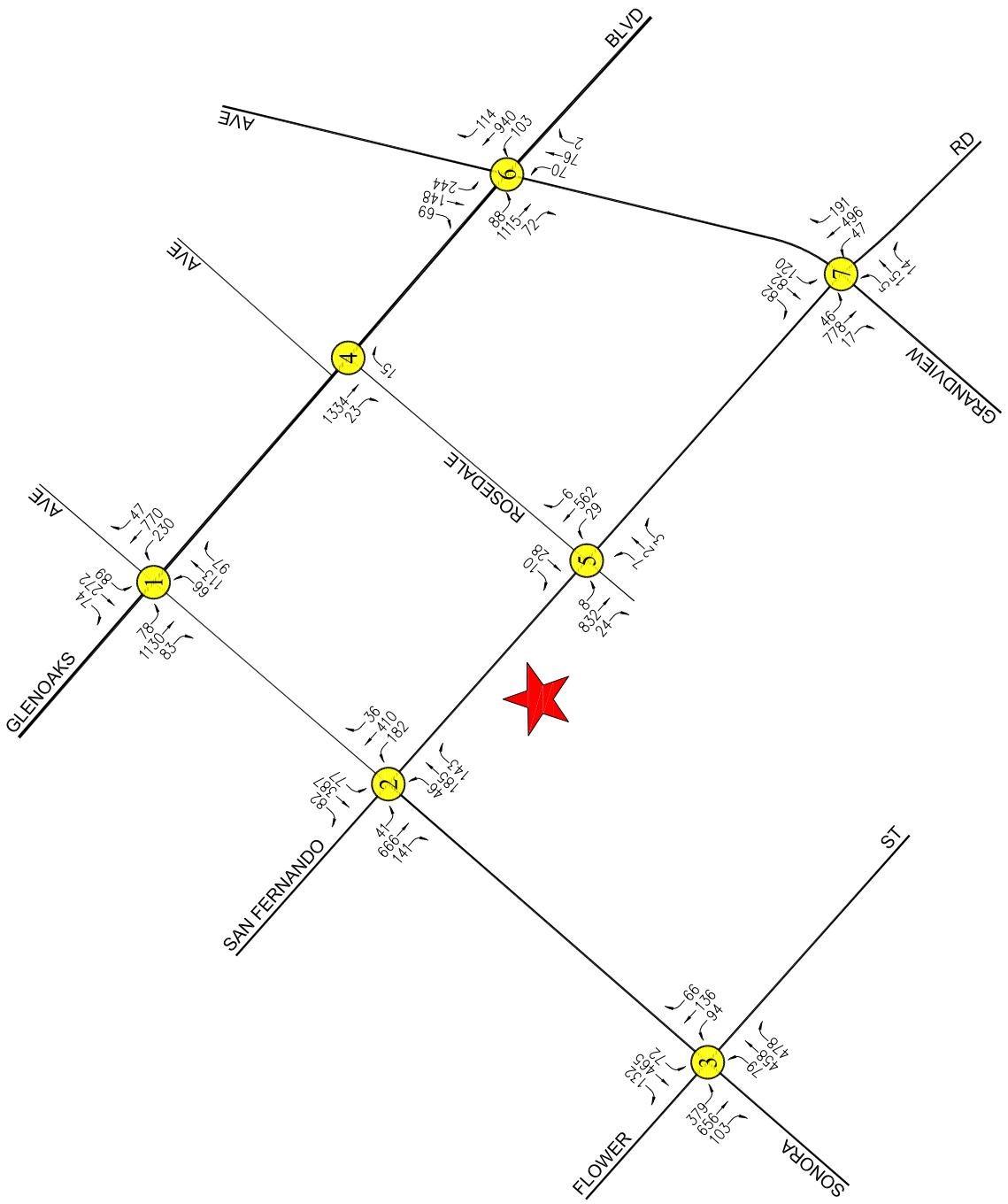
[a] According to the City of Glendale's TIA and LOS Guidelines, an impact is considered significant if the final volume-to-capacity ratio (v/c) equals or exceeds the thresholds shown below:

Level of Service  
D/E/F

Final V/C  
>> 0.800

Project-Related Increase in V/C  
equal to or greater than 0.020

**FIGURE 9-1**  
**EXISTING WITH PROJECT TRAFFIC VOLUMES**  
**WEEKDAY AM PEAK HOUR**  
**6265 SAN FERNANDO ROAD OFFICE PROJECT**

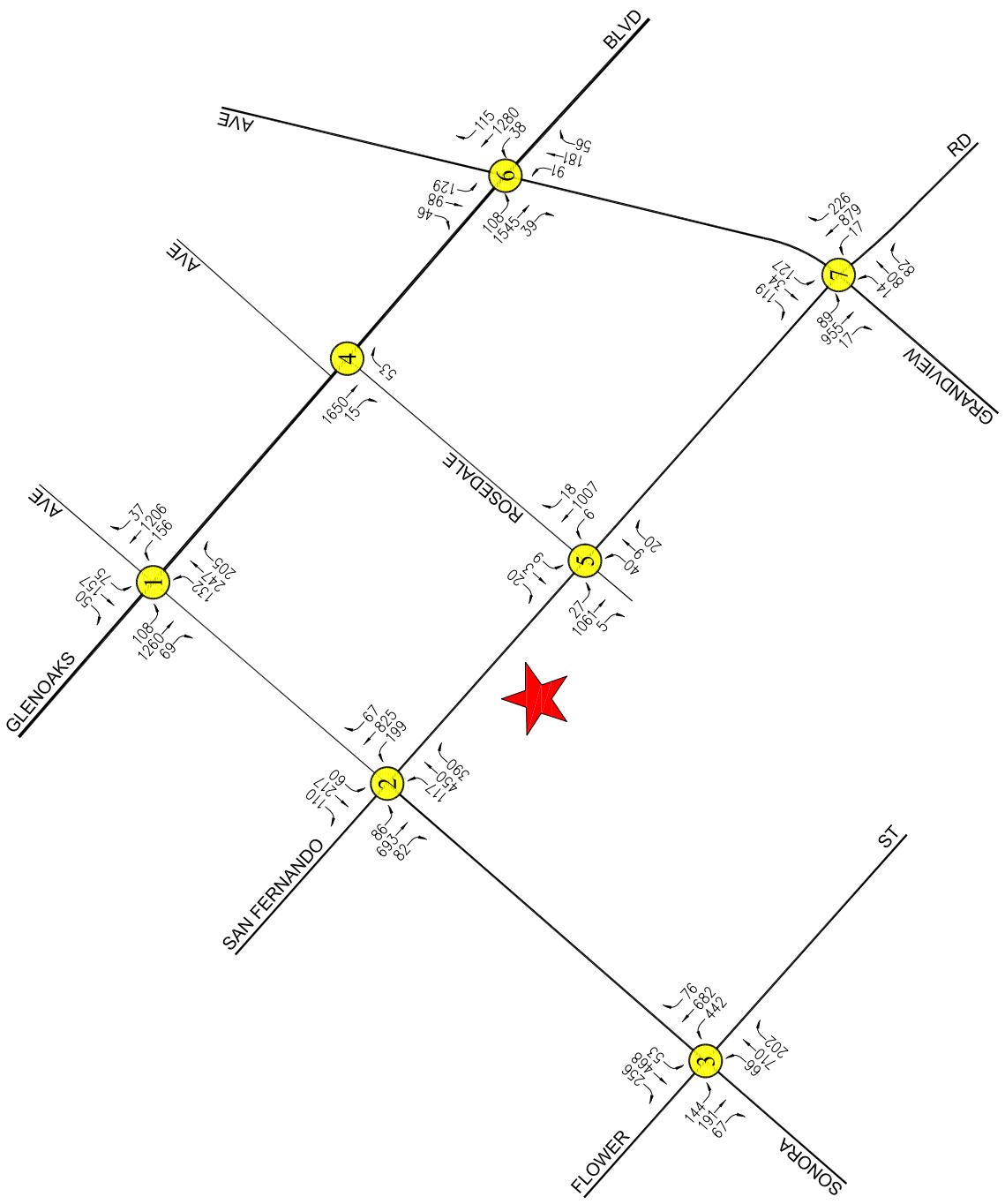


PROJECT SITE  
★  
 STUDY INTERSECTION  
⊗

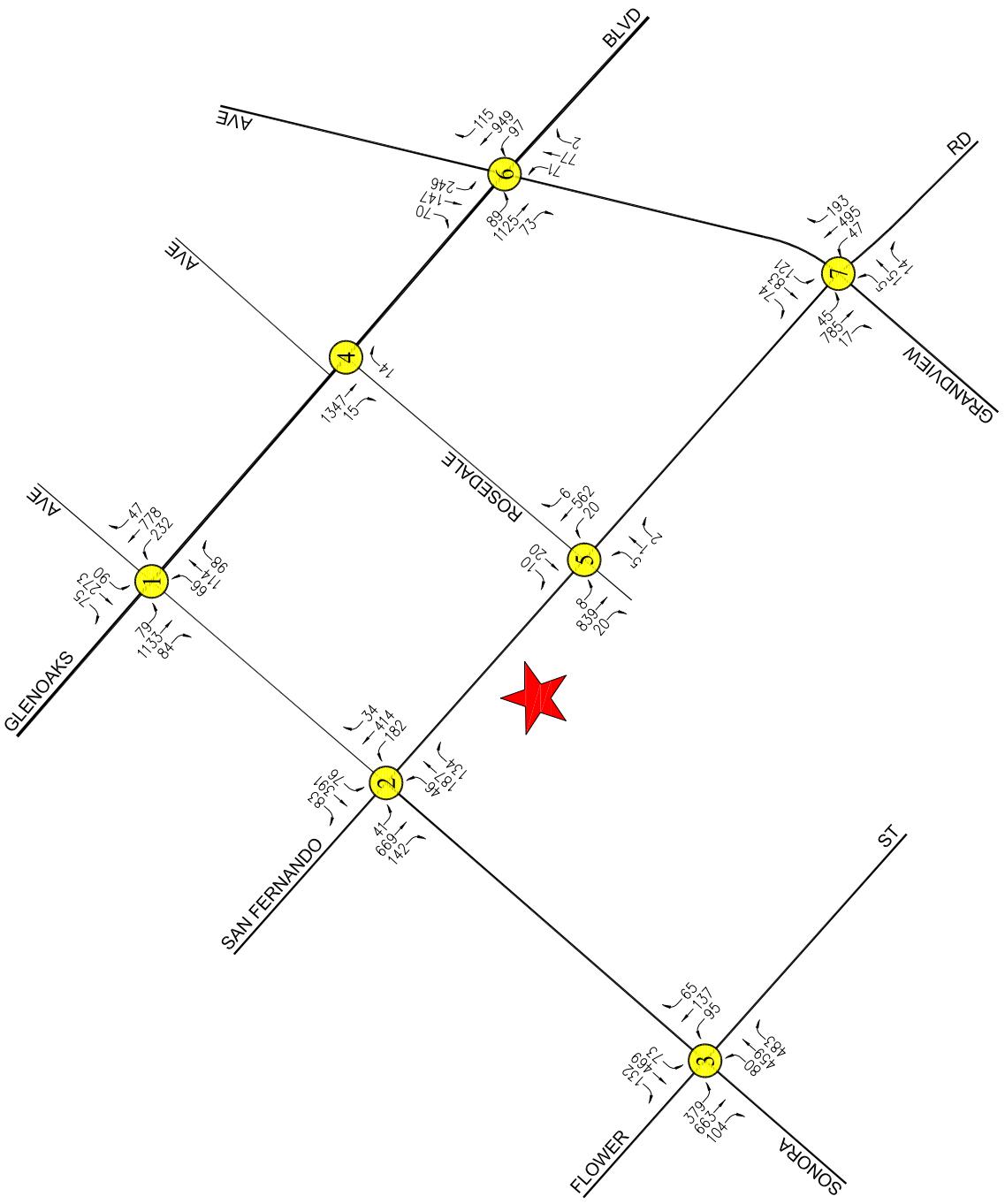
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**FIGURE 9-2**  
**EXISTING WITH PROJECT TRAFFIC VOLUMES**  
**WEEKDAY PM PEAK HOUR**  
**6265 SAN FERNANDO ROAD OFFICE PROJECT**



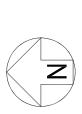
**PROJECT SITE**  
★ STUDY INTERSECTION  
  
**NOT TO SCALE**  
**LINSCOTT, LAW & GREENSPAN, engineers**



**FIGURE 9-3**  
**FUTURE CUMULATIVE BASELINE TRAFFIC VOLUMES**

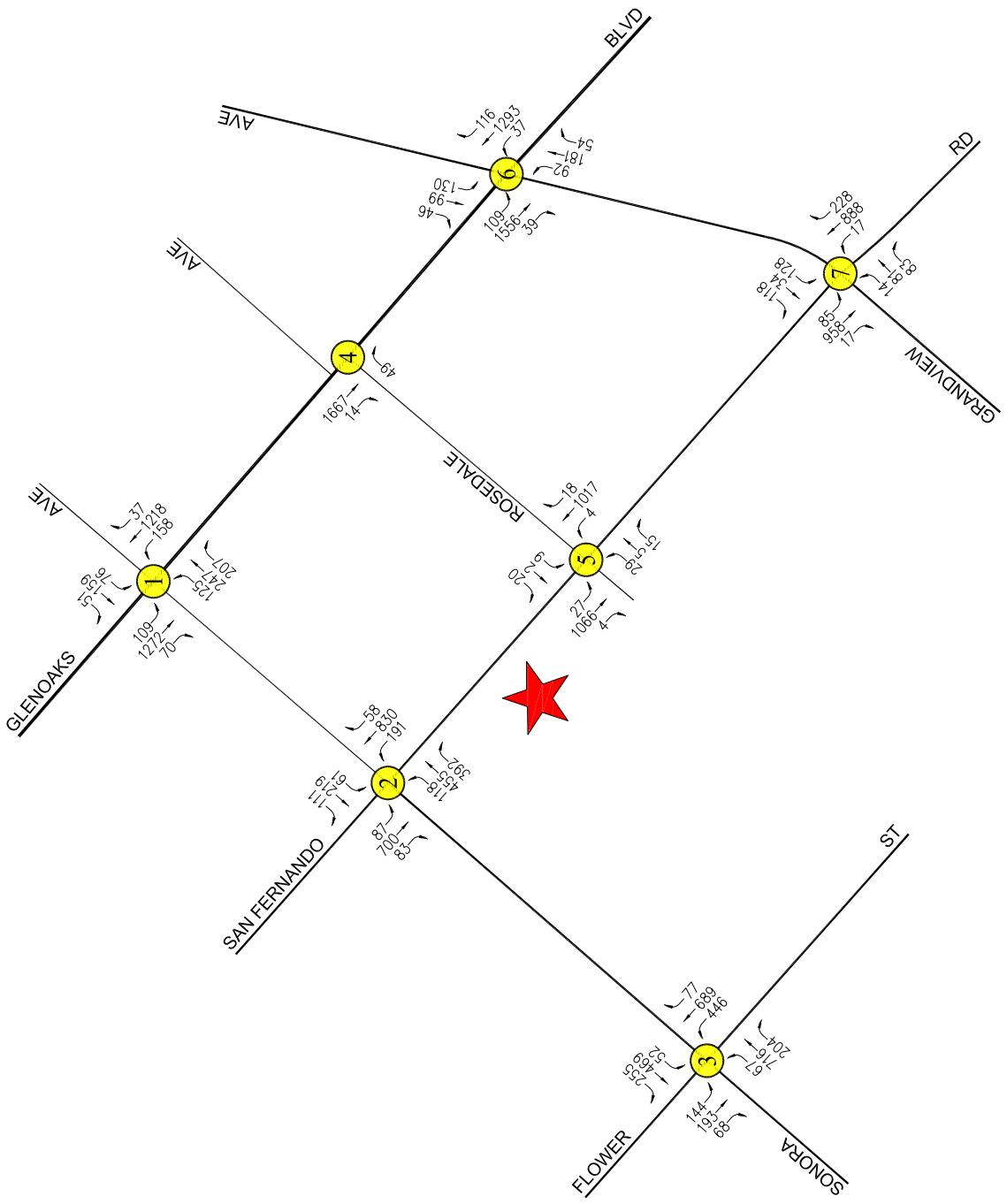
WEEKDAY AM PEAK HOUR  
6265 SAN FERNANDO ROAD OFFICE PROJECT

★ PROJECT SITE  
⊗ STUDY INTERSECTION



NOT TO SCALE

**FIGURE 9-4**  
**FUTURE CUMULATIVE BASELINE TRAFFIC VOLUMES**  
**WEEKDAY PM PEAK HOUR**  
**6265 SAN FERNANDO ROAD OFFICE PROJECT**



PROJECT SITE  
★  
 STUDY INTERSECTION  
⊗

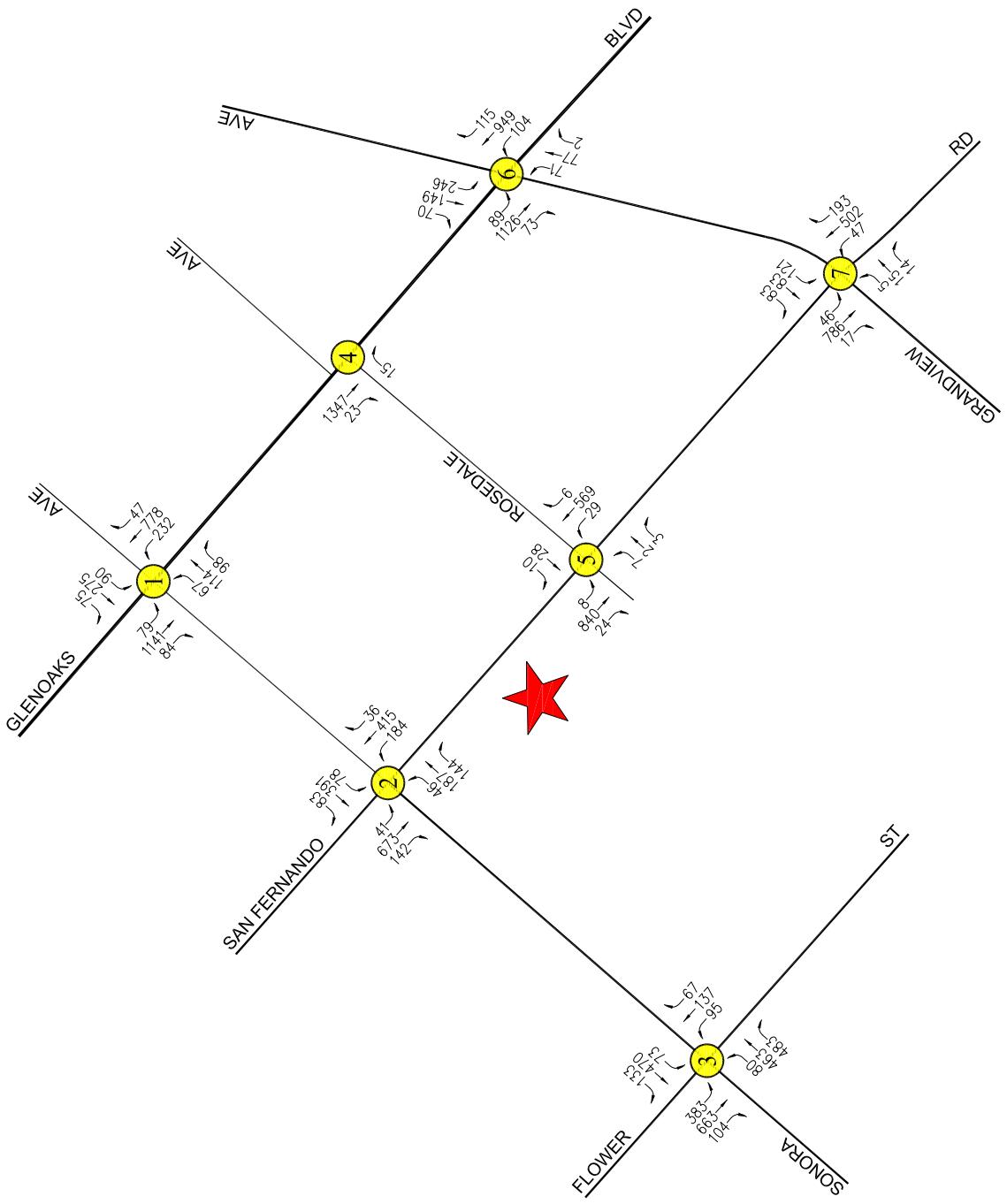


NOT TO SCALE

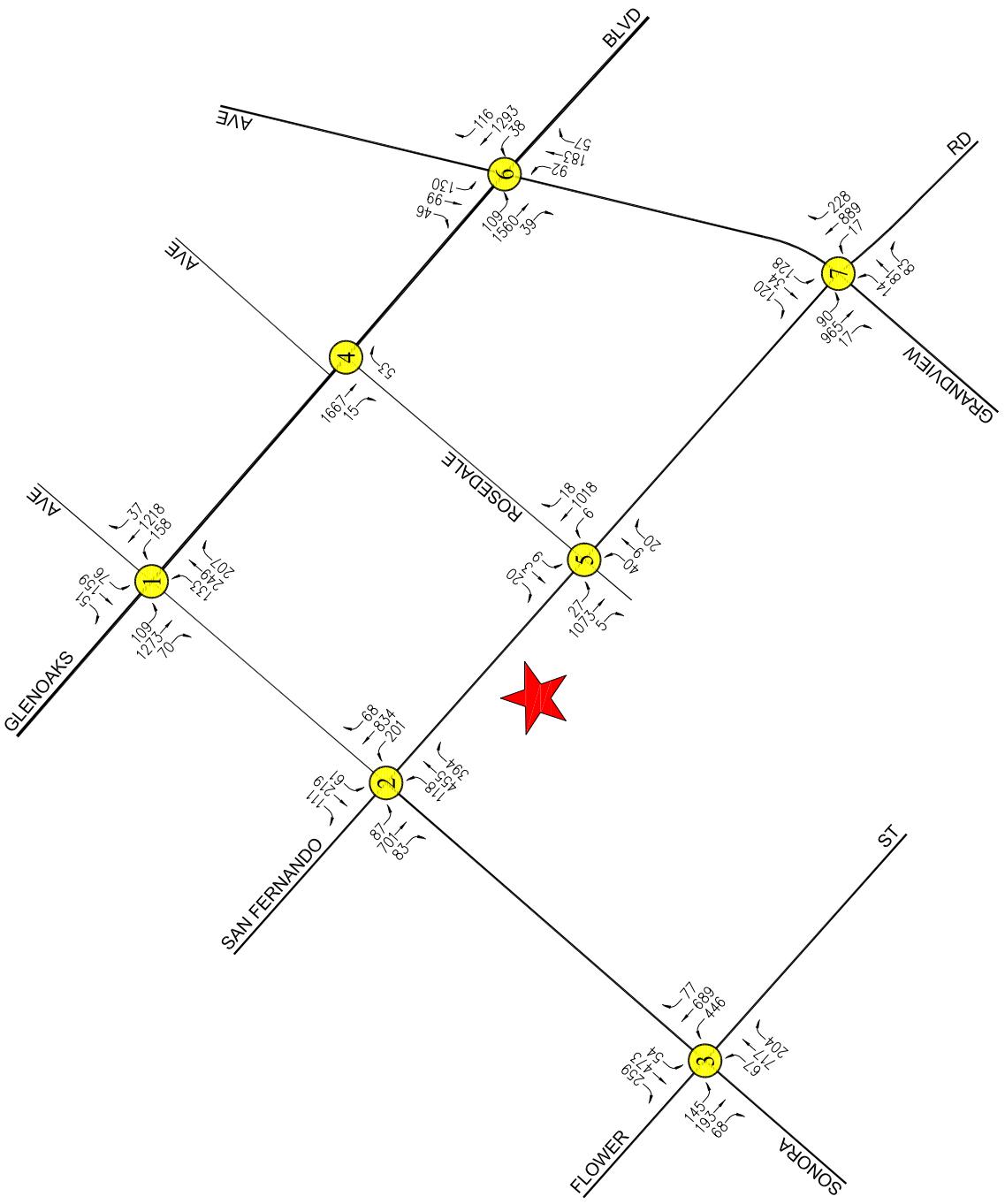
### **9.2.2 Future Cumulative with Project Conditions**

The “Future Cumulative with Project” conditions were forecast based on the addition of traffic generated by the Project plus completion and occupancy of related projects. As shown in column [4] of *Table 9–1*, application of the City’s threshold criteria to the “Future Cumulative with Project” scenario indicates that the proposed Project is not expected to create significant impacts at any of the seven study intersections. Therefore, no mitigation measures are required or recommended with respect to these intersections under the “Future Cumulative with Project” conditions. The “Future Cumulative with Project” (existing, ambient growth, related projects, and Project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in **Figures 9–5** and **9–6**, respectively.

