

# 777 N Front Street Project Transportation Impact Analysis

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March 2019

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# 1. INTRODUCTION

This report documents the assumptions, methodologies, and findings of a study conducted by Fehr & Peers to evaluate the potential traffic and parking impacts of the proposed land use development project at 777 North Front Street, Burbank, California.

## PROJECT DESCRIPTION

The project site is located at the 777 North Front Street in the City of Burbank. The project site is largely bounded by Burbank Boulevard to the north, the Interstate 5 (I-5) to the east, Magnolia Boulevard to the south (above grade), and Front Street to the west. The site is currently vacant.

The project proposes the development of an 8-acre site and includes a 307-room hotel with 1,800 square feet of high-turnover restaurant space, a 573-unit apartment building, and 1,067 square feet of retail gallery space. Five driveways on Front Street will provide access to the site. Primary vehicular access to the site will be from two residential driveways and one hotel driveway. The northernmost driveway is an outbound only driveway providing loading access for the residential units as well as emergency access. The southernmost driveway will be used by both residents and hotel guests as a secondary access point.

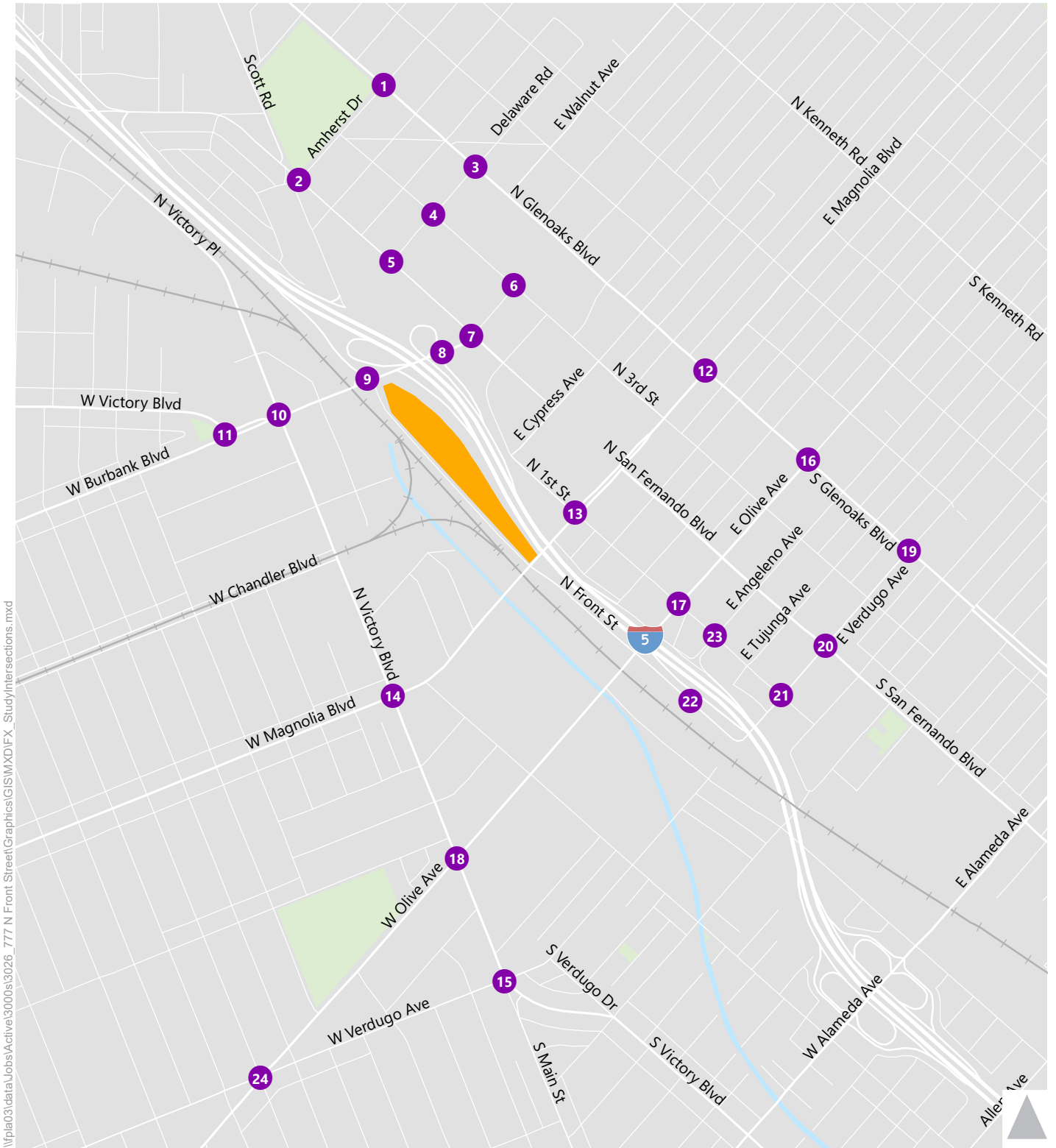
Figure 1 illustrates the location of the project in relation to the surrounding street system and Figure 2 illustrates the ground-level site plan of the project.