FIGURE 9-5  
WEEKDAY AM PEAK HOUR  
TRAFFIC VOLUMES  
6265 SAN FERNANDO ROAD OFFICE PROJECT



NOT TO SCALE  
N  
PROJECT SITE  
X STUDY INTERSECTION



**FIGURE 9-6  
FUTURE CUMULATIVE WITH PROJECT TRAFFIC VOLUMES**

WEEKDAY PM PEAK HOUR  
6265 SAN FERNANDO ROAD OFFICE PROJECT

NOT TO SCALE  
N  
PROJECT SITE  
X STUDY INTERSECTION

## 10.0 RESIDENTIAL STREET SEGMENT ANALYSIS

A residential street segment analysis was prepared to evaluate Project-related traffic using local streets to access the Project Site. One residential street segment located near the Project Site has been analyzed for potential impacts:

- Rosedale Avenue between Glenoaks Boulevard and San Fernando Road.

The potential impacts of Project-generated traffic at the study street segment was identified using criteria set forth in the City's TIA and LOS guidelines. **Table 10-1** provides a summary of the residential street segment analysis. According to the City's published traffic study guidelines, a transportation impact on a local residential street shall be deemed significant in accordance with the following criteria:

- If the addition of a Project's ADT to a "residential" street does not cause the street's environmental capacity to be exceeded (regardless of how great an increase), no Project-generated impact occurs.
- If the street's "environmental" capacity is exceeded with or without the Project, no Project-generated impact occurs if the Project increases the without Project ADT by less than 10 percent.

Rosedale Avenue is designated as a Local Street by the City of Glendale. Per the *City of Glendale TIA and LOS Guidelines* document, the environmental capacity of a Local Street such as Rosedale Avenue is 2,500 ADT.

Automatic 24-hour machine traffic counts were conducted on Thursday, September 12, 2019 for the analyzed street segment. Copies of the 24-hour machine counts are contained in *Appendix A*. The ADT of the analyzed segment, with the addition of traffic forecasted to be generated by the former office use at the Project Site, is 573. Accordingly, the existing ADT on Rosedale Avenue is well below the City's environmental capacity of 2,500 ADT.

The forecast traffic conditions at the analyzed street segments for existing, "Existing with Project", future cumulative baseline, and "Future Cumulative with Project" scenarios are summarized in *Table 10-1*. As presented in column [1] of *Table 10-1*, the actual 24-hour count data, with addition of traffic forecasted to be generated by the former uses at the Project Site, was utilized to evaluate existing conditions on the roadway. Additionally, as shown in column [1] of *Table 10-1*, a 1.0 percent (1.0%) annual ambient growth rate per year to and including the year 2020 was conservatively added to the existing ADT volume in order to estimate the future cumulative baseline traffic volumes.

**Table 10-1**  
**RESIDENTIAL STREET SEGMENT ANALYSIS SUMMARY**

07-08-19										
NO.	STREET SEGMENT	CLASSIFICATION [a]	STREET SCENARIO [b]	[1] 24-HOUR VOLUME W/O PROJECT [c]		[2] PROPOSED PROJECT DISTRIBUTION [d] IN OUT	[3] DAILY PROJECT BUILD-OUT TRIP ENDS [e]	[4] PROJECTED ADT WITH PROJECT (FINAL ADT) [(1)+(3)]	ADT % INCREASE WITH PROJECT	SEGMENT IMPACT [f]
				Existing 2019	Future 2020					
1	Rosedale Avenue between Glenoaks Avenue and San Fernando Road (east of Project Site)	Local Street		573	579	20.0% 20.0%	10.0% 10.0%	58 58	631 637	10.1% 10.0%

[a] *City of Glendale Circulation Element of the General Plan*, City of Glendale Planning and Public Works Divisions, August 25, 1998.

[b] Future 2020 traffic volumes estimated by applying a 1% annual growth factor to Existing 2019 traffic volumes.

[c] Includes estimated ADT on Rosedale Avenue generated by existing office use on-site.

[d] See Figure 7-1, Project Trip Distribution for the forecast assignment of Project trips to Rosedale Avenue between Glenoaks Avenue and San Fernando Road.

[e] Forecast daily trips (194 inbound trips, 193 outbound trips) per Table 7-1 applied to forecast assignment of trips on street segment in Column [2].

[f] According to the City of Glendale's TIA and LOS Guidelines, an on a local residential street shall be deemed significant in accordance with the following criteria:

1. If the addition of a Project's ADT to a "residential" street does not cause the street's environmental capacity to be exceeded (regardless of how great an increase), no Project-generated impact occurs.

2. If the street's "environmental" capacity is exceeded with or without the Project, no Project-generated impact occurs if the Project increases the without Project ADT by less than 10 percent.

As presented in column [4] of *Table 10–1*, the forecast ADT with the addition of Project trips is 631 and 637 under “Existing with Project” and “Future Cumulative with Project” conditions, respectively. Additionally, daily trips would increase traffic volumes on Rosedale Avenue between Glenoaks Boulevard and San Fernando Road by 10.1% and 10.0%, under “Existing with Project” and “Future Cumulative with Project” conditions, respectively. While the Project results in an increase in ADT of 10.0% or more on the analyzed street segment, the total volume of traffic on Rosedale Avenue would remain well below the City’s environmental capacity of 2,500 ADT. Therefore, based on the City’s threshold of significance, the Project would not cause a significant impact on the analyzed street segment.

## **11.0 CONGESTION MANAGEMENT PROGRAM TRAFFIC IMPACT ASSESSMENT**

The Congestion Management Program (CMP) is a state-mandated program that was enacted by the California State Legislature with the passage of Proposition 111 in 1990. The program is intended to address the impact of local growth on the regional transportation system.

As required by the 2010 Congestion Management Program for Los Angeles County, a Traffic Impact Assessment (TIA) has been prepared to determine the potential impacts on designated monitoring locations on the CMP highway system. The analysis has been prepared in accordance with procedures outlined in the *2010 Congestion Management Program for Los Angeles County*, County of Los Angeles Metropolitan Transportation Authority, 2010.

According to Section D.9.1 (Appendix D, page D-6) of the 2010 CMP manual, the criteria for determining a significant transportation impact is listed below:

“A significant transportation impact occurs when the proposed Project increases traffic demand on a CMP facility by 2% of capacity ( $V/C \geq 0.02$ ), causing or worsening LOS F ( $V/C > 1.00$ ).”

The CMP impact criteria apply for analysis of both intersection and freeway monitoring locations.

### **11.1 Intersections**

No CMP intersection monitoring locations have been identified within the Project vicinity. Therefore, no further review of potential impacts to intersection monitoring locations that are part of the CMP highway system is required.

### **11.2 Freeways**

The following CMP freeway monitoring locations have been identified in the Project vicinity:

- | <b>•    <u>CMP Station</u></b> | <b><u>Location</u></b>                            |
|--------------------------------|---|
| No. 1005                       | I-5 Freeway south of Colorado Street Freeway Exit |
| No. 1055                       | SR-134 Freeway east of Central Avenue             |

The CMP TIA guidelines require that freeway monitoring locations must be examined if the proposed Project will add 150 or more trips (in either direction) during either the AM or PM weekday peak periods. The proposed Project will not add 150 or more trips (in either direction) during either the AM or PM weekday peak hours to the CMP freeway monitoring locations which is the threshold for preparing a traffic impact assessment, as stated in the CMP manual. Therefore, no further review of potential impacts to freeway monitoring locations that are part of the CMP highway system is required.

### **11.3 Transit Impact Review**

As required by the *2010 Congestion Management Program for Los Angeles County*, a review has been made of the potential impacts of the Project on transit service. As discussed in Subsection 4.4 herein, existing transit service is provided in the vicinity of the proposed Project.

The Project trip generation, as shown in *Table 7-1*, was adjusted by values set forth in the CMP (i.e., person trips equal 1.4 times vehicle trips, and transit trips equal 3.5 percent of the total person trips) to estimate transit trip generation. Pursuant to the CMP guidelines, the proposed Project is forecast to generate demand for two transit trips during both the AM and PM peak hours. The calculations are as follows:

- AM Peak Hour =  $46 \times 1.4 \times 0.035 = 2$  Transit Trips
- PM Peak Hour =  $45 \times 1.4 \times 0.035 = 2$  Transit Trips

As shown in *Table 4-1*, six transit lines and routes are provided adjacent to or in close proximity the Project Site. As outlined in *Table 4-1*, under the “No. of Buses During Peak Hour” column, these six public transit lines provide services for an average of (i.e., average of the directional number of buses during the peak hours) generally 35 buses during the AM peak hour and roughly 27 buses during the PM peak hour. Therefore, based on the above calculated AM and PM peak hour trips, this would correspond to an insignificant number of additional Project-generated transit trips per bus. It is anticipated that the existing transit service in the Project area will adequately accommodate the increase of Project-generated transit trips.

## **12.0 CONCLUSIONS**

This traffic impact analysis has been prepared to evaluate the potential impacts to the local street system due to the proposed office project located at 6265-6325 San Fernando Road in the City of Glendale. Seven intersections were identified and analyzed in order to determine changes in operations following construction and occupancy of the proposed Project. Application of the impact threshold criteria from the City of Glendale indicate that none of the seven study intersections would be significantly impacted by the forecast Project traffic. Incremental, but not significant, impacts are noted at the seven study intersections evaluated in this analysis. As no significant impacts are expected due to the proposed Project, no traffic mitigation measures are required or recommended for the study intersections.

In addition, the segment of Rosedale Avenue between San Fernando Road and Glenoaks Boulevard was evaluated for a potential residential street impact. Based on the City's thresholds of significance, the Project will not cause a significant impact on Rosedale Avenue as the total volume of traffic

## **APPENDIX A**

### **MANUAL TRAFFIC COUNT DATA**

Counts Unlimited  
 PO Box 1178  
 Corona, CA 92878  
 (951) 268-6268

City of Glendale  
 N/S: Sonora Avenue  
 E/W: Glenoaks Boulevard  
 Weather: Clear

File Name : 01\_GDE\_Sonora\_Glenoaks AM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 1

Groups Printed- Total Volume

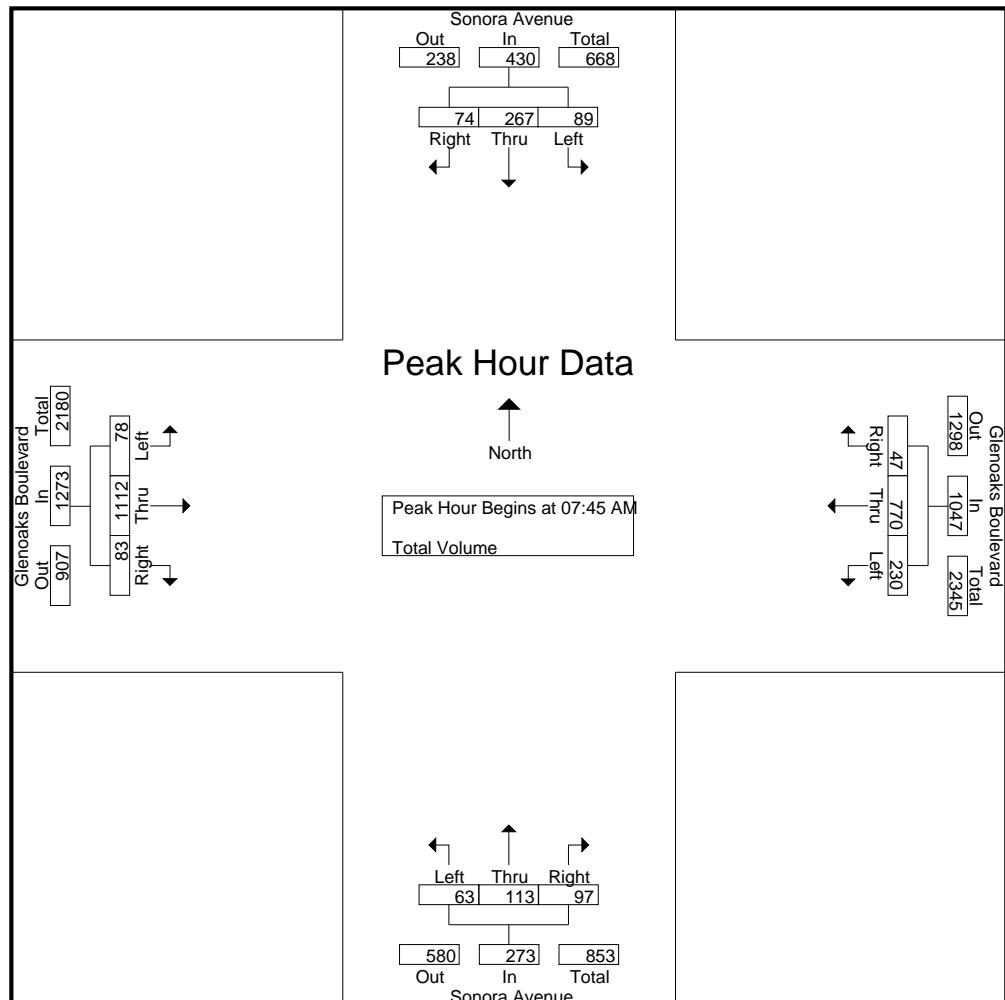
	Sonora Avenue Southbound				Glenoaks Boulevard Westbound				Sonora Avenue Northbound				Glenoaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	7	38	6	51	24	65	1	90	13	17	20	50	11	153	13	177	368
07:15 AM	17	50	8	75	22	87	5	114	9	15	6	30	12	212	13	237	456
07:30 AM	26	64	8	98	55	174	13	242	11	20	26	57	13	236	14	263	660
07:45 AM	16	73	14	103	69	227	15	311	12	38	29	79	27	282	20	329	822
Total	66	225	36	327	170	553	34	757	45	90	81	216	63	883	60	1006	2306
08:00 AM	26	84	19	129	69	212	23	304	22	32	26	80	20	210	22	252	765
08:15 AM	26	58	24	108	46	166	5	217	13	29	20	62	18	320	17	355	742
08:30 AM	21	52	17	90	46	165	4	215	16	14	22	52	13	300	24	337	694
08:45 AM	19	65	13	97	67	237	5	309	14	17	16	47	17	246	30	293	746
Total	92	259	73	424	228	780	37	1045	65	92	84	241	68	1076	93	1237	2947
Grand Total	158	484	109	751	398	1333	71	1802	110	182	165	457	131	1959	153	2243	5253
Apprch %	21	64.4	14.5		22.1	74	3.9		24.1	39.8	36.1		5.8	87.3	6.8		
Total %	3	9.2	2.1	14.3	7.6	25.4	1.4	34.3	2.1	3.5	3.1	8.7	2.5	37.3	2.9	42.7	

	Sonora Avenue Southbound				Glenoaks Boulevard Westbound				Sonora Avenue Northbound				Glenoaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	16	73	14	103	69	227	15	311	12	38	29	79	27	282	20	329	822
08:00 AM	26	84	19	129	69	212	23	304	22	32	26	80	20	210	22	252	765
08:15 AM	26	58	24	108	46	166	5	217	13	29	20	62	18	320	17	355	742
08:30 AM	21	52	17	90	46	165	4	215	16	14	22	52	13	300	24	337	694
Total Volume	89	267	74	430	230	770	47	1047	63	113	97	273	78	1112	83	1273	3023
% App. Total	20.7	62.1	17.2		22	73.5	4.5		23.1	41.4	35.5		6.1	87.4	6.5		
PHF	.856	.795	.771	.833	.833	.848	.511	.842	.716	.743	.836	.853	.722	.869	.865	.896	.919

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City of Glendale  
 N/S: Sonora Avenue  
 E/W: Glenoaks Boulevard  
 Weather: Clear

File Name : 01\_GDE\_Sonora\_Glenoaks AM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:45 AM			
	Out	In	Total	Approach												
+0 mins.	26	64	8	98	55	174	13	242	11	20	26	57	27	282	20	329
+15 mins.	16	73	14	103	69	227	15	311	12	38	29	79	20	210	22	252
+30 mins.	26	84	19	129	69	212	23	304	22	32	26	80	18	320	17	355
+45 mins.	26	58	24	108	46	166	5	217	13	29	20	62	13	300	24	337
Total Volume	94	279	65	438	239	779	56	1074	58	119	101	278	78	1112	83	1273
% App. Total	21.5	63.7	14.8		22.3	72.5	5.2		20.9	42.8	36.3		6.1	87.4	6.5	
PHF	.904	.830	.677	.849	.866	.858	.609	.863	.659	.783	.871	.869	.722	.869	.865	.896

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City of Glendale  
 N/S: Sonora Avenue  
 E/W: Glenoaks Boulevard  
 Weather: Clear

File Name : 01\_GDE\_Sonora\_Glenoaks PM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 1

Groups Printed- Total Volume

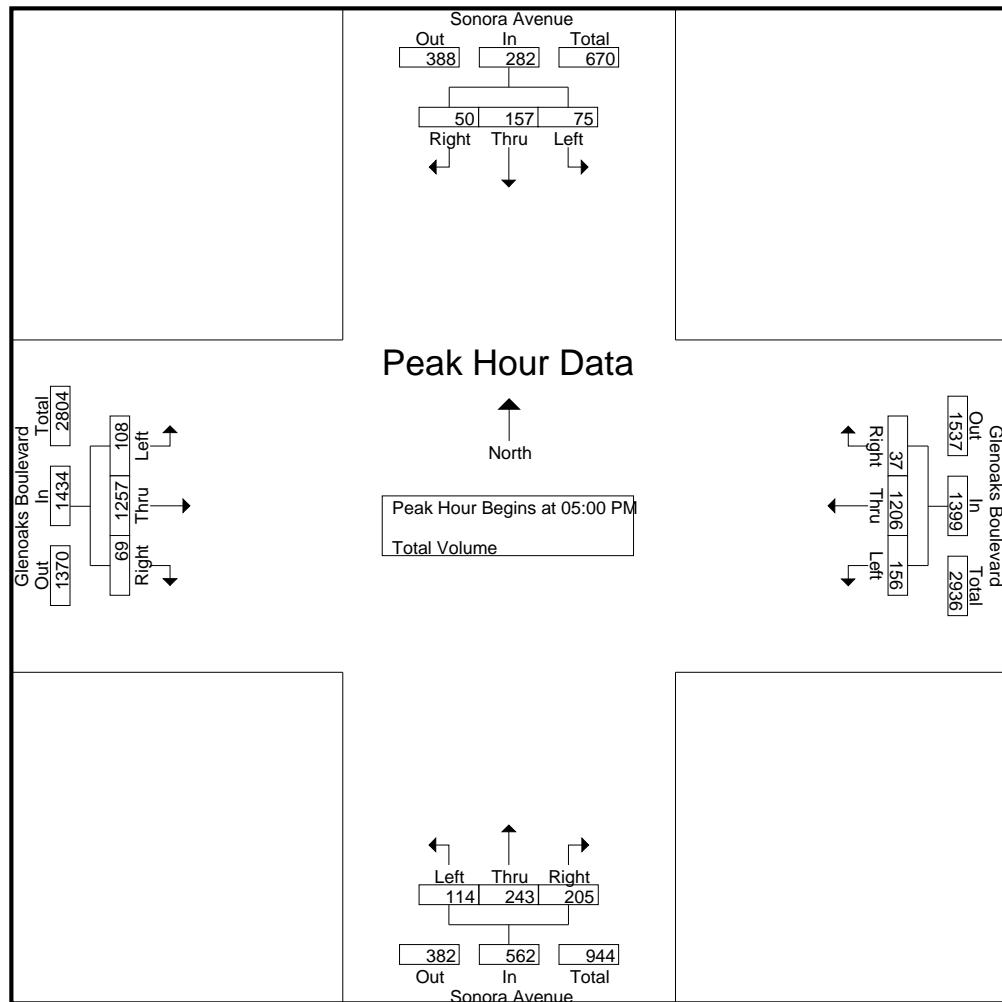
	Sonora Avenue Southbound				Glenoaks Boulevard Westbound				Sonora Avenue Northbound				Glenoaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	19	41	10	70	37	263	11	311	26	42	43	111	34	248	9	291	783
04:15 PM	19	33	8	60	36	217	16	269	23	39	45	107	24	291	21	336	772
04:30 PM	21	50	15	86	35	266	13	314	20	50	37	107	19	297	22	338	845
04:45 PM	17	30	8	55	48	278	8	334	29	49	45	123	30	275	21	326	838
Total	76	154	41	271	156	1024	48	1228	98	180	170	448	107	1111	73	1291	3238
05:00 PM	20	40	13	73	27	336	11	374	27	60	49	136	18	312	30	360	943
05:15 PM	21	40	17	78	46	272	6	324	41	59	44	144	20	329	18	367	913
05:30 PM	13	36	8	57	39	309	5	353	23	61	63	147	33	328	12	373	930
05:45 PM	21	41	12	74	44	289	15	348	23	63	49	135	37	288	9	334	891
Total	75	157	50	282	156	1206	37	1399	114	243	205	562	108	1257	69	1434	3677
Grand Total	151	311	91	553	312	2230	85	2627	212	423	375	1010	215	2368	142	2725	6915
Apprch %	27.3	56.2	16.5		11.9	84.9	3.2		21	41.9	37.1		7.9	86.9	5.2		
Total %	2.2	4.5	1.3	8	4.5	32.2	1.2	38	3.1	6.1	5.4	14.6	3.1	34.2	2.1	39.4	

	Sonora Avenue Southbound				Glenoaks Boulevard Westbound				Sonora Avenue Northbound				Glenoaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	20	40	13	73	27	336	11	374	27	60	49	136	18	312	30	360	943
05:15 PM	21	40	17	78	46	272	6	324	41	59	44	144	20	329	18	367	913
05:30 PM	13	36	8	57	39	309	5	353	23	61	63	147	33	328	12	373	930
05:45 PM	21	41	12	74	44	289	15	348	23	63	49	135	37	288	9	334	891
Total Volume	75	157	50	282	156	1206	37	1399	114	243	205	562	108	1257	69	1434	3677
% App. Total	26.6	55.7	17.7		11.2	86.2	2.6		20.3	43.2	36.5		7.5	87.7	4.8		
PHF	.893	.957	.735	.904	.848	.897	.617	.935	.695	.964	.813	.956	.730	.955	.575	.961	.975

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City of Glendale  
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 E/W: Glenoaks Boulevard  
 Weather: Clear

File Name : 01\_GDE\_Sonora\_Glenoaks PM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	21	50	15	86	27	336	11	374	27	60	49	136	18	312	30	360
+15 mins.	17	30	8	55	46	272	6	324	41	59	44	144	20	329	18	367
+30 mins.	20	40	13	73	39	309	5	353	23	61	63	147	33	328	12	373
+45 mins.	21	40	17	78	44	289	15	348	23	63	49	135	37	288	9	334
Total Volume	79	160	53	292	156	1206	37	1399	114	243	205	562	108	1257	69	1434
% App. Total	27.1	54.8	18.2		11.2	86.2	2.6		20.3	43.2	36.5		7.5	87.7	4.8	
PHF	.940	.800	.779	.849	.848	.897	.617	.935	.695	.964	.813	.956	.730	.955	.575	.961

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City of Glendale  
 N/S: Sonora Avenue  
 E/W: San Fernando Road  
 Weather: Clear

File Name : 02\_GDE\_Sonora\_San Fernando AM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 1

Groups Printed- Total Volume

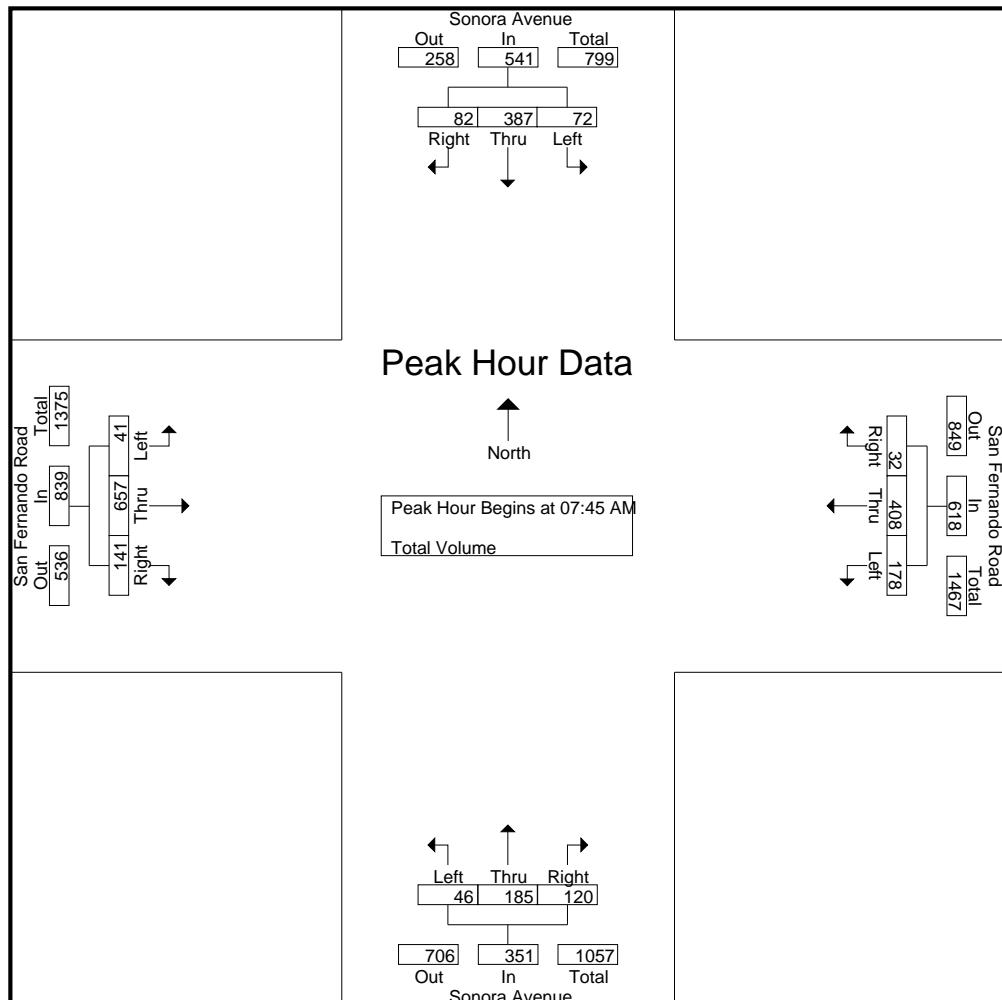
	Sonora Avenue Southbound				San Fernando Road Westbound				Sonora Avenue Northbound				San Fernando Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	14	53	13	80	25	63	3	91	7	30	13	50	4	88	19	111	332
07:15 AM	18	62	8	88	25	75	2	102	14	25	20	59	3	110	16	129	378
07:30 AM	23	100	16	139	41	86	7	134	12	47	29	88	8	154	13	175	536
07:45 AM	19	109	12	140	52	102	8	162	10	50	33	93	9	179	36	224	619
Total	74	324	49	447	143	326	20	489	43	152	95	290	24	531	84	639	1865
08:00 AM	19	112	27	158	37	110	10	157	9	59	26	94	11	154	36	201	610
08:15 AM	15	87	23	125	41	97	7	145	12	42	19	73	10	146	30	186	529
08:30 AM	19	79	20	118	48	99	7	154	15	34	42	91	11	178	39	228	591
08:45 AM	16	131	21	168	36	86	8	130	20	33	29	82	3	150	32	185	565
Total	69	409	91	569	162	392	32	586	56	168	116	340	35	628	137	800	2295
Grand Total	143	733	140	1016	305	718	52	1075	99	320	211	630	59	1159	221	1439	4160
Apprch %	14.1	72.1	13.8		28.4	66.8	4.8		15.7	50.8	33.5		4.1	80.5	15.4		
Total %	3.4	17.6	3.4	24.4	7.3	17.3	1.2	25.8	2.4	7.7	5.1	15.1	1.4	27.9	5.3	34.6	

	Sonora Avenue Southbound				San Fernando Road Westbound				Sonora Avenue Northbound				San Fernando Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	19	109	12	140	52	102	8	162	10	50	33	93	9	179	36	224	619
08:00 AM	19	112	27	158	37	110	10	157	9	59	26	94	11	154	36	201	610
08:15 AM	15	87	23	125	41	97	7	145	12	42	19	73	10	146	30	186	529
08:30 AM	19	79	20	118	48	99	7	154	15	34	42	91	11	178	39	228	591
Total Volume	72	387	82	541	178	408	32	618	46	185	120	351	41	657	141	839	2349
% App. Total	13.3	71.5	15.2		28.8	66	5.2		13.1	52.7	34.2		4.9	78.3	16.8		
PHF	.947	.864	.759	.856	.856	.927	.800	.954	.767	.784	.714	.934	.932	.918	.904	.920	.949

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City of Glendale  
N/S: Sonora Avenue  
E/W: San Fernando Road  
Weather: Clear

File Name : 02\_GDE\_Sonora\_San Fernando AM  
Site Code : 05719611  
Start Date : 9/12/2019  
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	19	112	27	158	52	102	8	162	10	50	33	93	9	179	36	224
+15 mins.	15	87	23	125	37	110	10	157	9	59	26	94	11	154	36	201
+30 mins.	19	79	20	118	41	97	7	145	12	42	19	73	10	146	30	186
+45 mins.	16	131	21	168	48	99	7	154	15	34	42	91	11	178	39	228
Total Volume	69	409	91	569	178	408	32	618	46	185	120	351	41	657	141	839
% App. Total	12.1	71.9	16		28.8	66	5.2		13.1	52.7	34.2		4.9	78.3	16.8	
PHF	.908	.781	.843	.847	.856	.927	.800	.954	.767	.784	.714	.934	.932	.918	.904	.920

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City of Glendale  
 N/S: Sonora Avenue  
 E/W: San Fernando Road  
 Weather: Clear

File Name : 02\_GDE\_Sonora\_San Fernando PM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 1

Groups Printed- Total Volume

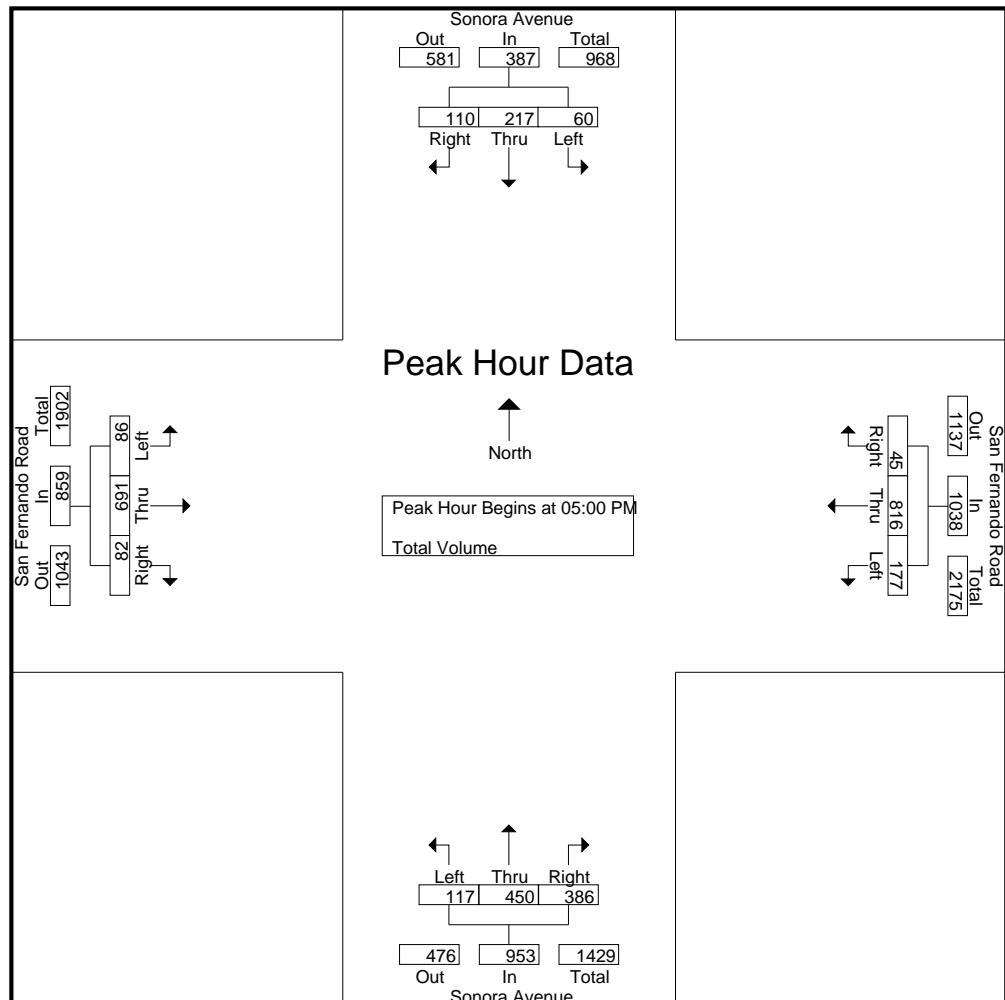
	Sonora Avenue Southbound				San Fernando Road Westbound				Sonora Avenue Northbound				San Fernando Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	14	36	30	80	49	162	18	229	49	79	76	204	18	155	22	195	708
04:15 PM	15	49	34	98	59	220	17	296	30	74	64	168	16	149	27	192	754
04:30 PM	16	65	27	108	41	173	13	227	36	77	60	173	16	188	49	253	761
04:45 PM	13	42	30	85	41	191	8	240	47	103	74	224	23	159	22	204	753
Total	58	192	121	371	190	746	56	992	162	333	274	769	73	651	120	844	2976
05:00 PM	16	48	24	88	39	221	14	274	30	107	71	208	23	197	20	240	810
05:15 PM	15	57	35	107	45	175	11	231	38	117	89	244	22	172	21	215	797
05:30 PM	17	58	22	97	55	198	5	258	19	119	117	255	26	165	21	212	822
05:45 PM	12	54	29	95	38	222	15	275	30	107	109	246	15	157	20	192	808
Total	60	217	110	387	177	816	45	1038	117	450	386	953	86	691	82	859	3237
Grand Total	118	409	231	758	367	1562	101	2030	279	783	660	1722	159	1342	202	1703	6213
Apprch %	15.6	54	30.5		18.1	76.9	5		16.2	45.5	38.3		9.3	78.8	11.9		
Total %	1.9	6.6	3.7	12.2	5.9	25.1	1.6	32.7	4.5	12.6	10.6	27.7	2.6	21.6	3.3	27.4	

	Sonora Avenue Southbound				San Fernando Road Westbound				Sonora Avenue Northbound				San Fernando Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	16	48	24	88	39	221	14	274	30	107	71	208	23	197	20	240	810
05:15 PM	15	57	35	107	45	175	11	231	38	117	89	244	22	172	21	215	797
05:30 PM	17	58	22	97	55	198	5	258	19	119	117	255	26	165	21	212	822
05:45 PM	12	54	29	95	38	222	15	275	30	107	109	246	15	157	20	192	808
Total Volume	60	217	110	387	177	816	45	1038	117	450	386	953	86	691	82	859	3237
% App. Total	15.5	56.1	28.4		17.1	78.6	4.3		12.3	47.2	40.5		10	80.4	9.5		
PHF	.882	.935	.786	.904	.805	.919	.750	.944	.770	.945	.825	.934	.827	.877	.976	.895	.984

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City of Glendale  
N/S: Sonora Avenue  
E/W: San Fernando Road  
Weather: Clear

File Name : 02\_GDE\_Sonora\_San Fernando PM  
Site Code : 05719611  
Start Date : 9/12/2019  
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM	05:00 PM	05:00 PM	04:30 PM
+0 mins.	<b>16</b> <b>65</b> 27 <b>108</b>	39    221    14    274	30    107    71    208	16    188    49 <b>253</b>
+15 mins.	13    42    30    85	45    175    11    231	<b>38</b> 117    89    244	<b>23</b> 159    22    204
+30 mins.	16    48    24    88	<b>55</b> 198    5    258	19 <b>119</b> <b>117</b> <b>255</b>	23 <b>197</b> 20    240
+45 mins.	15    57 <b>35</b> 107	38 <b>222</b> <b>15</b> <b>275</b>	30    107    109    246	22    172    21    215
Total Volume	60    212    116    388	177    816    45    1038	117    450    386    953	84    716    112    912
% App. Total	15.5    54.6    29.9	17.1    78.6    4.3	12.3    47.2    40.5	9.2    78.5    12.3
PHF	.938    .815    .829    .898	.805    .919    .750    .944	.770    .945    .825    .934	.913    .909    .571    .901

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City of Glendale  
 N/S: Sonora Avenue  
 E/W: Flower Street  
 Weather: Clear

File Name : 07\_GDE\_Sonora\_Flower 9-19 AM  
 Site Code : 05719611  
 Start Date : 9/19/2019  
 Page No : 1

Groups Printed- Total Volume

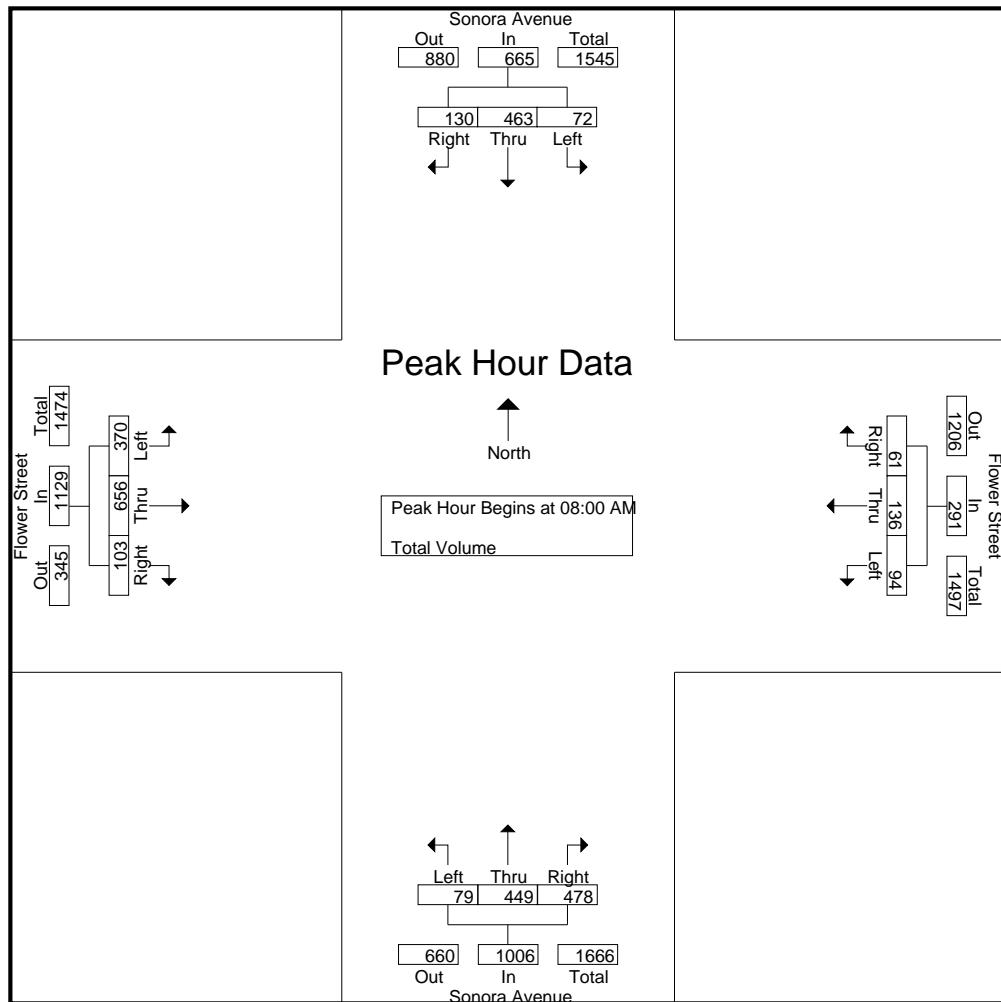
	Sonora Avenue Southbound				Flower Street Westbound				Sonora Avenue Northbound				Flower Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	8	74	28	110	6	19	3	28	19	62	30	111	62	44	11	117	366
07:15 AM	3	80	29	112	14	28	9	51	25	68	42	135	67	54	16	137	435
07:30 AM	7	119	19	145	16	40	6	62	15	96	55	166	73	68	22	163	536
07:45 AM	10	135	38	183	32	44	8	84	23	112	71	206	90	104	71	265	738
Total	28	408	114	550	68	131	26	225	82	338	198	618	292	270	120	682	2075
08:00 AM	17	119	29	165	25	30	18	73	20	120	104	244	104	139	34	277	759
08:15 AM	17	103	36	156	22	35	10	67	21	117	103	241	87	135	27	249	713
08:30 AM	19	119	40	178	22	34	16	72	19	105	126	250	94	182	18	294	794
08:45 AM	19	122	25	166	25	37	17	79	19	107	145	271	85	200	24	309	825
Total	72	463	130	665	94	136	61	291	79	449	478	1006	370	656	103	1129	3091
Grand Total	100	871	244	1215	162	267	87	516	161	787	676	1624	662	926	223	1811	5166
Apprch %	8.2	71.7	20.1		31.4	51.7	16.9		9.9	48.5	41.6		36.6	51.1	12.3		
Total %	1.9	16.9	4.7	23.5	3.1	5.2	1.7	10	3.1	15.2	13.1	31.4	12.8	17.9	4.3	35.1	