## STUDY SCOPE

The scope of analysis for this study was developed in conjunction with the City of Burbank. The base assumptions, technical methodologies, and geographic coverage of the study were all identified as part of the study approach. The following traffic scenarios have been developed and analyzed as part of this study:

- Existing (2018) Conditions – The analysis of existing traffic conditions is intended to provide a basis for the remainder of the study. The existing conditions analysis includes a description of the street system serving the site, current traffic volumes, and an assessment of the operating conditions at these locations.
- Existing (2018) plus Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of operating conditions under existing conditions with the addition of project-generated traffic. The direct impacts of the proposed project on existing traffic operating conditions were then identified.
- Future Year (2022) Base Conditions – Future traffic conditions without the proposed project will be developed for the year 2022. The objective of this analysis is to project future traffic growth and operating conditions that could be expected to result from regional growth and related projects in the vicinity of the project site by the year 2022. This scenario includes the changes in traffic from the new freeway ramp at Burbank Boulevard.
- Future Year (2022) plus Project Conditions – This traffic scenario includes the proposed project, provides projected traffic volumes, and an assessment of operating conditions under future conditions with the addition of project-generated traffic. The impacts of the proposed project on future traffic operating conditions were then identified.





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- Study Intersection
- Project Site



Figure 1  
Project Study Intersections

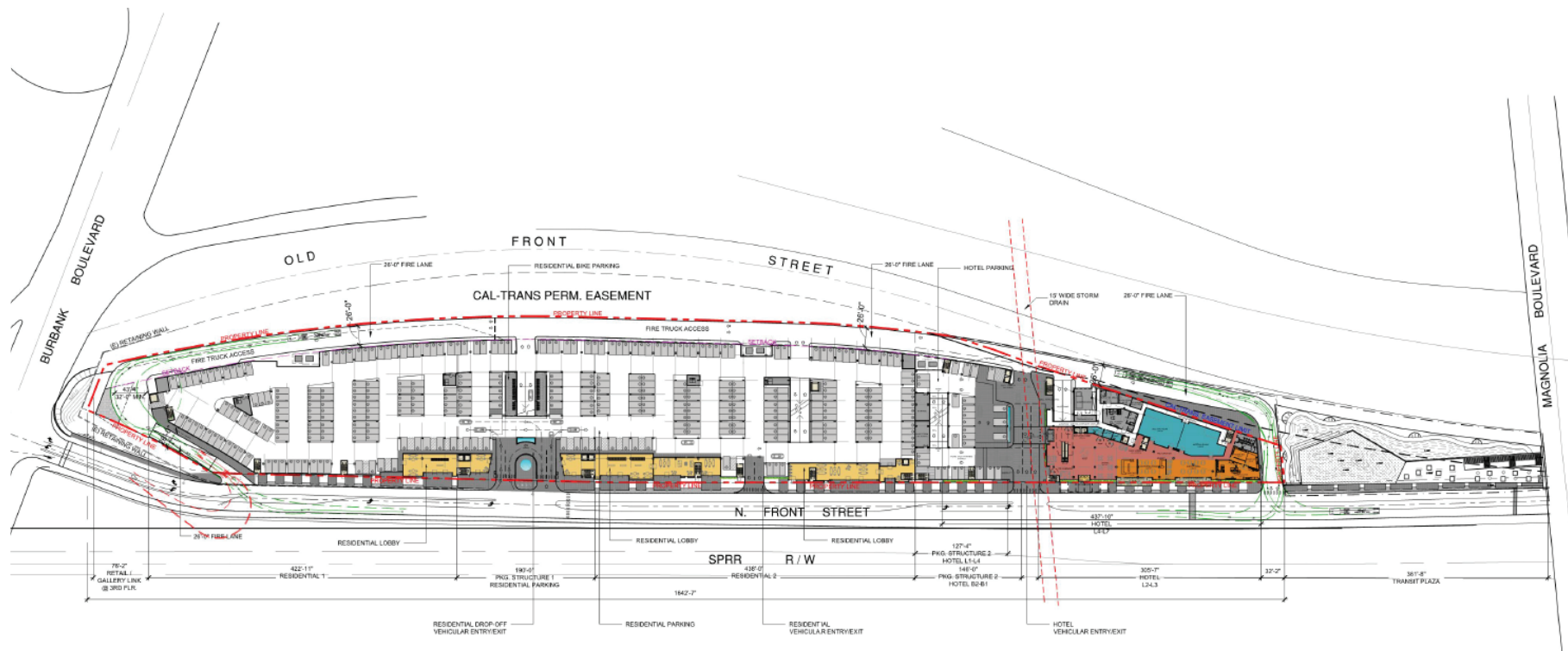


Figure 2  
Site Plan



The transportation staff of the City of Burbank determined the study area and identified the following 24 intersections in the vicinity of the proposed development for detailed analysis:

1. Glenoaks Boulevard & Amherst Drive
2. San Fernando Boulevard & Amherst Drive
3. Glenoaks Boulevard & Delaware Road
4. 3<sup>rd</sup> Street & Delaware Road
5. San Fernando Boulevard & Delaware Road
6. 3<sup>rd</sup> Street & Burbank Boulevard
7. San Fernando Boulevard & Burbank Boulevard
8. I-5 Northbound (NB) Off Ramp & Burbank Boulevard
9. I-5 Southbound (SB) Off Ramp/Front Street & Burbank Boulevard
10. Victory Place & Burbank Boulevard
11. Victory Boulevard & Burbank Boulevard
12. Glenoaks Boulevard & Magnolia Boulevard
13. 1<sup>st</sup> Street/Ikea Way & Magnolia Boulevard
14. Victory Boulevard & Magnolia Boulevard
15. Victory Boulevard & Verdugo Avenue
16. Glenoaks Boulevard & Olive Avenue
17. 1<sup>st</sup> Street/Ikea Way & Olive Avenue
18. Victory Boulevard & Olive Avenue
19. Glenoaks Boulevard & Verdugo Avenue
20. San Fernando Boulevard & Verdugo Avenue
21. Ikea Way & Verdugo Avenue
22. Front Street & I-5 SB Ramps
23. 1<sup>st</sup> Street/Ikea Way & Angeleno Avenue
24. Olive Avenue/Sparks Road & Verdugo Avenue

All 24 of the analyzed intersections are located in the City of Burbank. The locations of the analyzed intersections are illustrated in Figure 1.

Finally, the study will analyze potential project impacts on the Congestion Management Program (CMP) intersections and freeway segments in accordance with requirements of *2010 Congestion Management Program for Los Angeles County* (Los Angeles County Metropolitan Transportation Authority, 2010).



## **ORGANIZATION OF REPORT**

This report is divided into 8 chapters, including this introduction. Chapter 2 describes the existing circulation system and traffic conditions in the study area, including existing level of service. The methodologies used to develop traffic forecasts for the project and the forecasts themselves are included in Chapter 3 along with the Existing plus Project level of service calculations. Chapter 4 presents the methodology for estimating future traffic and the level of service for the future scenarios. Chapter 5 provides an assessment of potential traffic impacts for the existing and future traffic conditions. Chapter 6 discusses internal circulation and parking at the site. Chapter 7 contains the results of the CMP regional transportation system impact analysis for the project. Chapter 8 summarizes the construction impacts. Chapter 9 summarizes the conclusions of the study and the recommendations intended to address significant impacts. Appendices to this report include details related to the technical analysis.



## 2. EXISTING CONDITIONS

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions in the study area. The assessment of conditions relevant to this study includes an inventory of the street system, traffic volumes on these facilities, and operating conditions at key intersections.

### EXISTING STREET SYSTEM

The Golden State Freeway (I-5) to the south provides primary regional access to the site. The project site is largely bounded by Burbank Boulevard to the north, the I-5 to the east, Magnolia Boulevard to the south (above grade), and Front Street to the west. Access to project site from the I-5 is available via the ramps at Burbank Boulevard.

The following is a brief description of the major streets serving the project site:

- Front Street – Front Street is classified as a Downtown Collector and runs north/south in the study area, east of the I-5. Front Street has one through lane in each direction and no parking is permitted on either side of the street. The speed limit is 40 mph.
- Burbank Boulevard – In the study area, Burbank Boulevard is a secondary arterial running in the east/west direction and provides two through lanes per direction east of the I-5 northbound ramps, three through lanes in each direction between the I-5 northbound ramps and Victory Boulevard, and two lanes in each direction west of Victory Boulevard. Parking is prohibited on both sides of the street between North San Fernando Boulevard and Victory Boulevard. There is no parking available on Burbank Boulevard near the project site. The speed limit is 35mph.
- Glenoaks Boulevard – Glenoaks Boulevard is a major arterial running north/south in the study area with two through lanes per direction. Parking is generally allowed on both sides of the street. The speed limit is 30 – 35 mph in the study area.
- Magnolia Boulevard – Magnolia Boulevard is a secondary arterial running in the east/west direction, with two through lanes per direction. On-street parking is allowed along most segments of Magnolia Boulevard within the study area. The speed limit is 30 - 35 mph in the study area.
- Olive Avenue – Olive Avenue is primarily a northeast/southwest major arterial that provides two and three through lanes per direction in the study area. Olive provides regional access to SR-134 and the I-5. Parking is generally allowed along both sides of the street within the study area. The speed limit is 30 -35 mph in the study area.
- San Fernando Boulevard – San Fernando Boulevard is classified as a secondary north/south arterial street and provides two lanes in each direction between the southern City limits and Verdugo Avenue, one lane in each direction between Verdugo Avenue and Magnolia Boulevard, and two lanes in each direction between Cypress Avenue and I-5. . Parking is generally permitted on both sides of the street. The speed limit is 35 mph between Magnolia Boulevard and Verdugo Avenue. San Fernando Boulevard carries two-way traffic with one lane with diagonal parking, and a speed limit of 25 mph.