	Sonora Avenue Southbound				Flower Street Westbound				Sonora Avenue Northbound				Flower Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	17	119	29	165	25	30	18	73	20	120	104	244	104	139	34	277	759
08:15 AM	17	103	36	156	22	35	10	67	21	117	103	241	87	135	27	249	713
08:30 AM	19	119	40	178	22	34	16	72	19	105	126	250	94	182	18	294	794
08:45 AM	19	122	25	166	25	37	17	79	19	107	145	271	85	200	24	309	825
Total Volume	72	463	130	665	94	136	61	291	79	449	478	1006	370	656	103	1129	3091
% App. Total	10.8	69.6	19.5		32.3	46.7	21		7.9	44.6	47.5		32.8	58.1	9.1		
PHF	.947	.949	.813	.934	.940	.919	.847	.921	.940	.935	.824	.928	.889	.820	.757	.913	.937

Counts Unlimited  
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City of Glendale  
N/S: Sonora Avenue  
E/W: Flower Street  
Weather: Clear

File Name : 07\_GDE\_Sonora\_Flower 9-19 AM  
Site Code : 05719611  
Start Date : 9/19/2019  
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				08:00 AM				08:00 AM			
+0 mins.	10	135	38	<b>183</b>	<b>32</b>	<b>44</b>	8	<b>84</b>	20	<b>120</b>	104	244	<b>104</b>	139	<b>34</b>	277
+15 mins.	17	119	29	165	25	30	<b>18</b>	73	<b>21</b>	117	103	241	87	135	27	249
+30 mins.	17	103	36	156	22	35	10	67	19	105	126	250	94	182	18	294
+45 mins.	<b>19</b>	119	<b>40</b>	178	22	34	16	72	19	107	<b>145</b>	<b>271</b>	85	<b>200</b>	24	<b>309</b>
Total Volume	63	476	143	682	101	143	52	296	79	449	478	1006	370	656	103	1129
% App. Total	9.2	69.8	21		34.1	48.3	17.6		7.9	44.6	47.5		32.8	58.1	9.1	
PHF	.829	.881	.894	.932	.789	.813	.722	.881	.940	.935	.824	.928	.889	.820	.757	.913

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City of Glendale  
 N/S: Sonora Avenue  
 E/W: Flower Street  
 Weather: Clear

File Name : 07\_GDE\_Sonora\_Flower 9-19 PM  
 Site Code : 05719611  
 Start Date : 9/19/2019  
 Page No : 1

Groups Printed- Total Volume

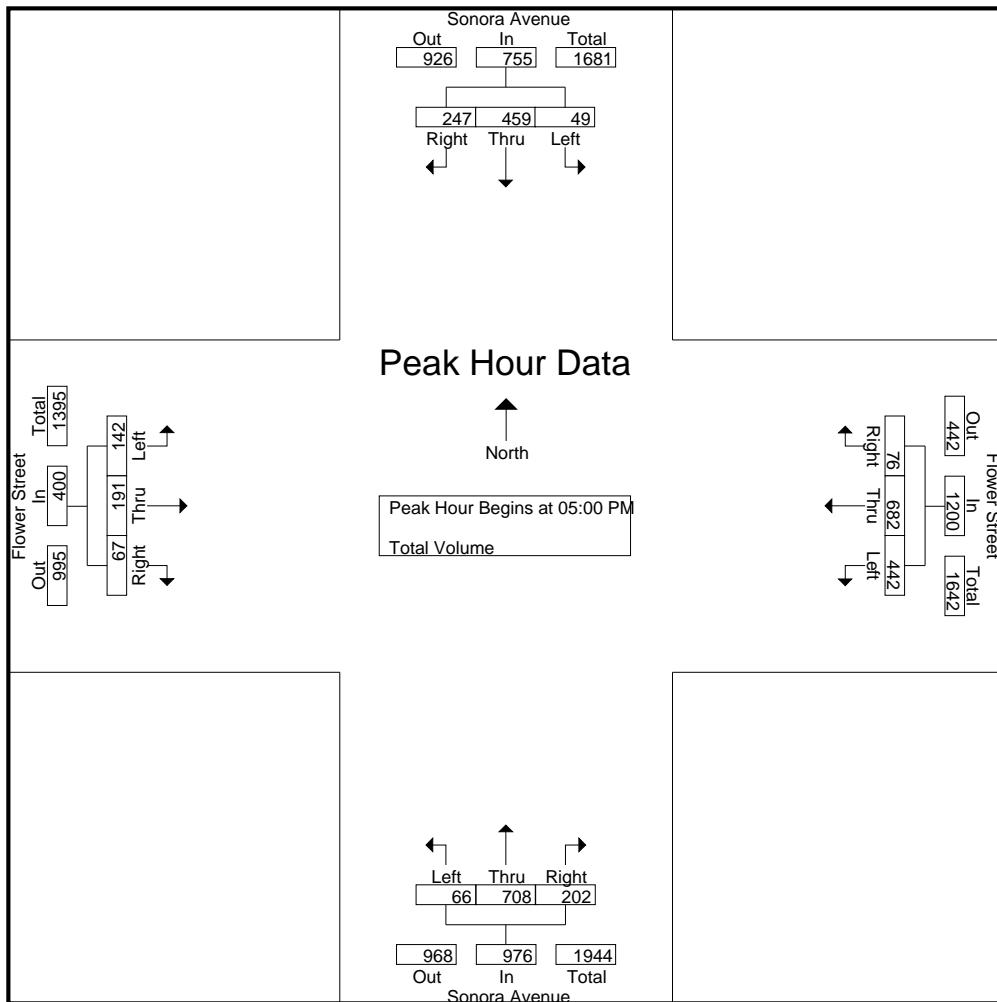
	Sonora Avenue Southbound				Flower Street Westbound				Sonora Avenue Northbound				Flower Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	10	94	50	154	46	93	10	149	15	152	115	282	40	58	19	117	702
04:15 PM	7	106	51	164	54	87	9	150	16	171	56	243	39	44	17	100	657
04:30 PM	21	137	74	232	69	113	7	189	9	154	43	206	46	79	24	149	776
04:45 PM	16	93	45	154	74	114	11	199	12	149	49	210	45	56	9	110	673
Total	54	430	220	704	243	407	37	687	52	626	263	941	170	237	69	476	2808
05:00 PM	20	137	66	223	121	171	21	313	16	161	31	208	38	47	20	105	849
05:15 PM	8	96	57	161	122	168	20	310	15	192	56	263	33	40	19	92	826
05:30 PM	8	137	66	211	103	174	19	296	12	167	49	228	39	46	11	96	831
05:45 PM	13	89	58	160	96	169	16	281	23	188	66	277	32	58	17	107	825
Total	49	459	247	755	442	682	76	1200	66	708	202	976	142	191	67	400	3331
Grand Total	103	889	467	1459	685	1089	113	1887	118	1334	465	1917	312	428	136	876	6139
Apprch %	7.1	60.9	32		36.3	57.7	6		6.2	69.6	24.3		35.6	48.9	15.5		
Total %	1.7	14.5	7.6	23.8	11.2	17.7	1.8	30.7	1.9	21.7	7.6	31.2	5.1	7	2.2	14.3	

	Sonora Avenue Southbound				Flower Street Westbound				Sonora Avenue Northbound				Flower Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	20	137	66	223	121	171	21	313	16	161	31	208	38	47	20	105	849
05:15 PM	8	96	57	161	122	168	20	310	15	192	56	263	33	40	19	92	826
05:30 PM	8	137	66	211	103	174	19	296	12	167	49	228	39	46	11	96	831
05:45 PM	13	89	58	160	96	169	16	281	23	188	66	277	32	58	17	107	825
Total Volume	49	459	247	755	442	682	76	1200	66	708	202	976	142	191	67	400	3331
% App. Total	6.5	60.8	32.7		36.8	56.8	6.3		6.8	72.5	20.7		35.5	47.8	16.8		
PHF	.613	.838	.936	.846	.906	.980	.905	.958	.717	.922	.765	.881	.910	.823	.838	.935	.981

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City of Glendale  
 N/S: Sonora Avenue  
 E/W: Flower Street  
 Weather: Clear

File Name : 07\_GDE\_Sonora\_Flower 9-19 PM  
 Site Code : 05719611  
 Start Date : 9/19/2019  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				05:00 PM				04:00 PM			
+0 mins.	7	106	51	164	121	171	<b>21</b>	<b>313</b>	16	161	31	208	40	58	19	117
+15 mins.	<b>21</b>	<b>137</b>	<b>74</b>	<b>232</b>	<b>122</b>	<b>168</b>	20	310	15	<b>192</b>	56	263	39	44	17	100
+30 mins.	16	93	45	154	103	<b>174</b>	19	296	12	167	49	228	<b>46</b>	<b>79</b>	<b>24</b>	<b>149</b>
+45 mins.	20	137	66	223	96	169	16	281	<b>23</b>	188	<b>66</b>	<b>277</b>	45	56	9	110
Total Volume	64	473	236	773	442	682	76	1200	66	708	202	976	170	237	69	476
% App. Total	8.3	61.2	30.5		36.8	56.8	6.3		6.8	72.5	20.7		35.7	49.8	14.5	
PHF	.762	.863	.797	.833	.906	.980	.905	.958	.717	.922	.765	.881	.924	.750	.719	.799

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City of Glendale  
 N/S: Rosedale Avenue  
 E/W: Glenoaks Boulevard  
 Weather: Clear

File Name : 03\_GDE\_Rosedale\_Genoaks AM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 1

Groups Printed- Total Volume

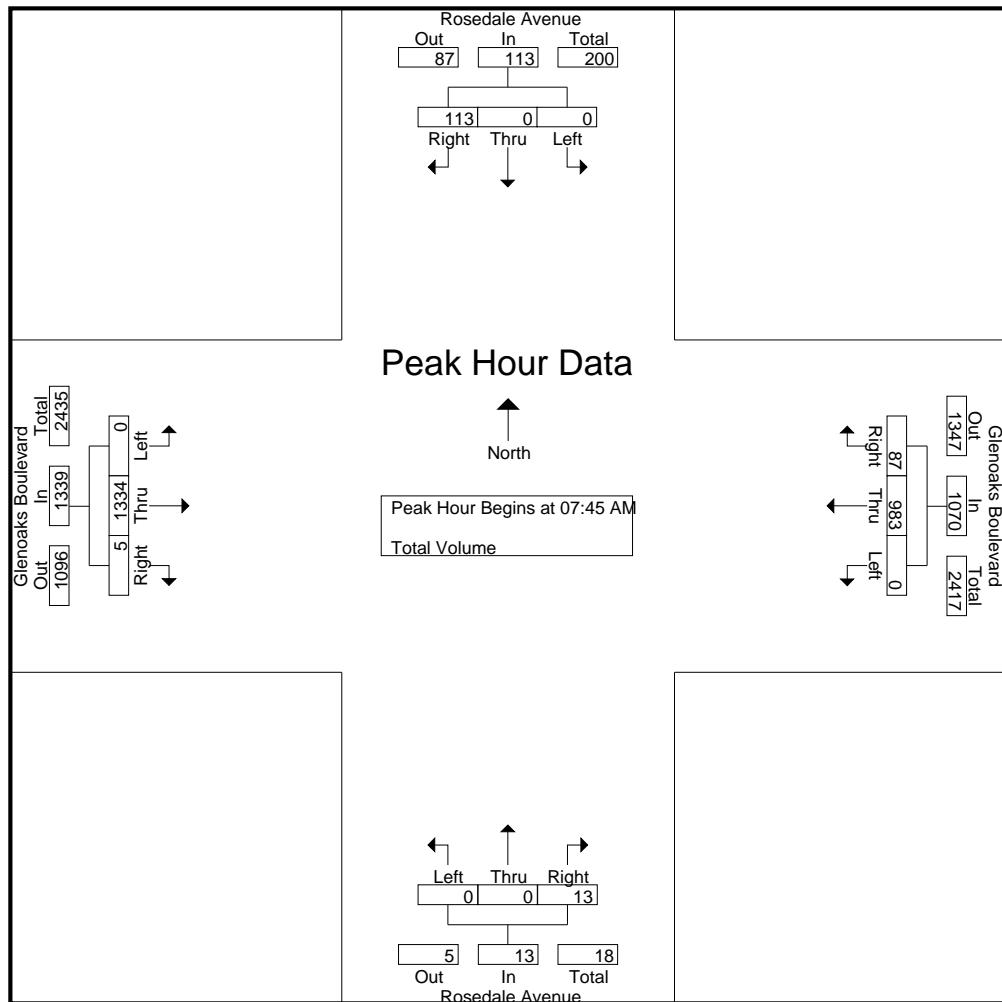
	Rosedale Avenue Southbound				Glenoaks Boulevard Westbound				Rosedale Avenue Northbound				Glenoaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	9	9	0	73	21	94	0	0	2	2	0	189	2	191	296
07:15 AM	0	0	11	11	0	131	23	154	0	0	3	3	0	245	0	245	413
07:30 AM	0	0	22	22	0	222	18	240	0	0	5	5	0	298	1	299	566
07:45 AM	0	0	35	35	0	313	25	338	0	0	3	3	0	338	1	339	715
Total	0	0	77	77	0	739	87	826	0	0	13	13	0	1070	4	1074	1990
08:00 AM	0	0	32	32	0	280	24	304	0	0	4	4	0	286	0	286	626
08:15 AM	0	0	25	25	0	193	20	213	0	0	4	4	0	368	3	371	613
08:30 AM	0	0	21	21	0	197	18	215	0	0	2	2	0	342	1	343	581
08:45 AM	0	0	21	21	0	307	19	326	0	0	7	7	0	296	5	301	655
Total	0	0	99	99	0	977	81	1058	0	0	17	17	0	1292	9	1301	2475
Grand Total	0	0	176	176	0	1716	168	1884	0	0	30	30	0	2362	13	2375	4465
Apprch %	0	0	100		0	91.1	8.9		0	0	100		0	99.5	0.5		
Total %	0	0	3.9	3.9	0	38.4	3.8	42.2	0	0	0.7	0.7	0	52.9	0.3	53.2	

	Rosedale Avenue Southbound				Glenoaks Boulevard Westbound				Rosedale Avenue Northbound				Glenoaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	35	35	0	313	25	338	0	0	3	3	0	338	1	339	715
08:00 AM	0	0	32	32	0	280	24	304	0	0	4	4	0	286	0	286	626
08:15 AM	0	0	25	25	0	193	20	213	0	0	4	4	0	368	3	371	613
08:30 AM	0	0	21	21	0	197	18	215	0	0	2	2	0	342	1	343	581
Total Volume	0	0	113	113	0	983	87	1070	0	0	13	13	0	1334	5	1339	2535
% App. Total	0	0	100		0	91.9	8.1		0	0	100		0	99.6	0.4		
PHF	.000	.000	.807	.807	.000	.785	.870	.791	.000	.000	.813	.813	.000	.906	.417	.902	.886

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City of Glendale  
 N/S: Rosedale Avenue  
 E/W: Glenoaks Boulevard  
 Weather: Clear

File Name : 03\_GDE\_Rosedale\_Glenoaks AM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				08:00 AM				07:45 AM			
+0 mins.	0	0	22	22	0	222	18	240	0	0	4	4	0	338	1	339
+15 mins.	0	0	35	35	0	313	25	338	0	0	4	4	0	286	0	286
+30 mins.	0	0	32	32	0	280	24	304	0	0	2	2	0	368	3	371
+45 mins.	0	0	25	25	0	193	20	213	0	0	7	7	0	342	1	343
Total Volume	0	0	114	114	0	1008	87	1095	0	0	17	17	0	1334	5	1339
% App. Total	0	0	100		0	92.1	7.9		0	0	100		0	99.6	0.4	
PHF	.000	.000	.814	.814	.000	.805	.870	.810	.000	.000	.607	.607	.000	.906	.417	.902

Counts Unlimited  
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City of Glendale  
 N/S: Rosedale Avenue  
 E/W: Glenoaks Boulevard  
 Weather: Clear

File Name : 03\_GDE\_Rosedale\_Genoaks PM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 1

Groups Printed- Total Volume

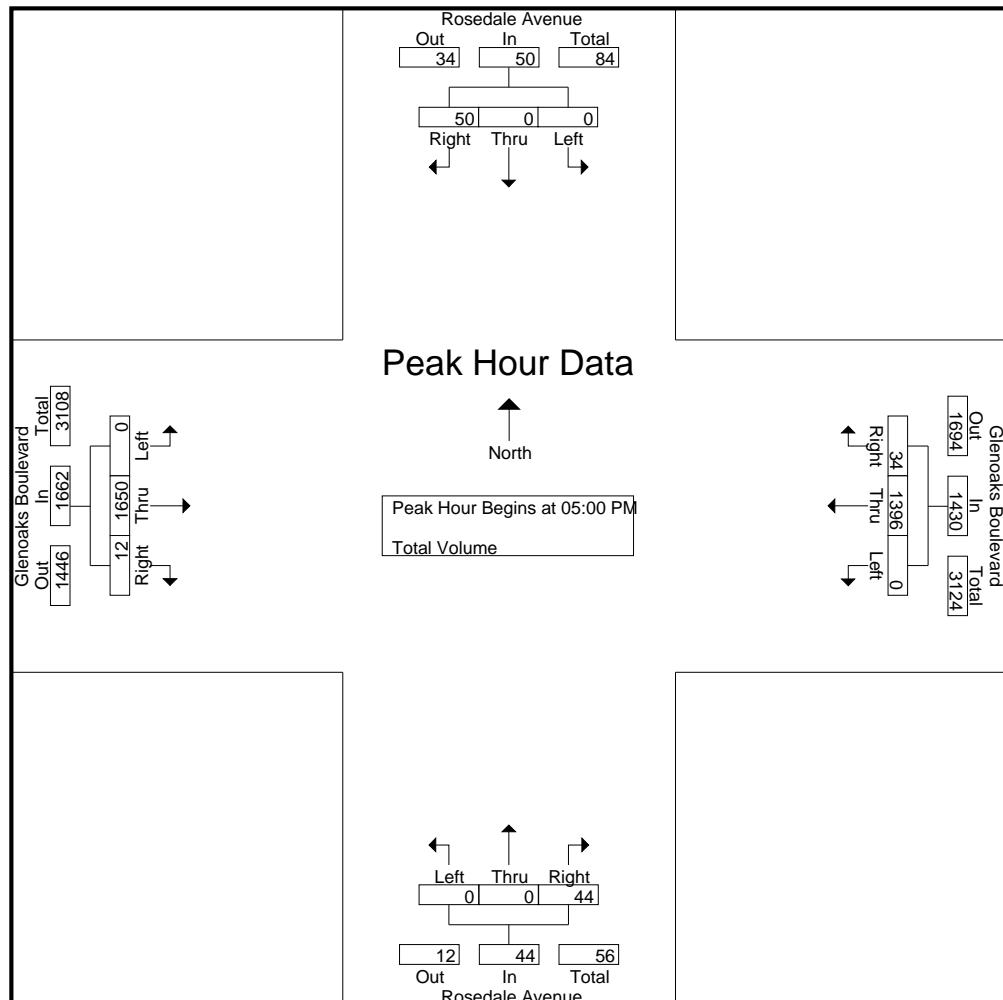
	Rosedale Avenue Southbound				Glenoaks Boulevard Westbound				Rosedale Avenue Northbound				Glenoaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	29	29	0	308	25	333	0	0	9	9	0	328	1	329	700
04:15 PM	0	0	23	23	0	264	23	287	0	0	9	9	0	380	2	382	701
04:30 PM	0	0	36	36	0	294	15	309	0	0	5	5	0	354	1	355	705
04:45 PM	0	0	35	35	0	346	9	355	0	0	10	10	0	370	4	374	774
Total	0	0	123	123	0	1212	72	1284	0	0	33	33	0	1432	8	1440	2880
05:00 PM	0	0	23	23	0	341	11	352	0	0	13	13	0	424	2	426	814
05:15 PM	0	0	14	14	0	345	3	348	0	0	11	11	0	428	0	428	801
05:30 PM	0	0	5	5	0	346	12	358	0	0	6	6	0	422	4	426	795
05:45 PM	0	0	8	8	0	364	8	372	0	0	14	14	0	376	6	382	776
Total	0	0	50	50	0	1396	34	1430	0	0	44	44	0	1650	12	1662	3186
Grand Total	0	0	173	173	0	2608	106	2714	0	0	77	77	0	3082	20	3102	6066
Apprch %	0	0	100		0	96.1	3.9		0	0	100		0	99.4	0.6		
Total %	0	0	2.9	2.9	0	43	1.7	44.7	0	0	1.3	1.3	0	50.8	0.3	51.1	

	Rosedale Avenue Southbound				Glenoaks Boulevard Westbound				Rosedale Avenue Northbound				Glenoaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	23	23	0	341	11	352	0	0	13	13	0	424	2	426	814
05:15 PM	0	0	14	14	0	345	3	348	0	0	11	11	0	428	0	428	801
05:30 PM	0	0	5	5	0	346	12	358	0	0	6	6	0	422	4	426	795
05:45 PM	0	0	8	8	0	364	8	372	0	0	14	14	0	376	6	382	776
Total Volume	0	0	50	50	0	1396	34	1430	0	0	44	44	0	1650	12	1662	3186
% App. Total	0	0	100		0	97.6	2.4		0	0	100		0	99.3	0.7		
PHF	.000	.000	.543	.543	.000	.959	.708	.961	.000	.000	.786	.786	.000	.964	.500	.971	.979

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City of Glendale  
 N/S: Rosedale Avenue  
 E/W: Glenoaks Boulevard  
 Weather: Clear

File Name : 03\_GDE\_Rosedale\_Glenoaks PM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM		05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	29	29	0	341	11	352	0	0	13	13	0	424
+15 mins.	0	0	23	23	0	345	3	348	0	0	11	11	0	428
+30 mins.	0	0	<b>36</b>	<b>36</b>	0	346	<b>12</b>	358	0	0	6	6	0	422
+45 mins.	0	0	35	35	0	<b>364</b>	8	<b>372</b>	0	0	<b>14</b>	<b>14</b>	0	376
Total Volume	0	0	123	123	0	1396	34	1430	0	0	44	44	0	1650
% App. Total	0	0	100	100	0	97.6	2.4	2.4	0	0	100	100	0	99.3
PHF	.000	.000	.854	.854	.000	.959	.708	.961	.000	.000	.786	.786	.000	.964
													.500	.971

Counts Unlimited  
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City of Glendale  
 N/S: Rosedale Avenue  
 E/W: San Fernando Road  
 Weather: Clear

File Name : 04\_GDE\_Rosedale\_San Fernando AM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 1

Groups Printed- Total Volume

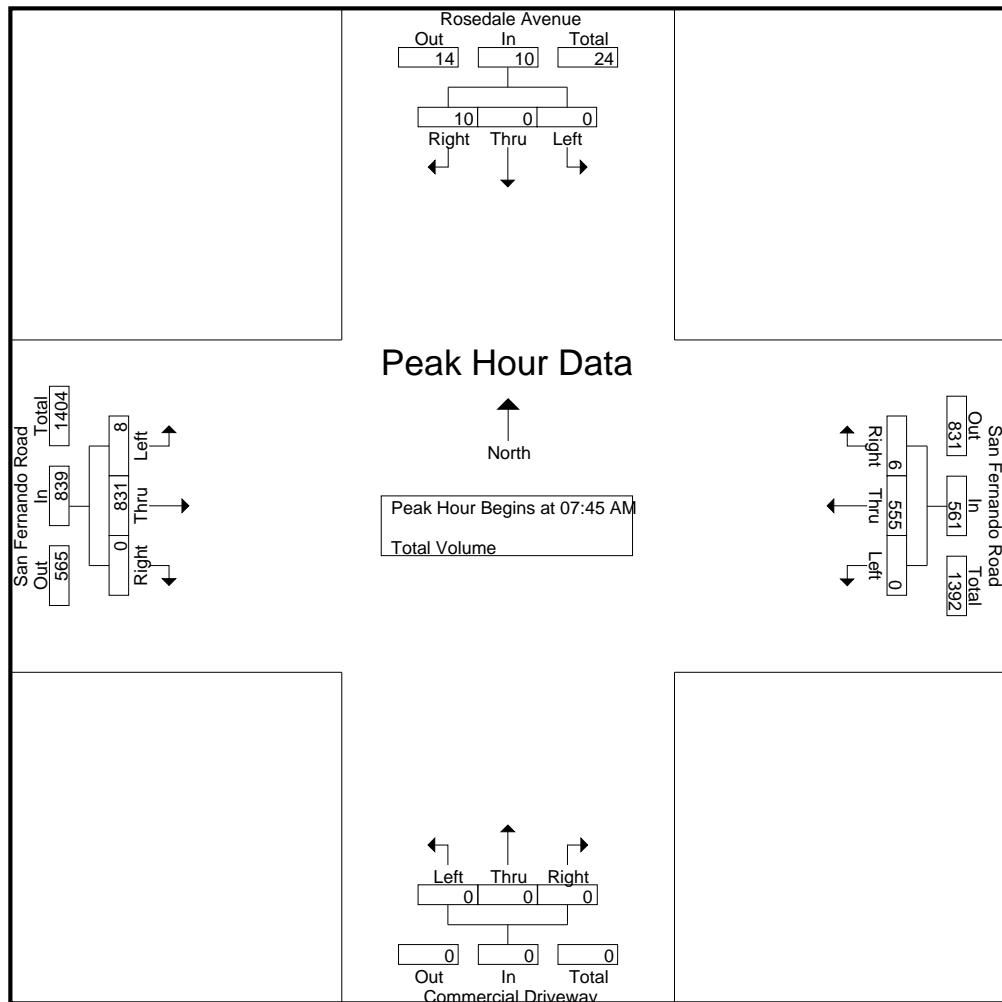
	Rosedale Avenue Southbound				San Fernando Road Westbound				Commercial Driveway Northbound				San Fernando Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	1	2	0	87	0	87	0	0	0	0	1	105	0	106	195
07:15 AM	0	0	2	2	0	95	0	95	0	0	0	0	0	158	0	158	255
07:30 AM	0	0	2	2	0	134	3	137	0	0	0	0	3	211	0	214	353
07:45 AM	0	0	2	2	0	135	1	136	0	0	0	0	1	212	0	213	351
Total	1	0	7	8	0	451	4	455	0	0	0	0	5	686	0	691	1154
08:00 AM	0	0	6	6	0	150	3	153	0	0	0	0	2	214	0	216	375
08:15 AM	0	0	0	0	0	143	0	143	0	0	0	0	2	184	0	186	329
08:30 AM	0	0	2	2	0	127	2	129	0	0	0	0	3	221	0	224	355
08:45 AM	2	0	3	5	0	130	6	136	0	0	0	0	0	210	0	210	351
Total	2	0	11	13	0	550	11	561	0	0	0	0	7	829	0	836	1410
Grand Total	3	0	18	21	0	1001	15	1016	0	0	0	0	12	1515	0	1527	2564
Apprch %	14.3	0	85.7		0	98.5	1.5		0	0	0	0	0.8	99.2	0		
Total %	0.1	0	0.7	0.8	0	39	0.6	39.6	0	0	0	0	0.5	59.1	0	59.6	

	Rosedale Avenue Southbound				San Fernando Road Westbound				Commercial Driveway Northbound				San Fernando Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	2	2	0	135	1	136	0	0	0	0	1	212	0	213	351
08:00 AM	0	0	6	6	0	150	3	153	0	0	0	0	2	214	0	216	375
08:15 AM	0	0	0	0	0	143	0	143	0	0	0	0	2	184	0	186	329
08:30 AM	0	0	2	2	0	127	2	129	0	0	0	0	3	221	0	224	355
Total Volume	0	0	10	10	0	555	6	561	0	0	0	0	8	831	0	839	1410
% App. Total	0	0	100		0	98.9	1.1		0	0	0	0	1	99	0		
PHF	.000	.000	.417	.417	.000	.925	.500	.917	.000	.000	.000	.000	.667	.940	.000	.936	.940

Counts Unlimited  
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City of Glendale  
 N/S: Rosedale Avenue  
 E/W: San Fernando Road  
 Weather: Clear

File Name : 04\_GDE\_Rosedale\_San Fernando AM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM	07:30 AM	07:00 AM	07:45 AM
+0 mins.	0 0 6 6	0 134 3 137	0 0 0 0	1 212 0 213
+15 mins.	0 0 0 0	0 135 1 136	0 0 0 0	2 214 0 216
+30 mins.	0 0 2 2	0 150 3 153	0 0 0 0	2 184 0 186
+45 mins.	2 0 3 5	0 143 0 143	0 0 0 0	3 221 0 224
Total Volume	2 0 11 13	0 562 7 569	0 0 0 0	8 831 0 839
% App. Total	15.4 0 84.6	0 98.8 1.2	0 0 0 0	1 99 0 0
PHF	.250 .000 .458 .542	.000 .937 .583 .930	.000 .000 .000 .000	.667 .940 .000 .936

Counts Unlimited  
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City of Glendale  
 N/S: Rosedale Avenue  
 E/W: San Fernando Road  
 Weather: Clear

File Name : 04\_GDE\_Rosedale\_San Fernando PM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 1

Groups Printed- Total Volume

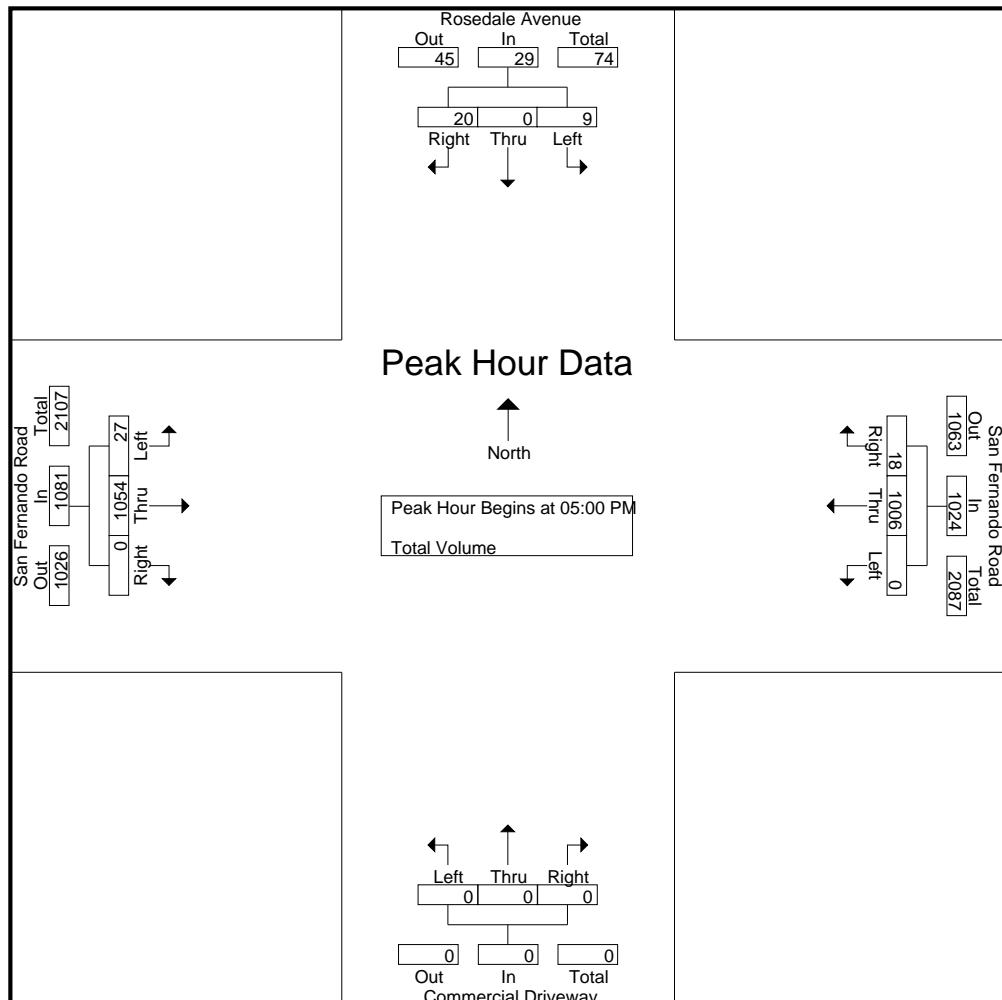
	Rosedale Avenue Southbound				San Fernando Road Westbound				Commercial Driveway Northbound				San Fernando Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	5	5	0	222	1	223	0	0	0	0	6	230	0	236	464
04:15 PM	0	0	6	6	0	267	4	271	0	0	0	0	3	216	0	219	496
04:30 PM	1	0	3	4	0	211	3	214	0	0	0	0	5	265	0	270	488
04:45 PM	1	0	3	4	0	207	2	209	0	0	0	0	5	250	0	255	468
Total	2	0	17	19	0	907	10	917	0	0	0	0	19	961	0	980	1916
05:00 PM	1	0	7	8	0	269	8	277	0	0	0	0	5	269	0	274	559
05:15 PM	3	0	2	5	0	220	3	223	0	0	0	0	7	259	0	266	494
05:30 PM	3	0	4	7	0	260	4	264	0	0	0	0	6	273	0	279	550
05:45 PM	2	0	7	9	0	257	3	260	0	0	0	0	9	253	0	262	531
Total	9	0	20	29	0	1006	18	1024	0	0	0	0	27	1054	0	1081	2134
Grand Total	11	0	37	48	0	1913	28	1941	0	0	0	0	46	2015	0	2061	4050
Apprch %	22.9	0	77.1		0	98.6	1.4		0	0	0	0	2.2	97.8	0		
Total %	0.3	0	0.9	1.2	0	47.2	0.7	47.9	0	0	0	0	1.1	49.8	0	50.9	

	Rosedale Avenue Southbound				San Fernando Road Westbound				Commercial Driveway Northbound				San Fernando Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	1	0	7	8	0	269	8	277	0	0	0	0	5	269	0	274	559
05:15 PM	3	0	2	5	0	220	3	223	0	0	0	0	7	259	0	266	494
05:30 PM	3	0	4	7	0	260	4	264	0	0	0	0	6	273	0	279	550
05:45 PM	2	0	7	9	0	257	3	260	0	0	0	0	9	253	0	262	531
Total Volume	9	0	20	29	0	1006	18	1024	0	0	0	0	27	1054	0	1081	2134
% App. Total	31	0	69		0	98.2	1.8		0	0	0	0	2.5	97.5	0		
PHF	.750	.000	.714	.806	.000	.935	.563	.924	.000	.000	.000	.000	.750	.965	.000	.969	.954

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City of Glendale  
 N/S: Rosedale Avenue  
 E/W: San Fernando Road  
 Weather: Clear

File Name : 04\_GDE\_Rosedale\_San Fernando PM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				04:00 PM				05:00 PM			
+0 mins.	1	0	7	8	0	<b>269</b>	<b>8</b>	<b>277</b>	0	0	0	0	5	269	0	274
+15 mins.	<b>3</b>	0	2	5	0	220	3	223	0	0	0	0	7	259	0	266
+30 mins.	3	0	4	7	0	260	4	264	0	0	0	0	6	<b>273</b>	0	<b>279</b>
+45 mins.	2	0	7	<b>9</b>	0	257	3	260	0	0	0	0	<b>9</b>	253	0	262
Total Volume	9	0	20	29	0	1006	18	1024	0	0	0	0	27	1054	0	1081
% App. Total	31	0	69		0	98.2	1.8		0	0	0	0	2.5	97.5	0	
PHF	.750	.000	.714	.806	.000	.935	.563	.924	.000	.000	.000	.000	.750	.965	.000	.969

Counts Unlimited  
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City of Glendale  
 N/S: Grandview Avenue  
 E/W: Glenoaks Boulevard  
 Weather: Clear

File Name : 05\_GDE\_Grandview\_Genoaks AM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 1

Groups Printed- Total Volume

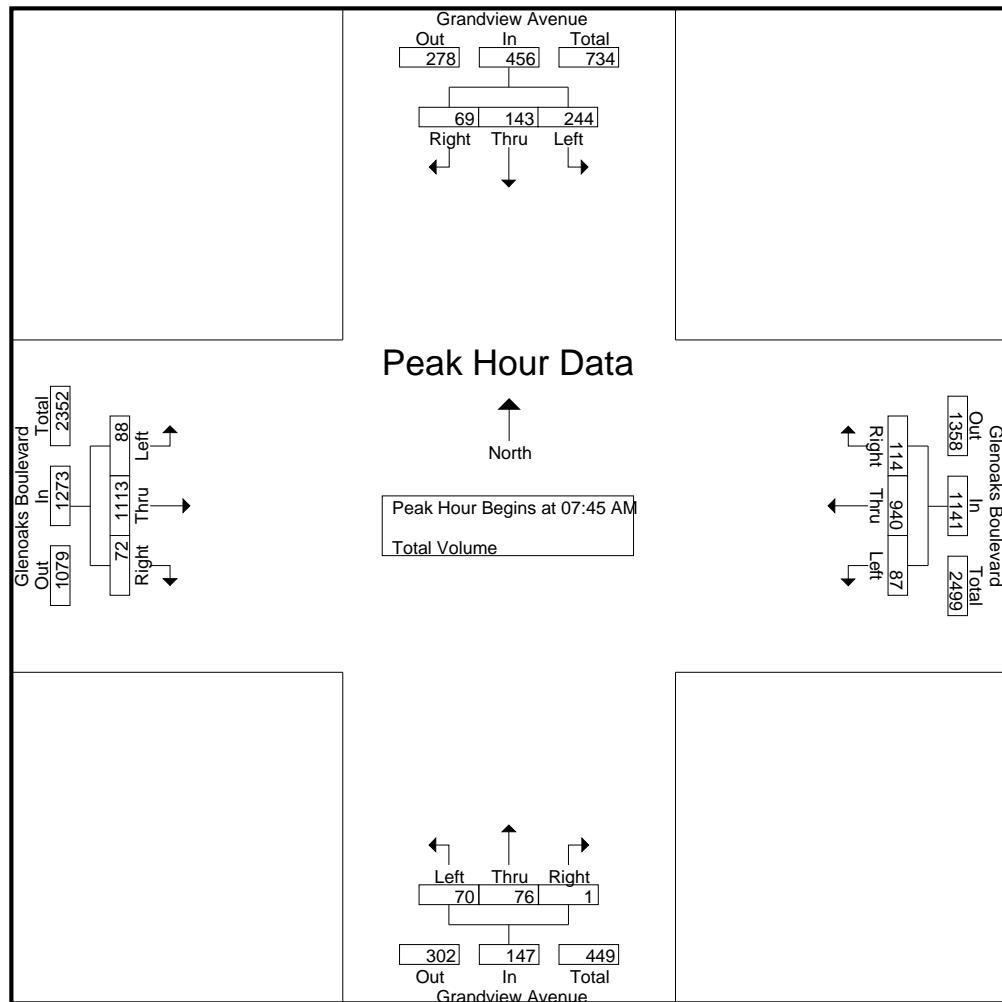
	Grandview Avenue Southbound				Glenoaks Boulevard Westbound				Grandview Avenue Northbound				Glenoaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	24	25	6	55	16	94	12	122	12	11	3	26	9	153	17	179	382
07:15 AM	55	31	5	91	7	138	15	160	10	14	1	25	8	217	15	240	516
07:30 AM	62	24	14	100	10	202	16	228	23	16	1	40	31	250	15	296	664
07:45 AM	59	35	15	109	22	336	40	398	15	16	0	31	34	265	13	312	850
Total	200	115	40	355	55	770	83	908	60	57	5	122	82	885	60	1027	2412
08:00 AM	71	33	19	123	26	252	33	311	20	24	0	44	19	253	17	289	767
08:15 AM	60	38	15	113	15	176	17	208	19	16	0	35	20	309	22	351	707
08:30 AM	54	37	20	111	24	176	24	224	16	20	1	37	15	286	20	321	693
08:45 AM	48	29	22	99	23	266	15	304	19	15	5	39	17	259	21	297	739
Total	233	137	76	446	88	870	89	1047	74	75	6	155	71	1107	80	1258	2906
Grand Total	433	252	116	801	143	1640	172	1955	134	132	11	277	153	1992	140	2285	5318
Apprch %	54.1	31.5	14.5		7.3	83.9	8.8		48.4	47.7	4		6.7	87.2	6.1		
Total %	8.1	4.7	2.2	15.1	2.7	30.8	3.2	36.8	2.5	2.5	0.2	5.2	2.9	37.5	2.6	43	

	Grandview Avenue Southbound				Glenoaks Boulevard Westbound				Grandview Avenue Northbound				Glenoaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	59	35	15	109	22	336	40	398	15	16	0	31	34	265	13	312	850
08:00 AM	71	33	19	123	26	252	33	311	20	24	0	44	19	253	17	289	767
08:15 AM	60	38	15	113	15	176	17	208	19	16	0	35	20	309	22	351	707
08:30 AM	54	37	20	111	24	176	24	224	16	20	1	37	15	286	20	321	693
Total Volume	244	143	69	456	87	940	114	1141	70	76	1	147	88	1113	72	1273	3017
% App. Total	53.5	31.4	15.1		7.6	82.4	10		47.6	51.7	0.7		6.9	87.4	5.7		
PHF	.859	.941	.863	.927	.837	.699	.713	.717	.875	.792	.250	.835	.647	.900	.818	.907	.887

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City of Glendale  
N/S: Grandview Avenue  
E/W: Glenoaks Boulevard  
Weather: Clear

File Name : 05\_GDE\_Grandview\_Glenoaks AM  
Site Code : 05719611  
Start Date : 9/12/2019  
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				07:30 AM				08:00 AM				07:45 AM			
+0 mins.	59	35	15	109	10	202	16	228	20	24	0	44	34	265	13	312
+15 mins.	71	33	19	123	22	336	40	398	19	16	0	35	19	253	17	289
+30 mins.	60	38	15	113	26	252	33	311	16	20	1	37	20	309	22	351
+45 mins.	54	37	20	111	15	176	17	208	19	15	5	39	15	286	20	321
Total Volume	244	143	69	456	73	966	106	1145	74	75	6	155	88	1113	72	1273
% App. Total	53.5	31.4	15.1		6.4	84.4	9.3		47.7	48.4	3.9		6.9	87.4	5.7	
PHF	.859	.941	.863	.927	.702	.719	.663	.719	.925	.781	.300	.881	.647	.900	.818	.907

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City of Glendale  
 N/S: Grandview Avenue  
 E/W: Glenoaks Boulevard  
 Weather: Clear

File Name : 05\_GDE\_Grandview\_Glenoaks PM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 1

Groups Printed- Total Volume

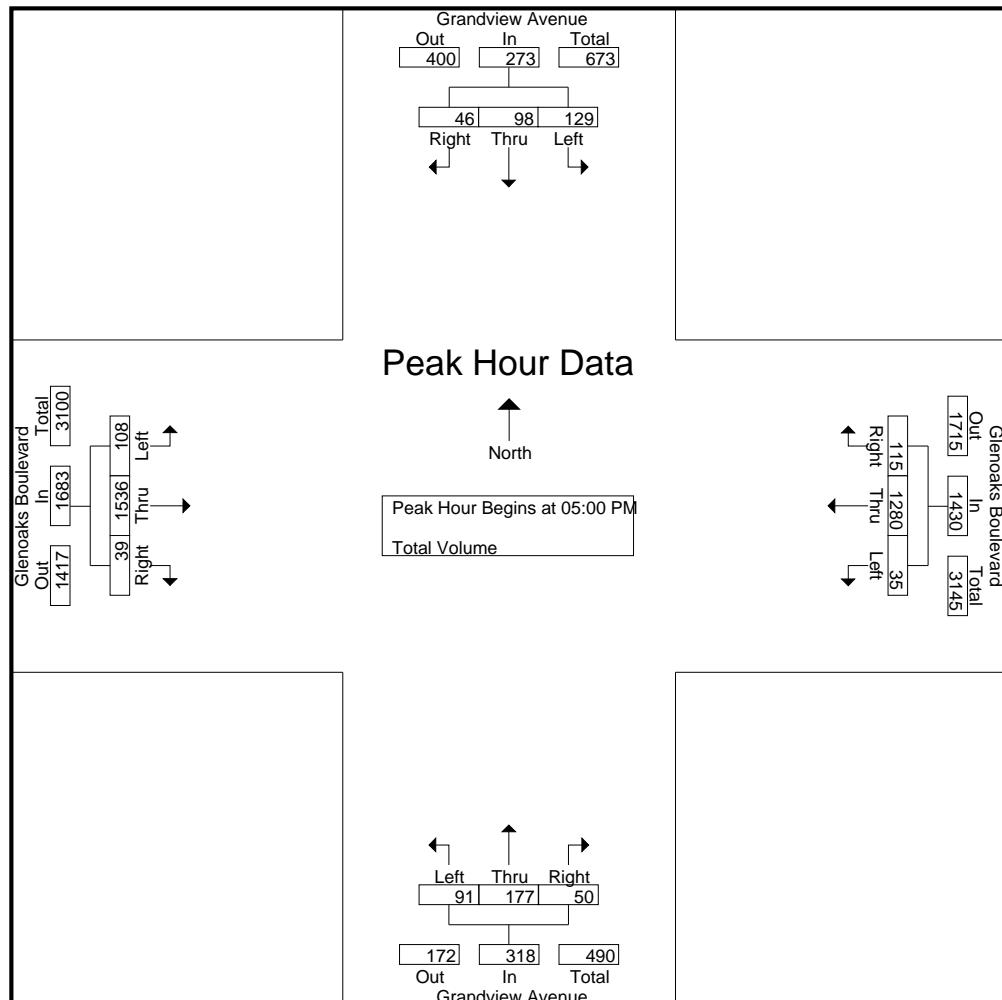
	Grandview Avenue Southbound				Glenoaks Boulevard Westbound				Grandview Avenue Northbound				Glenoaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	34	16	15	65	10	278	29	317	27	24	5	56	24	301	13	338	776
04:15 PM	49	18	12	79	13	243	32	288	28	36	3	67	12	330	19	361	795
04:30 PM	42	23	12	77	10	277	25	312	19	29	11	59	22	342	6	370	818
04:45 PM	32	13	10	55	10	303	22	335	27	33	7	67	23	349	10	382	839
Total	157	70	49	276	43	1101	108	1252	101	122	26	249	81	1322	48	1451	3228
05:00 PM	35	28	18	81	9	292	25	326	29	46	21	96	21	367	13	401	904
05:15 PM	32	28	11	71	9	313	29	351	18	38	6	62	29	386	7	422	906
05:30 PM	35	22	9	66	9	326	30	365	19	44	13	76	36	393	8	437	944
05:45 PM	27	20	8	55	8	349	31	388	25	49	10	84	22	390	11	423	950
Total	129	98	46	273	35	1280	115	1430	91	177	50	318	108	1536	39	1683	3704
Grand Total	286	168	95	549	78	2381	223	2682	192	299	76	567	189	2858	87	3134	6932
Apprch %	52.1	30.6	17.3		2.9	88.8	8.3		33.9	52.7	13.4		6	91.2	2.8		
Total %	4.1	2.4	1.4	7.9	1.1	34.3	3.2	38.7	2.8	4.3	1.1	8.2	2.7	41.2	1.3	45.2	

	Grandview Avenue Southbound				Glenoaks Boulevard Westbound				Grandview Avenue Northbound				Glenoaks Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	35	28	18	81	9	292	25	326	29	46	21	96	21	367	13	401	904
05:15 PM	32	28	11	71	9	313	29	351	18	38	6	62	29	386	7	422	906
05:30 PM	35	22	9	66	9	326	30	365	19	44	13	76	36	393	8	437	944
05:45 PM	27	20	8	55	8	349	31	388	25	49	10	84	22	390	11	423	950
Total Volume	129	98	46	273	35	1280	115	1430	91	177	50	318	108	1536	39	1683	3704
% App. Total	47.3	35.9	16.8		2.4	89.5	8		28.6	55.7	15.7		6.4	91.3	2.3		
PHF	.921	.875	.639	.843	.972	.917	.927	.921	.784	.903	.595	.828	.750	.977	.750	.963	.975

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City of Glendale  
 N/S: Grandview Avenue  
 E/W: Glenoaks Boulevard  
 Weather: Clear

File Name : 05\_GDE\_Grandview\_Genoaks PM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	49	18	12	79	9	292	25	326	29	46	21	96	21	367	13	401
+15 mins.	42	23	12	77	9	313	29	351	18	38	6	62	29	386	7	422
+30 mins.	32	13	10	55	9	326	30	365	19	44	13	76	36	393	8	437
+45 mins.	35	28	18	81	8	349	31	388	25	49	10	84	22	390	11	423
Total Volume	158	82	52	292	35	1280	115	1430	91	177	50	318	108	1536	39	1683
% App. Total	54.1	28.1	17.8		2.4	89.5	8		28.6	55.7	15.7		6.4	91.3	2.3	
PHF	.806	.732	.722	.901	.972	.917	.927	.921	.784	.903	.595	.828	.750	.977	.750	.963

Counts Unlimited  
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City of Glendale  
 N/S: Grandview Avenue  
 E/W: San Fernando Road  
 Weather: Clear

File Name : 06\_GDE\_Grandview\_San Fernando AM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 1

Groups Printed- Total Volume

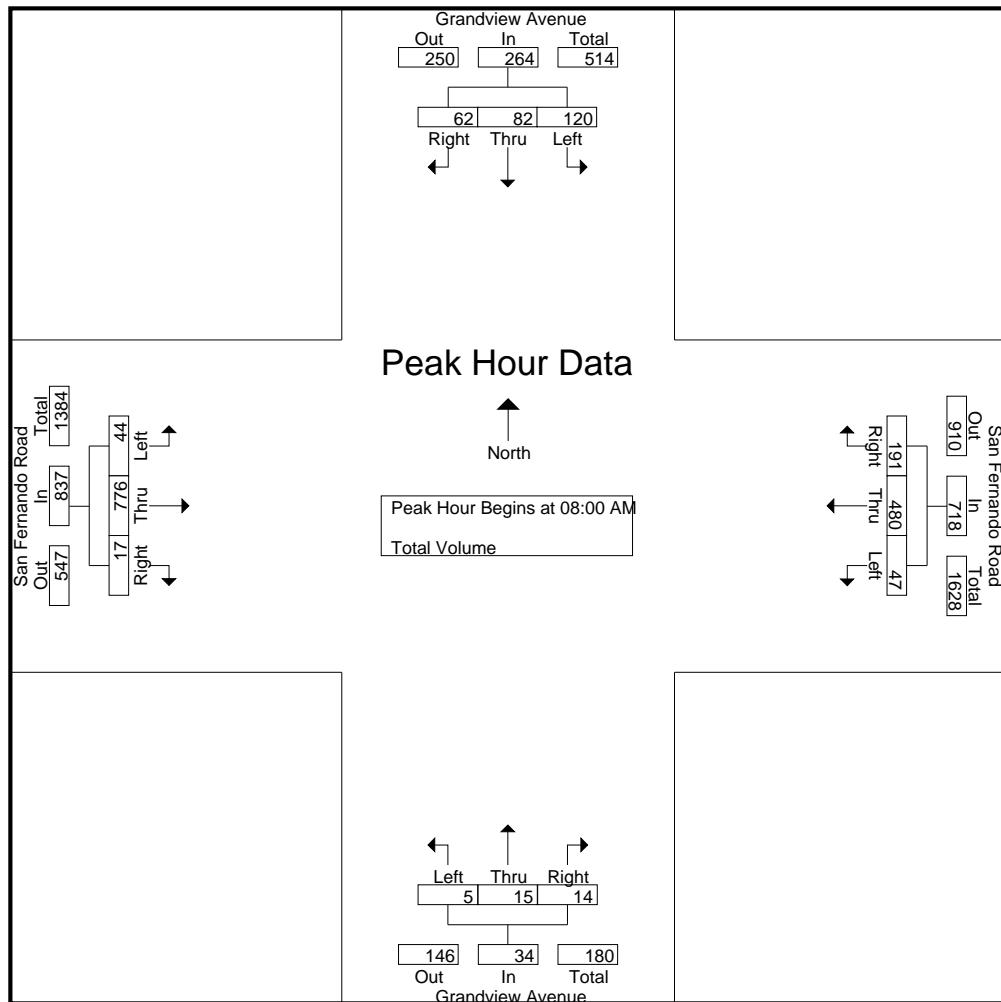
	Grandview Avenue Southbound				San Fernando Road Westbound				Grandview Avenue Northbound				San Fernando Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	20	9	17	46	9	68	28	105	0	0	3	3	2	107	0	109	263
07:15 AM	37	8	12	57	8	79	29	116	1	3	3	7	5	149	1	155	335
07:30 AM	25	9	12	46	7	119	36	162	0	5	3	8	7	210	2	219	435
07:45 AM	33	10	12	55	5	124	31	160	0	2	3	5	9	183	1	193	413
Total	115	36	53	204	29	390	124	543	1	10	12	23	23	649	4	676	1446
08:00 AM	32	14	18	64	5	130	54	189	0	3	3	6	12	201	2	215	474
08:15 AM	43	14	13	70	14	120	44	178	0	0	4	4	7	179	5	191	443
08:30 AM	24	17	13	54	12	109	44	165	2	5	3	10	15	193	4	212	441
08:45 AM	21	37	18	76	16	121	49	186	3	7	4	14	10	203	6	219	495
Total	120	82	62	264	47	480	191	718	5	15	14	34	44	776	17	837	1853
Grand Total	235	118	115	468	76	870	315	1261	6	25	26	57	67	1425	21	1513	3299
Apprch %	50.2	25.2	24.6		6	69	25		10.5	43.9	45.6		4.4	94.2	1.4		
Total %	7.1	3.6	3.5	14.2	2.3	26.4	9.5	38.2	0.2	0.8	0.8	1.7	2	43.2	0.6	45.9	

	Grandview Avenue Southbound				San Fernando Road Westbound				Grandview Avenue Northbound				San Fernando Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	32	14	<b>18</b>	64	5	<b>130</b>	<b>54</b>	<b>189</b>	0	3	3	6	12	201	2	215	474
08:15 AM	<b>43</b>	14	13	70	14	120	44	178	0	0	4	4	7	179	5	191	443
08:30 AM	24	17	13	54	12	109	44	165	2	5	3	10	<b>15</b>	193	4	212	441
08:45 AM	21	<b>37</b>	18	<b>76</b>	<b>16</b>	121	49	186	<b>3</b>	<b>7</b>	<b>4</b>	<b>14</b>	10	<b>203</b>	<b>6</b>	<b>219</b>	<b>495</b>
Total Volume	120	82	62	264	47	480	191	718	5	15	14	34	44	776	17	837	1853
% App. Total	45.5	31.1	23.5		6.5	66.9	26.6		14.7	44.1	41.2		5.3	92.7	2		
PHF	.698	.554	.861	.868	.734	.923	.884	.950	.417	.536	.875	.607	.733	.956	.708	.955	.936

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City of Glendale  
 N/S: Grandview Avenue  
 E/W: San Fernando Road  
 Weather: Clear

File Name : 06\_GDE\_Grandview\_San Fernando AM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	32	14	<b>18</b>	64	5	<b>130</b>	<b>54</b>	<b>189</b>	0	3	3	6	12	201	2	215
+15 mins.	<b>43</b>	14	13	70	14	120	44	178	0	0	<b>4</b>	4	7	179	5	191
+30 mins.	24	17	13	54	12	109	44	165	2	5	3	10	<b>15</b>	193	4	212
+45 mins.	21	<b>37</b>	18	<b>76</b>	<b>16</b>	121	49	186	<b>3</b>	<b>7</b>	4	<b>14</b>	10	<b>203</b>	<b>6</b>	<b>219</b>
Total Volume	120	82	62	264	47	480	191	718	5	15	14	34	44	776	17	837
% App. Total	45.5	31.1	23.5		6.5	66.9	26.6		14.7	44.1	41.2		5.3	92.7	2	
PHF	.698	.554	.861	.868	.734	.923	.884	.950	.417	.536	.875	.607	.733	.956	.708	.955

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City of Glendale  
 N/S: Grandview Avenue  
 E/W: San Fernando Road  
 Weather: Clear

File Name : 06\_GDE\_Grandview\_San Fernando PM  
 Site Code : 05719611  
 Start Date : 9/12/2019  
 Page No : 1

Groups Printed- Total Volume

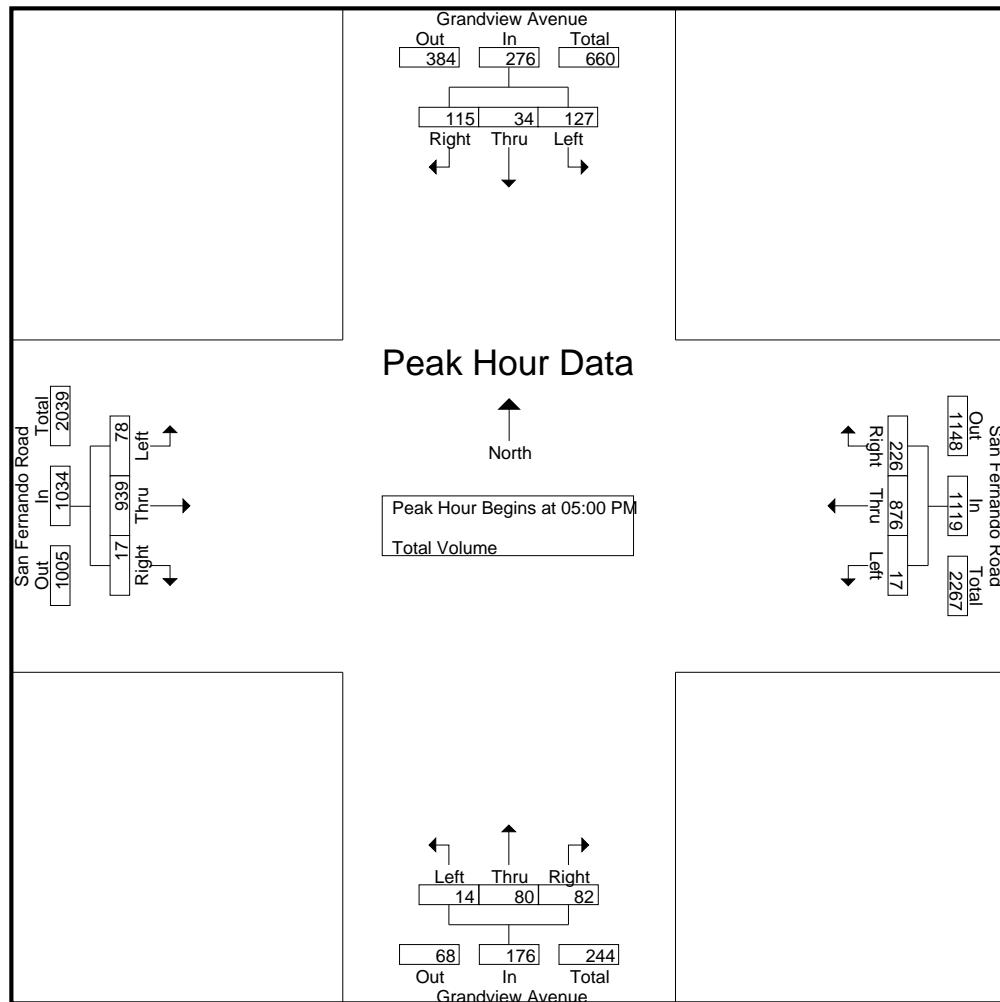
	Grandview Avenue Southbound				San Fernando Road Westbound				Grandview Avenue Northbound				San Fernando Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	22	7	23	52	3	194	47	244	2	4	8	14	10	192	4	206	516
04:15 PM	29	1	28	58	7	230	46	283	0	4	2	6	18	202	2	222	569
04:30 PM	21	6	26	53	5	179	41	225	5	11	32	48	19	237	6	262	588
04:45 PM	25	3	22	50	5	198	50	253	1	18	24	43	13	215	4	232	578
Total	97	17	99	213	20	801	184	1005	8	37	66	111	60	846	16	922	2251
05:00 PM	40	8	29	77	5	236	51	292	2	14	19	35	18	250	1	269	673
05:15 PM	36	9	30	75	4	204	57	265	4	23	25	52	16	233	9	258	650
05:30 PM	26	9	29	64	4	205	54	263	3	26	26	55	19	239	4	262	644
05:45 PM	25	8	27	60	4	231	64	299	5	17	12	34	25	217	3	245	638
Total	127	34	115	276	17	876	226	1119	14	80	82	176	78	939	17	1034	2605
Grand Total	224	51	214	489	37	1677	410	2124	22	117	148	287	138	1785	33	1956	4856
Apprch %	45.8	10.4	43.8		1.7	79	19.3		7.7	40.8	51.6		7.1	91.3	1.7		
Total %	4.6	1.1	4.4	10.1	0.8	34.5	8.4	43.7	0.5	2.4	3	5.9	2.8	36.8	0.7	40.3	

	Grandview Avenue Southbound				San Fernando Road Westbound				Grandview Avenue Northbound				San Fernando Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	40	8	29	77	5	236	51	292	2	14	19	35	18	250	1	269	673
05:15 PM	36	9	30	75	4	204	57	265	4	23	25	52	16	233	9	258	650
05:30 PM	26	9	29	64	4	205	54	263	3	26	26	55	19	239	4	262	644
05:45 PM	25	8	27	60	4	231	64	299	5	17	12	34	25	217	3	245	638
Total Volume	127	34	115	276	17	876	226	1119	14	80	82	176	78	939	17	1034	2605
% App. Total	46	12.3	41.7		1.5	78.3	20.2		8	45.5	46.6		7.5	90.8	1.6		
PHF	.794	.944	.958	.896	.850	.928	.883	.936	.700	.769	.788	.800	.780	.939	.472	.961	.968

Counts Unlimited  
PO Box 1178  
Corona, CA 92878  
(951) 268-6268

City of Glendale  
N/S: Grandview Avenue  
E/W: San Fernando Road  
Weather: Clear

File Name : 06\_GDE\_Grandview\_San Fernando PM  
Site Code : 05719611  
Start Date : 9/12/2019  
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				04:45 PM				05:00 PM			
+0 mins.	40	8	29	77	5	236	51	292	1	18	24	43	18	250	1	<b>269</b>
+15 mins.	36	9	30	75	4	204	57	265	2	14	19	35	16	233	<b>9</b>	258
+30 mins.	26	9	29	64	4	205	54	263	<b>4</b>	23	25	52	19	239	4	262
+45 mins.	25	8	27	60	4	231	<b>64</b>	299	3	<b>26</b>	<b>55</b>	<b>25</b>	217	3	245	
Total Volume	127	34	115	276	17	876	226	1119	10	81	94	185	78	939	17	1034
% App. Total	46	12.3	41.7		1.5	78.3	20.2		5.4	43.8	50.8		7.5	90.8	1.6	
PHF	.794	.944	.958	.896	.850	.928	.883	.936	.625	.779	.904	.841	.780	.939	.472	.961

# Counts Unlimited, Inc.

City of Glendale  
Rosedale Avenue  
B/ Glenoaks Boulevard - San Fernando Road  
24 Hour Directional Volume Count

PO Box 1178  
Corona, CA 92878  
Phone: (951) 268-6268  
email: counts@countsunlimited.com

Page 1

GDE001  
Site Code: 057-19611

Start Time	12-Sep-19 Thu	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	3			1	2				
12:15		0	10			0	3				
12:30		0	11			0	1				
12:45		0	6	0	30	0	3	1	9	1	39
01:00		0	8			0	2				
01:15		0	4			1	3				
01:30		0	7			0	2				
01:45		2	5	2	24	0	2	1	9	3	33
02:00		0	5			1	1				
02:15		0	14			1	3				
02:30		0	6			0	2				
02:45		1	5	1	30	0	2	2	8	3	38
03:00		0	5			0	4				
03:15		0	6			0	0				
03:30		0	7			0	0				
03:45		0	5	0	23	0	2	0	6	0	29
04:00		0	9			0	1				
04:15		0	9			0	2				
04:30		0	5			0	1				
04:45		0	10	0	33	0	4	0	8	0	41
05:00		0	13			0	2				
05:15		0	11			0	0				
05:30		1	6			0	4				
05:45		0	14	1	44	1	6	1	12	2	56
06:00		0	8			0	4				
06:15		1	12			1	4				
06:30		2	6			0	1				
06:45		0	7	3	33	1	2	2	11	5	44
07:00		2	9			2	2				
07:15		3	6			0	3				
07:30		5	3			1	0				
07:45		3	5	13	23	1	0	4	5	17	28
08:00		4	5			0	4				
08:15		4	5			3	2				
08:30		2	3			1	3				
08:45		7	2	17	15	5	2	9	11	26	26
09:00		5	2			1	2				
09:15		3	2			3	1				
09:30		7	3			4	0				
09:45		3	1	18	8	1	0	9	3	27	11
10:00		4	1			4	0				
10:15		3	0			4	0				
10:30		5	0			2	0				
10:45		2	2	14	3	2	1	12	1	26	4
11:00		9	1			3	0				
11:15		3	0			3	0				
11:30		6	0			4	0				
11:45		6	2	24	3	2	2	12	2	36	5
Total Combined Total		93	269	93	269	53	85	53	85	146	354
AM Peak Vol.	-	11:00	-	-	-	08:45	-	-	-	-	-
P.H.F.	-	24	-	-	-	13	-	-	-	-	-
		0.667				0.650					
PM Peak Vol.	-	-	05:00	-	-	-	05:30	-	-	-	-
P.H.F.	-	-	44	-	-	-	18	-	-	-	-
		0.786				0.750					
Percentage		25.7%	74.3%			38.4%	61.6%				
ADT/AADT		ADT 500		AADT 500							

## **APPENDIX B**

### **ICU AND LEVELS OF SERVICE EXPLANATION ICU DATA WORKSHEETS – WEEKDAY AM AND PM PEAK HOURS**

## **INTERSECTION CAPACITY UTILIZATION (ICU) DESCRIPTION**

Level of Service is a term used to describe prevailing conditions and their effect on traffic. Broadly interpreted, the Levels of Service concept denotes any one of a number of differing combinations of operating conditions which may occur as a roadway is accommodating various traffic volumes. Level of Service is a qualitative measure of the effect of such factors as travel speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience.

Six Levels of Service, A through F, have been defined in the 1965 *Highway Capacity Manual*, published by the Transportation Research Board. Level of Service A describes a condition of free flow, with low traffic volumes and relatively high speeds, while Level of Service F describes forced traffic flow at low speeds with jammed conditions and queues which cannot clear during the green phases.

The Intersection Capacity Utilization (ICU) method of intersection capacity analysis has been used in our studies. It directly relates traffic demand and available capacity for key intersection movements, regardless of present signal timing. The capacity per hour of green time for each approach is calculated based on the methods of the *Highway Capacity Manual*. The proportion of total signal time needed by each key movement is determined and compared to the total time available (100 percent of the hour). The result of summing the requirements of the conflicting key movements plus an allowance for clearance times is expressed as a decimal fraction. Conflicting key traffic movements are those opposing movements whose combined green time requirements are greatest.

The resulting ICU represents the proportion of the total hour required to accommodate intersection demand volumes if the key conflicting traffic movements are operating at capacity. Other movements may be operating near capacity, or may be operating at significantly better levels. The ICU may be translated to a Level of Service as tabulated below.

The Levels of Service (abbreviated from the *Highway Capacity Manual*) are listed here with their corresponding ICU and Load Factor equivalents. Load Factor is that proportion of the signal cycles during the peak hour which are fully loaded; i.e. when all of the vehicles waiting at the beginning of green are not able to clear on that green phase.

Intersection Capacity Utilization Characteristics		
Level of Service	Load Factor	Equivalent ICU
A	0.0	0.00 - 0.60
B	0.0 - 0.1	0.61 - 0.70
C	0.1 - 0.3	0.71 - 0.80
D	0.3 - 0.7	0.81 - 0.90
E	0.7 - 1.0	0.91 - 1.00
F	Not Applicable	Not Applicable

### **SERVICE LEVEL A**

There are no loaded cycles and few are even close to loaded at this service level. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.

### **SERVICE LEVEL B**

This level represents stable operation where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.

### **SERVICE LEVEL C**

At this level stable operation continues. Loading is still intermittent but more frequent than at Level B. Occasionally drivers may have to wait through more than one red signal indication and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.

### **SERVICE LEVEL D**

This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak hour, but enough cycles with lower demand occur to permit periodic clearance of queues, thus preventing excessive backups. Drivers frequently have to wait through more than one red signal. This level is the lower limit of acceptable operation to most drivers.

### **SERVICE LEVEL E**

This represents near capacity and capacity operation. At capacity (ICU = 1.0) it represents the most vehicles that the particular intersection can accommodate. However, full utilization of every signal cycle is seldom attained no matter how great the demand. At this level all drivers wait through more than one red signal, and frequently through several.

### **SERVICE LEVEL F**

Jammed conditions. Traffic backed up from a downstream location on one of the street restricts or prevents movement of traffic through the intersection under consideration.

**LINSCOTT, LAW & GREENSPAN, ENGINEERS**  
 20931 Burbank Boulevard, Suite C, Woodland Hills, CA  
 (818) 835-8648 Fax (818) 835-8649

INTERSECTION UTILIZATION

N-S St: Sonora Avenue  
 E-W St: Glenoaks Boulevard  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-1

Sonora Avenue @ Glenoaks Boulevard  
 Peak hr: AM  
 Annual Growth: 1%  
 ICU-1

Date:  
 Date of Count:  
 Projection Year:

10/07/2019  
 2019  
 2020

Movement	2019 EXIST. TRAFFIC						2019 W/PROJECT SITE TRAFFIC						2020 WITHOUT PROJECT						2020 W/PROJECT					
	1		2		V/C Ratio		Added Volume		Total Volume		V/C Ratio		Added Volume		Total Volume		V/C Ratio		Added Volume		Total Volume		V/C Ratio	
	Capacity	Volume	Capacity	Volume	Capacity	Ratio	Capacity	Volume	Capacity	Volume	Capacity	Ratio	Capacity	Volume	Capacity	Volume	Capacity	Capacity	Volume	Capacity	Volume	Capacity	Capacity	Volume
Nb Left	65	1600	0.041 *	1	66	1600	0.041 *	0	66	1600	0.041 *	1	67	1600	0.042 *									
Nb Thru	113	1600	0.131	0	113	1600	0.131	0	114	1600	0.133	0	114	1600	0.133									
Nb Right	97	0	-	0	97	0	-	0	98	0	-	0	98	0	-									
Sb Left	89	1600	0.056	0	89	1600	0.056	0	90	1600	0.056	0	90	1600	0.056									
Sb Thru	270	1600	0.215 *	2	272	1600	0.216 *	0	273	1600	0.217 *	2	275	1600	0.218 *									
Sb Right	74	0	-	0	74	0	-	0	75	0	-	0	75	0	-									
Eb Left	78	1600	0.049	0	78	1600	0.049	0	79	1600	0.049	0	79	1600	0.049									
Eb Thru	1122	4800	0.251 *	8	1130	4800	0.253 *	0	1133	4800	0.254 *	8	1141	4800	0.255 *									
Eb Right	83	0	-	0	83	0	-	0	84	0	-	0	84	0	-									
Wb Left	230	1600	0.144 *	0	230	1600	0.144 *	0	232	1600	0.145 *	0	232	1600	0.145 *									
Wb Thru	770	4800	0.170	0	770	4800	0.170	0	778	4800	0.172	0	778	4800	0.172									
Wb Right	47	0	-	0	47	0	-	0	47	0	-	0	47	0	-									
Yellow Allowance:		0.100 *							0.100 *				0.100 *											
ICU LOS		0.750	C							0.754	C			0.757	C									

\* Key conflicting movement as a part of ICU  
 1 Counts conducted by. Counts Unlimited  
 2 Capacity expressed in veh/hour of green

0.100 \*

0.760  
C

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 20931 Burbank Boulevard, Suite C, Woodland Hills, CA  
 (818) 835-8648 Fax (818) 835-8649

**INTERSECTION UTILIZATION**

N-S St: Sonora Avenue  
 E-W St: Glenoaks Boulevard  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-1

Sonora Avenue @ Glenoaks Boulevard  
 Peak hr: PM  
 Annual Growth: 1%  
 ICU-1

Date:  
 Date of Count:  
 10/07/2019  
 2019

Projection Year:  
 File:

Movement	Volume	2019 EXIST. TRAFFIC				2019 W/PROJECT SITE TRAFFIC				2020 WITHOUT PROJECT				2020 W/PROJECT			
		1	2	V/C	Ratio	Added Volume	Total Volume	Capacity	V/C Ratio	Added Volume	Total Volume	Capacity	V/C Ratio	Added Volume	Total Volume	Capacity	V/C Ratio
Nb Left	124	1600	0.078	8	132	1600	0.083	0	125	1600	0.078	8	133	1600	0.083	8	133
Nb Thru	245	1600	0.281 *	2	247	1600	0.283 *	0	247	1600	0.284 *	2	249	1600	0.285 *	2	249
Nb Right	205	0	-	0	205	0	-	0	207	0	-	0	207	0	-	0	207
Sb Left	75	1600	0.047 *	0	75	1600	0.047 *	0	76	1600	0.047 *	0	76	1600	0.047 *	0	76
Sb Thru	157	1600	0.129	0	157	1600	0.129	0	159	1600	0.131	0	159	1600	0.131	0	159
Sb Right	50	0	-	0	50	0	-	0	51	0	-	0	51	0	-	0	51
Eb Left	108	1600	0.068	0	108	1600	0.068	0	109	1600	0.068	0	109	1600	0.068	0	109
Eb Thru	1259	4800	0.277 *	1	1260	4800	0.277 *	0	1272	4800	0.279 *	1	1273	4800	0.280 *	1	1273
Eb Right	69	0	-	0	69	0	-	0	70	0	-	0	70	0	-	0	70
Wb Left	156	1600	0.098 *	0	156	1600	0.098 *	0	158	1600	0.098 *	0	158	1600	0.098 *	0	158
Wb Thru	1206	4800	0.259	0	1206	4800	0.259	0	1218	4800	0.262	0	1218	4800	0.262	0	1218
Wb Right	37	0	-	0	37	0	-	0	37	0	-	0	37	0	-	0	37
Yellow Allowance:		0.100 *			0.100 *				0.100 *				0.100 *				0.100 *
ICU LOS		0.802 D			0.804 D				0.809 D				0.811 D				0.811 D

\* Key conflicting movement as a part of ICU  
 1 Counts conducted by Counts Unlimited  
 2 Capacity expressed in veh/hour of green

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 20931 Burbank Boulevard, Suite C, Woodland Hills, CA  
 (818) 835-8648 Fax (818) 835-8649

INTERSECTION UTILIZATION

N-S St: Sonora Avenue  
 E-W St: San Fernando Road  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-2

Sonora Avenue @ San Fernando Road  
 Peak hr: AM  
 Annual Growth: 1%  
 ICU-2

INTERSECTION CAPACITY UTILIZATION

Movement	2019 EXIST. TRAFFIC				2019 W/PROJECT SITE TRAFFIC				2020 WITHOUT PROJECT				2020 W/PROJECT						
	1	2	V/C	Ratio	Added Volume	Total Volume	Capacity	Ratio	Added Volume	Total Volume	Capacity	Ratio	Added Volume	Total Volume	Capacity	2	V/C Ratio		
Nb Left	46	1600	0.029	*	0	46	1600	0.029	*	0	46	1600	0.029	*	0	46	1600	0.029	
Nb Thru	185	1600	0.116	0	185	1600	0.116	0	187	1600	0.117	0	187	1600	0.117	0	187	1600	0.117
Nb Right	133	1600	0.083	10	143	1600	0.089	0	134	1600	0.084	10	144	1600	0.090	10	144	1600	0.090
Sb Left	75	1600	0.047	2	77	1600	0.048	0	76	1600	0.047	2	78	1600	0.049	2	78	1600	0.049
Sb Thru	387	1600	0.293	*	0	387	1600	0.293	*	0	391	1600	0.296	*	0	391	1600	0.296	
Sb Right	82	0	-	0	82	0	-	0	83	0	-	0	83	0	-	0	83	0	-
Eb Left	41	1600	0.026	0	41	1600	0.026	0	41	1600	0.026	0	41	1600	0.026	0	41	1600	0.026
Eb Thru	662	3200	0.251	*	4	666	3200	0.252	*	0	669	3200	0.253	*	4	673	3200	0.255	
Eb Right	141	0	-	0	141	0	-	0	142	0	-	0	142	0	-	0	142	0	-
Wb Left	180	1600	0.113	*	2	182	1600	0.114	*	0	182	1600	0.114	*	2	184	1600	0.115	
Wb Thru	409	3200	0.138	1	410	3200	0.139	1	414	3200	0.140	1	415	3200	0.141	1	415	3200	0.141
Wb Right	34	0	-	2	36	0	-	0	34	0	-	2	36	0	-	2	36	0	-
Yellow Allowance:		0.100	*			0.100	*			0.100	*			0.100	*			0.100	*
ICU LOS		0.785	C			0.788	C			0.792	C			0.795	C			0.795	C

\* Key conflicting movement as a part of ICU  
 1 Counts conducted by. Counts Unlimited  
 2 Capacity expressed in veh/hour of green

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 20931 Burbank Boulevard, Suite C, Woodland Hills, CA  
 (818) 835-8648 Fax (818) 835-8649

**INTERSECTION UTILIZATION**

N-S St: Sonora Avenue  
 E-W St: San Fernando Road  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-2

Sonora Avenue @ San Fernando Road  
 Peak hr: PM  
 Annual Growth: 1%  
 ICU-2

Date:  
 Date of Count:  
 10/01/2019  
 2019

Projection Year:  
 File:

Movement	Volume	2019 EXIST. TRAFFIC				2019 W/PROJECT SITE TRAFFIC				2020 WITHOUT PROJECT				2020 W/PROJECT					
		1		2		Added Volume		V/C Capacity Ratio		Added Volume		Total Volume		V/C Capacity Ratio		Added Volume		Total Volume	
		Capacity	V/C Ratio	Capacity	V/C Ratio	Total	Volume	Capacity	V/C Ratio	Total	Volume	Capacity	V/C Ratio	Total	Volume	Capacity	V/C Ratio		
Nb Left	117	1600	0.073	0	117	1600	0.073	0	118	1600	0.074	0	0	118	1600	0.074			
Nb Thru	450	1600	0.281 *	0	450	1600	0.281 *	0	455	1600	0.284 *	0	0	455	1600	0.284 *			
Nb Right	388	1600	0.243	2	390	1600	0.244	0	392	1600	0.245	2	2	394	1600	0.246			
Sb Left	60	1600	0.038 *	0	60	1600	0.038 *	0	61	1600	0.038 *	0	0	61	1600	0.038 *			
Sb Thru	217	1600	0.204	0	217	1600	0.204	0	219	1600	0.206	0	0	219	1600	0.206			
Sb Right	110	0	-	0	110	0	-	0	111	0	-	0	0	111	0	-			
Eb Left	86	1600	0.054	0	86	1600	0.054	0	87	1600	0.054	0	0	87	1600	0.054			
Eb Thru	692	3200	0.242 *	1	693	3200	0.242 *	1	700	3200	0.245 *	1	1	701	3200	0.245 *			
Eb Right	82	0	-	0	82	0	-	0	83	0	-	0	0	83	0	-			
Wb Left	189	1600	0.118 *	10	199	1600	0.124 *	0	191	1600	0.119 *	10	10	201	1600	0.126 *			
Wb Thru	821	3200	0.274	4	825	3200	0.279	1	830	3200	0.277	4	4	834	3200	0.282			
Wb Right	57	0	-	10	67	0	-	0	58	0	-	10	10	68	0	-			
Yellow Allowance:		0.100 *			0.100 *				0.100 *					0.100 *					
ICU	0.779	C			0.785	C			0.786	C				0.792	C				
LOS																			

\* Key conflicting movement as a part of ICU  
 1 Counts conducted by Counts Unlimited  
 2 Capacity expressed in veh/hour of green

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 20931 Burbank Boulevard, Suite C, Woodland Hills, CA  
 (818) 835-8648 Fax (818) 835-8649

**INTERSECTION UTILIZATION**

N-S St: Sonora Avenue  
 E-W St: Flower Street  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-3

Sonora Avenue @ Flower Street  
 Peak hr: AM  
 Annual Growth: 1%  
 File: ICU-3

Date: 10/01/2019  
 Date of Count: 2019  
 Projection Year: 2020

Movement	2019 EXIST. TRAFFIC						2019 W/PROJECT SITE TRAFFIC						2020 WITHOUT PROJECT						2020 W/PROJECT						
	1		2		V/C		Added Volume		Total Volume		2 V/C Capacity Ratio		Added Volume		Total Volume		2 V/C Capacity Ratio		Added Volume		Total Volume		2 V/C Capacity Ratio		
	Capacity	Ratio	Capacity	Ratio	Capacity	Ratio	Volume	Capacity	Volume	Capacity	Volume	Capacity	Volume	Capacity	Volume	Capacity	Volume	Capacity	Volume	Capacity	Volume	Capacity	Volume	Capacity	
Nb Left	79	1600	0.049	0	79	1600	0.049	0	80	1600	0.050	0	80	1600	0.050	0	80	1600	0.050	0	80	1600	0.050		
Nb Thru	454	3200	0.291 *	4	458	3200	0.293 *	0	459	3200	0.294 *	4	463	3200	0.295 *	0	483	0	0	483	0	-	0	-	
Nb Right	478	0	-	0	478	0	-	0	483	0	-	0	483	0	-	0	483	0	-	0	483	0	-	0	-
Sb Left	72	1600	0.045 *	0	72	1600	0.045 *	0	73	1600	0.045 *	0	73	1600	0.045 *	0	73	1600	0.045 *	0	73	1600	0.045 *		
Sb Thru	464	3200	0.186	1	465	3200	0.187	0	469	3200	0.188	1	470	3200	0.188	1	470	3200	0.188	1	470	3200	0.188		
Sb Right	131	0	-	1	132	0	-	0	132	0	-	0	132	0	-	0	132	0	-	0	132	0	-	0	-
Eb Left	375	1600	0.234 *	4	379	1600	0.237 *	0	379	1600	0.237 *	4	383	1600	0.239 *	4	383	1600	0.239 *	4	383	1600	0.239 *		
Eb Thru	656	3200	0.237	0	656	3200	0.237	0	663	3200	0.240	0	663	3200	0.240	0	663	3200	0.240	0	663	3200	0.240		
Eb Right	103	0	-	0	103	0	-	0	104	0	-	0	104	0	-	0	104	0	-	0	104	0	-	0	-
Wb Left	94	1600	0.059	0	94	1600	0.059	0	95	1600	0.059	0	95	1600	0.059	0	95	1600	0.059	0	95	1600	0.059		
Wb Thru	136	3200	0.063 *	0	136	3200	0.063 *	0	137	3200	0.063 *	0	137	3200	0.063 *	0	137	3200	0.064 *	0	137	3200	0.064 *		
Wb Right	64	0	-	2	66	0	-	0	65	0	-	0	65	0	-	0	67	0	-	0	67	0	-	0	-
Yellow Allowance:		0.100 *							0.100 *				0.100 *				0.100 *				0.100 *				
ICU LOS		0.733	C							0.738	C			0.739	C			0.744	C						

\* Key conflicting movement as a part of ICU  
 1 Counts conducted by. Counts Unlimited  
 2 Capacity expressed in veh/hour of green

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**INTERSECTION UTILIZATION**

N-S St: Sonora Avenue  
 E-W St: Flower Street  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-3

Sonora Avenue @ Flower Street  
 Peak hr: PM  
 Annual Growth: 1%  
 ICU-3

Movement	Volume	2019 EXIST. TRAFFIC			2019 W/PROJECT SITE TRAFFIC			2020 WITHOUT PROJECT			2020 W/PROJECT		
		1	2	V/C Ratio	Added Volume	Total Volume	Capacity	2	V/C Ratio	Added Volume	Total Volume	Capacity	2
Nb Left	66	1600	0.041		0	66	1600	0.041		0	67	1600	0.042
Nb Thru	709	3200	0.285 *		1	710	3200	0.285 *		0	716	3200	0.288 *
Nb Right	202	0	-		0	202	0	-		0	204	0	-
Sb Left	51	1600	0.032 *		2	53	1600	0.033 *		0	52	1600	0.032 *
Sb Thru	464	3200	0.224		4	468	3200	0.226		0	469	3200	0.226
Sb Right	252	0	-		4	256	0	-		0	255	0	-
Eb Left	143	1600	0.089		1	144	1600	0.090		0	144	1600	0.090
Eb Thru	191	3200	0.081 *		0	191	3200	0.081 *		0	193	3200	0.081 *
Eb Right	67	0	-		0	67	0	-		0	68	0	-
Wb Left	442	1600	0.276 *		0	442	1600	0.276 *		0	446	1600	0.279 *
Wb Thru	682	3200	0.237		0	682	3200	0.237		0	689	3200	0.239
Wb Right	76	0	-		0	76	0	-		0	77	0	-
Yellow Allowance:		0.100 *				0.100 *				0.100 *			0.100 *
ICU LOS		0.773	C			0.775	C			0.780	C		0.782

\* Key conflicting movement as a part of ICU  
 1 Counts conducted by Counts Unlimited  
 2 Capacity expressed in veh/hour of green

Date:  
 Date of Count:  
 Projection Year:

10/01/2019  
 2019  
 2020

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 (818) 835-8648 Fax (818) 835-8649

INTERSECTION CAPACITY UTILIZATION

N-S St: Rosedale Avenue  
 E-W St: Glenoaks Boulevard  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-4

Rosedale Avenue @ Glenoaks Boulevard  
 Peak hr: AM  
 Annual Growth: 1%  
 ICU-4

Date:  
 10/01/2019

Date of Count:  
 2019

Projection Year:  
 2020

Movement	Volume	2019 EXIST. TRAFFIC			2019 W/PROJECT SITE TRAFFIC			2020 WITHOUT PROJECT			2020 W/PROJECT		
		1	2	V/C Ratio	Added Volume	Total Volume	Capacity	2	V/C Ratio	Added Volume	Total Volume	Capacity	2
Nb Left	0	0	0.000		0	0	0.000	0	0	0	0	0	0
Nb Thru	0	0	0.000		0	0	0.000	0	0	0	0	0	0.000
Nb Right	14	1600	0.009 *		1	15	1600	0.009 *	0	14	1600	0.009 *	1
Sb Left	0	0	0.000 *		0	0	0.000 *	0	0	0	0	0	0.000 *
Sb Thru	0	0	0.000		0	0	0.000	0	0	0	0	0	0.000
Sb Right	0	0	-		0	0	-	0	0	0	0	0	-
Eb Left	0	0	0.000		0	0	0.000	0	0	0	0	0	0.000
Eb Thru	1334	4800	0.281 *		0	1334	4800	0.283 *	0	1347	4800	0.284 *	0
Eb Right	15	0	-		8	23	0	-	0	15	0	-	8
Wb Left	0	0	0.000 *		0	0	0.000 *	0	0	0	0	0	0.000 *
Wb Thru	0	0	0.000		0	0	0.000	0	0	0	0	0	0.000
Wb Right	0	0	-		0	0	-	0	0	0	0	0	-
Yellow Allowance:		0.100	*		0.100	*		0.100	*	0.100	*	0.100	*
ICU LOS	0.390	A			0.392	A		0.393	A	0.395	A	0.395	A

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 (818) 835-8648 Fax (818) 835-8649

**INTERSECTION UTILIZATION**

N-S St: Rosedale Avenue  
 E-W St: Glenoaks Boulevard  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-4

Rosedale Avenue @ Glenoaks Boulevard  
 Peak hr: PM  
 Annual Growth: 1%  
 ICU-4

Date: 10/01/2019  
 Date of Count: 2019  
 Projection Year: 2020

Movement	Volume	2019 EXIST. TRAFFIC			2019 W/PROJECT SITE TRAFFIC			2020 WITHOUT PROJECT			2020 W/PROJECT					
		1	2	V/C Ratio	Added Volume	Total Volume	Capacity	2	V/C Ratio	Added Volume	Total Volume	Capacity	2	V/C Ratio		
Nb Left	0	0	0.000		0	0	0.000	0	0	0	0	0	0	0.000		
Nb Thru	0	0	0.000		0	0	0.000	0	0	0	0	0	0	0.000		
Nb Right	49	1600	0.031 *		4	53	1600	0.033 *	0	49	1600	0.031 *	4	53	1600	0.033 *
Sb Left	0	0	0.000 *		0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0.000 *
Sb Thru	0	0	0.000		0	0	0.000	0	0	0	0	0.000	0	0	0	0.000
Sb Right	0	0	-		0	0	-	0	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000		0	0	0.000	0	0	0	0	0.000	0	0	0	0.000
Eb Thru	1650	4800	0.347 *		0	1650	4800	0.347 *	0	1667	4800	0.350 *	0	1667	4800	0.350 *
Eb Right	14	0	-		1	15	0	-	0	14	0	-	1	15	0	-
Wb Left	0	0	0.000 *		0	0	0.000 *	0	0	0	0	0.000 *	0	0	0	0.000 *
Wb Thru	0	0	0.000		0	0	0.000	0	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-		0	0	-	0	0	0	0	-	0	0	0	-
Yellow Allowance:		0.100 *				0.100 *				0.100 *			0.100 *			
ICU LOS		0.477 A				0.480 A				0.481 A			0.484 A			

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**INTERSECTION UTILIZATION**

N-S St: Rosedale Avenue  
 E-W St: San Fernando Road  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-5

Rosedale Avenue @ San Fernando Road  
 Peak hr: AM  
 Annual Growth: 1%  
 ICU-5

Date: 10/07/2019  
 Date of Count: 2019  
 Projection Year:  
 File:

Movement	2019 EXIST. TRAFFIC				2019 W/PROJECT SITE TRAFFIC				2020 WITHOUT PROJECT				2020 W/PROJECT			
	1	2	V/C	Ratio	Added Volume	Total Volume	Capacity	V/C Ratio	Added Volume	Total Volume	Capacity	V/C Ratio	Added Volume	Total Volume	Capacity	V/C Ratio
Nb Left	5	0	0.003 *		2	7	0	0.004 *	0	5	0	0.003 *	2	7	0	0.004 *
Nb Thru	1	1600	0.005		1	2	1600	0.008	0	1	1600	0.005	1	2	1600	0.008
Nb Right	2	0	-		1	3	0	-	0	2	0	-	1	3	0	-
Sb Left	0	0	0.000		0	0	0.000		0	0	0	0.000	0	0	0	0.000
Sb Thru	20	1600	0.019 *		8	28	1600	0.024 *	0	20	1600	0.019 *	8	28	1600	0.024 *
Sb Right	10	0	-		0	10	0	-	0	10	0	-	0	10	0	-
Eb Left	8	1600	0.005		0	8	1600	0.005	0	8	1600	0.005	0	8	1600	0.005
Eb Thru	831	3200	0.266 *		1	832	3200	0.268 *	0	839	3200	0.269 *	1	840	3200	0.270 *
Eb Right	20	0	-		4	24	0	-	0	20	0	-	4	24	0	-
Wb Left	20	1600	0.013 *		9	29	1600	0.018 *	0	20	1600	0.013 *	9	29	1600	0.018 *
Wb Thru	555	3200	0.175		7	562	3200	0.178	1	562	3200	0.177	7	569	3200	0.180
Wb Right	6	0	-		0	6	0	-	0	6	0	-	0	6	0	-
Yellow Allowance:		0.100 *							0.100 *				0.100 *			
ICU LOS		0.400	A						0.414	A			0.403	A		0.417
																0.100 *

\* Key conflicting movement as a part of ICU  
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 (818) 835-8648 Fax (818) 835-8649

**INTERSECTION UTILIZATION**

N-S St: Rosedale Avenue  
 E-W St: San Fernando Road  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-5

Rosedale Avenue @ San Fernando Road  
 Peak hr: PM  
 Annual Growth: 1%  
 File:

Date:  
 Date of Count:  
 Projection Year:

10/07/2019  
 2019  
 2020

Movement	Volume	2019 EXIST. TRAFFIC				2019 W/PROJECT SITE TRAFFIC				2020 WITHOUT PROJECT				2020 W/PROJECT			
		1	2	V/C	Ratio	Added Volume	Total Volume	Capacity	V/C Ratio	Added Volume	Total Volume	Capacity	V/C Ratio	Added Volume	Total Volume	Capacity	V/C Ratio
Nb Left	29	0	0.018 *			11	40	0	0.025	0	29	0	0.018 *	11	40	0	0.025
Nb Thru	5	1600	0.031	4		1600	0.043 *	0		5	1600	0.031	4	9	1600	0.043 *	
Nb Right	15	0	-	5		20	0	0		15	0	-		5	20	0	-
Sb Left	9	0	0.006	0		9	0	0.006 *		0	9	0	0.006	0	9	0	0.006 *
Sb Thru	2	1600	0.019 *	1		3	1600	0.020		0	2	1600	0.020 *	1	3	1600	0.020
Sb Right	20	0	-	0		20	0	0		20	0	-		0	20	0	-
Eb Left	27	1600	0.017 *	0		27	1600	0.017 *		0	27	1600	0.017 *	0	27	1600	0.017 *
Eb Thru	1054	3200	0.331	7		1061	3200	0.333		1	1066	3200	0.334	7	1073	3200	0.337
Eb Right	4	0	-	1		5	0	-		0	4	0	-	1	5	0	-
Wb Left	4	1600	0.003	2		6	1600	0.004		0	4	1600	0.003	2	6	1600	0.004
Wb Thru	1006	3200	0.320 *	1		1007	3200	0.320 *		1	1017	3200	0.324 *	1	1018	3200	0.324 *
Wb Right	18	0	-	0		18	0	-		0	18	0	-	0	18	0	-
Yellow Allowance:		0.100 *				0.100 *				0.100 *				0.100 *			
ICU LOS		0.474	A			0.486	A			0.478	A		0.490	A			

\* Key conflicting movement as a part of ICU  
 1 Counts conducted by Counts Unlimited  
 2 Capacity expressed in veh/hour of green

\* Key conflicting movement as a part of ICU  
 1 Counts conducted by Counts Unlimited  
 2 Capacity expressed in veh/hour of green

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 (818) 835-8648 Fax (818) 835-8649

**INTERSECTION UTILIZATION**

N-S St: Grandview Avenue  
 E-W St: Glenoaks Boulevard  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-6

Grandview Avenue @ Glenoaks Boulevard  
 Peak hr: AM  
 Annual Growth: 1%  
 ICU-6

Date:  
 Date of Count:  
 10/01/2019  
 2019

Projection Year:  
 File:

Movement	2019 EXIST. TRAFFIC					2019 W/PROJECT SITE TRAFFIC					2020 WITHOUT PROJECT					2020 W/PROJECT				
	1		2		V/C	Added Volume	Total Volume	Capacity	V/C Ratio	Added Volume	Total Volume	Capacity	V/C Ratio	Added Volume	Total Volume	Capacity	V/C Ratio			
	Volume	Capacity	Volume	Capacity	V/C	Volume	Capacity	V/C	Volume	Capacity	V/C	Volume	Capacity	V/C	Volume	Capacity	V/C			
Nb Left	70	1600	0.044	0	0	70	1600	0.044	*	0	71	1600	0.044	0	71	1600	0.044			
Nb Thru	76	1600	0.048 *	0	0	76	1600	0.048 *	*	0	77	1600	0.048 *	0	77	1600	0.048 *			
Nb Right	2	1600	0.001	0	0	2	1600	0.001	*	0	2	1600	0.001	0	2	1600	0.001			
Sb Left	244	1600	0.153 *	0	0	244	1600	0.153 *	*	0	246	1600	0.154 *	0	246	1600	0.154 *			
Sb Thru	146	1600	0.134	2	148	1600	0.136	*	*	0	147	1600	0.136	2	149	1600	0.137			
Sb Right	69	0	-	0	0	69	0	-	*	0	70	0	-	0	70	0	-			
Eb Left	88	1600	0.055	0	0	88	1600	0.055	*	0	89	1600	0.056	0	89	1600	0.056			
Eb Thru	1114	4800	0.232 *	1	1115	4800	0.232 *	*	*	0	1125	4800	0.234 *	1	1126	4800	0.235 *			
Eb Right	72	1600	0.045	0	0	72	1600	0.045	*	0	73	1600	0.045	0	73	1600	0.045			
Wb Left	96	1600	0.060 *	7	103	1600	0.064 *	*	*	0	97	1600	0.061 *	7	104	1600	0.065 *			
Wb Thru	940	4800	0.220	0	940	4800	0.220	*	*	0	949	4800	0.222	0	949	4800	0.222			
Wb Right	114	0	-	0	0	114	0	-	*	0	115	0	-	0	115	0	-			
Yellow Allowance:			0.100 *							0.100 *				0.100 *			0.100 *			
ICU LOS		0.592	A								0.597	A			0.602	B		0.602		

\* Key conflicting movement as a part of ICU  
 1 Counts conducted by. Counts Unlimited  
 2 Capacity expressed in veh/hour of green

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 (818) 835-8648 Fax (818) 835-8649

INTERSECTION UTILIZATION

N-S St: Grandview Avenue  
 E-W St: Glenoaks Boulevard  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-6

Grandview Avenue @ Glenoaks Boulevard

Peak hr: PM  
 Annual Growth: 1%  
 ICU-6

Date:  
 10/01/2019

Date of Count:  
 2019

Projection Year:  
 2020

Movement	Volume	2019 EXIST. TRAFFIC						2019 W/PROJECT SITE TRAFFIC						2020 WITHOUT PROJECT						2020 W/PROJECT						
		1		2		V/C		Added Volume		Total Volume		2 V/C Capacity		Added Volume		Total Volume		2 V/C Capacity		Added Volume		Total Volume		2 V/C Capacity		
		Capacity	Ratio	Capacity	Ratio	Capacity	Ratio	Capacity	Ratio	Capacity	Ratio	Capacity	Ratio	Capacity	Ratio	Capacity	Ratio	Capacity	Ratio	Capacity	Ratio	Capacity	Ratio	Capacity	Ratio	
Nb Left	91	1600	0.057	0	91	1600	0.057	0	0	92	1600	0.057	0	0	92	1600	0.057	0	0	92	1600	0.057	0	1600	0.057	
Nb Thru	179	1600	0.112 *	2	181	1600	0.113 *	0	0	181	1600	0.113 *	2	2	183	1600	0.114 *	0	0	183	1600	0.114 *	0	1600	0.035	
Nb Right	53	1600	0.033	3	56	1600	0.035	0	0	54	1600	0.033	3	3	57	1600	0.035	0	0	57	1600	0.035	0	1600	0.035	
Sb Left	129	1600	0.081 *	0	129	1600	0.081 *	0	0	130	1600	0.081 *	0	0	130	1600	0.081 *	0	0	130	1600	0.081 *	0	1600	0.081 *	
Sb Thru	98	1600	0.090	0	98	1600	0.090	0	0	99	1600	0.091	0	0	99	1600	0.091	0	0	99	1600	0.091	0	1600	0.091	
Sb Right	46	0	-	0	46	0	-	0	0	46	0	-	0	0	46	0	-	0	0	46	0	-	0	0	-	
Eb Left	108	1600	0.068 *	0	108	1600	0.068 *	0	0	109	1600	0.068 *	0	0	109	1600	0.068 *	0	0	109	1600	0.068 *	0	1600	0.068 *	
Eb Thru	1541	4800	0.321	4	1545	4800	0.322	0	0	1556	4800	0.324	4	4	1560	4800	0.325	4	4	1560	4800	0.325	4	1600	0.325	
Eb Right	39	1600	0.024	0	39	1600	0.024	0	0	39	1600	0.025	0	0	39	1600	0.025	0	0	39	1600	0.025	0	1600	0.025	
Wb Left	37	1600	0.023	1	38	1600	0.024	0	0	37	1600	0.023	1	1	38	1600	0.024	1	1	38	1600	0.024	1	1600	0.024	
Wb Thru	1280	4800	0.291 *	0	1280	4800	0.291 *	0	0	1293	4800	0.294 *	0	0	1293	4800	0.294 *	0	0	1293	4800	0.294 *	0	1600	0.294 *	
Wb Right	115	0	-	0	115	0	-	0	0	116	0	-	0	0	116	0	-	0	0	116	0	-	0	0	-	
Yellow Allowance:		0.100 *			0.100 *					0.100 *					0.100 *				0.100 *					0.100 *		
ICU LOS		0.651	B			0.652	B			0.656	B				0.657	B										

\* Key conflicting movement as a part of ICU

1 Counts conducted by Counts Unlimited

2 Capacity expressed in veh/hour of green

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 (818) 835-8648 Fax (818) 835-8649

**INTERSECTION UTILIZATION**

N-S St: Grandview Avenue  
 E-W St: San Fernando Road  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-7

Grandview Avenue @ San Fernando Road  
 Peak hr: AM  
 Annual Growth: 1%  
 ICU-7

Date:  
 Date of Count:  
 10/01/2019  
 2019

Projection Year:  
 File:

Movement	2019 EXIST. TRAFFIC					2019 W/PROJECT SITE TRAFFIC					2020 WITHOUT PROJECT					2020 W/PROJECT				
	1		2		V/C	Added Volume	Total Volume	Capacity	V/C Ratio	Added Volume	Total Volume	Capacity	V/C Ratio	Added Volume	Total Volume	Capacity	V/C Ratio			
	Volume	Capacity	Volume	Capacity	V/C	Volume	Capacity	V/C	Volume	Capacity	V/C	Volume	Capacity	V/C	Volume	Capacity	V/C			
Nb Left	5	0	0.002	0	5	0	0.002	0	5	0	0.002	0	0	5	0	0	0.002			
Nb Thru	15	3200	0.006	0	15	3200	0.006	0	15	3200	0.006	0	0	15	3200	0.006	0	0.002		
Nb Right	14	1600	0.009 *	0	14	1600	0.009 *	0	14	1600	0.009 *	0	0	14	1600	0.009 *	0	0.002		
Sb Left	120	1600	0.075 *	0	120	1600	0.075 *	0	121	1600	0.076 *	0	0	121	1600	0.076 *	0	0.002		
Sb Thru	82	3200	0.048	0	82	3200	0.051	0	83	3200	0.049	0	0	83	3200	0.052	0	-		
Sb Right	73	0	-	9	82	0	-	0	74	0	-	0	9	83	0	-	0	-		
Eb Left	45	1600	0.028	1	46	1600	0.029	0	45	1600	0.028	1	1	46	1600	0.029	1	0.002		
Eb Thru	777	3200	0.243 *	1	778	3200	0.243 *	0	785	3200	0.245 *	1	1	786	3200	0.246 *	1	0.002		
Eb Right	17	1600	0.011	0	17	1600	0.011	0	17	1600	0.011	0	0	17	1600	0.011	0	0.002		
Wb Left	47	2880	0.016 *	0	47	2880	0.016 *	0	47	2880	0.016 *	0	0	47	2880	0.016 *	0	0.002		
Wb Thru	489	3200	0.153	7	496	3200	0.155	1	495	3200	0.155	7	7	502	3200	0.157	7	0.002		
Wb Right	191	1600	0.119	0	191	1600	0.119	0	193	1600	0.121	0	0	193	1600	0.121	0	0.002		
Yellow Allowance:	0.100 *					0.100 *					0.100 *					0.100 *				
ICU LOS	0.443	A	0.443	A	0.446	A	0.446	A	0.447	A	0.447	A	0.447	A	0.447	A	0.447	A		

\* Key conflicting movement as a part of ICU  
 1 Counts conducted by. Counts Unlimited  
 2 Capacity expressed in veh/hour of green

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 (818) 835-8648 Fax (818) 835-8649

**INTERSECTION UTILIZATION**

Grandview Avenue @ San Fernando Road

Peak hr:

Annual Growth:

1%

Date:  
10/01/2019

Date of Count:  
2019

Projection Year:  
2020

N-S St: Grandview Avenue  
 E-W St: San Fernando Road  
 Project: 6265 San Fernando Road Office Project  
 File: ICU-7

Movement	Volume	2019 EXIST. TRAFFIC				2019 W/PROJECT SITE TRAFFIC				2020 WITHOUT PROJECT				2020 W/PROJECT						
		1	2	V/C	Ratio	Added Volume	Total Volume	Capacity	V/C Ratio	Added Volume	Total Volume	Capacity	V/C Ratio	Added Volume	Total Volume	Capacity	V/C Ratio			
Nb Left	14	0	0.004			0	14	0	0.004	0	14	0	0.004	0	14	0	0.004			
Nb Thru	80	3200	0.029	0		80	3200	0.029	0	81	3200	0.030	0	81	3200	0.030	0			
Nb Right	82	1600	0.051	*		0	82	1600	0.051	*	0	83	1600	0.052	*	0	83	1600	0.052	*
Sb Left	127	1600	0.079	*		0	127	1600	0.079	*	0	128	1600	0.080	*	0	128	1600	0.080	*
Sb Thru	34	3200	0.047	0		34	3200	0.048	0	34	3200	0.048	0	34	3200	0.048	0	34	3200	0.048
Sb Right	117	0	-			2	119	0	-	0	118	0	-	2	120	0	-	2	120	0
Eb Left	84	1600	0.053	*		5	89	1600	0.056	*	0	85	1600	0.053	*	5	90	1600	0.056	*
Eb Thru	948	3200	0.296	7		955	3200	0.298	1	958	3200	0.300	7	965	3200	0.302	7	965	3200	0.302
Eb Right	17	1600	0.011	0		17	1600	0.011	0	17	1600	0.011	0	17	1600	0.011	0	17	1600	0.011
Wb Left	17	2880	0.006	0		17	2880	0.006	0	17	2880	0.006	0	17	2880	0.006	0	17	2880	0.006
Wb Thru	878	3200	0.274	*		1	879	3200	0.275	*	1	888	3200	0.277	*	1	889	3200	0.278	*
Wb Right	226	1600	0.141	0		226	1600	0.141	0	228	1600	0.143	0	228	1600	0.143	0	228	1600	0.143
Yellow Allowance:		0.100	*				0.100	*			0.100	*			0.100	*			0.100	*
ICU	0.558	A								0.561	A			0.562	A			0.566	A	
LOS																				

\* Key conflicting movement as a part of ICU

1 Counts conducted by Counts Unlimited

2 Capacity expressed in veh/hour of green