- Verdugo Avenue – Verdugo Avenue is a collector west of Flower Street and a downtown collector between Front Street and Glenoaks Boulevard. Verdugo Avenue runs east/west in the study area, with one through lane per direction, and a shared center turn lane or left-turn pockets. Parking is generally allowed on both sides of the street. The speed limit is 35 mph.
- Victory Boulevard – Victory Boulevard is a 4-lane major arterial running east/west in the study area. Victory becomes a northwest/southwest running street east of Empire Avenue. Generally, parking is allowed on both sides of the street. The speed limit is 30 – 35 mph.
- 1<sup>st</sup> Street/Ikea Way – 1<sup>st</sup> Street/Ikea Way is a secondary arterial running north/south in the study area with two through lanes per direction. Parking is generally not allowed on either side of the street. The speed limit on 1<sup>st</sup> Street/Ikea Way is 30 mph within the study area.

## EXISTING TRANSIT SERVICE

Two commuter rail line and 10 bus lines currently serve the project area, as shown in Figure 3. These transit lines are described below and consist of Metrolink commuter rail, Los Angeles County Metropolitan Transportation Authority (Metro) bus lines, Burbank Bus lines, and Glendale Beelines:

- Metrolink Antelope Valley Line – The Metrolink Antelope Valley Line provides service from Lancaster in the Antelope Valley to Union Station in Downtown Los Angeles with stops in Palmdale, Vincent Grade/Acton, Via Princessa, Santa Clarita, Newhall, Sylmar/San Fernando, Sun Valley, Hollywood Burbank Airport, Downtown Burbank, and Glendale. The closest station to the project site is Downtown Burbank. Service is provided seven days per week. Weekday morning and afternoon peak hour headways are 20 to 50 minutes.
- Metrolink Ventura County Line – The Metrolink Ventura County Line provides service from East Ventura to Los Angeles Union Station with stops in Oxnard, Camarillo, Moorpark, Simi Valley, Chatsworth, Northridge, Van Nuys, Hollywood Burbank Airport, Downtown Burbank, and Glendale. The closest station to the project site is Downtown Burbank. Service is provided on weekdays. Weekday morning and afternoon peak hour headways are 20 to 40 minutes.
- Metro 92 – Line 92 is a north/south line that travels from Sylmar to Echo Park via Pacoima, Sun Valley, Burbank, Glendale, Glassell Park, Silverlake, and Downtown Los Angeles. Major stops include Burbank Town Center, Downtown Burbank Metrolink Station, Glendale Galleria, Glendale Station, and Civic Center/Grand Park. Line 92 provides local service seven days per week. Weekday service hours are from 5:00 AM to 10:00 PM. Morning and afternoon peak hour headways on Line 92 are 20 minutes.
- Metro 94/794 – Line 94/794 is a north/south line that travel from Sylmar to downtown Los Angeles via San Fernando, Pacoima, Sun Valley, Burbank, and Glendale. Line 94/794 stops at the Sylmar/San Fernando and Sun Valley Metrolink Stations, Hollywood Burbank Airport, and Los Angeles Union Station. Within the study area, Line 94/794 travels along San Fernando Road in the project study area. Line 94 provides local service seven days per week. Weekday service hours are from 4:30 to 2:00 AM. Peak hour headways on Line 94 are 15 to 20 minutes in the morning and 20 to 30 minutes in the afternoon. Line 794 provides rapid service on weekdays only between 4:30 AM to 9:30 PM. Peak hour headways on Line 794 are approximately 20 to 30 minutes in the morning and 20 minutes in the afternoon. The combined frequency on Line 94/794 is 15 minutes.



- Metro 96 – Line 96 is a north/south line that travels from Burbank Station to Downtown Los Angeles via Glendale, Glassell Park, and Cypress Park. Major stops include Downtown Burbank Metrolink Station, Burbank Town Center, Los Angeles Zoo, Autry Museum of the American West, and Silver Lake Library. Line 96 provides local service seven days per week. Weekday service hours are from 4:30 AM to 9:30 PM. Morning and afternoon peak hour headways on Line 96 are 30 minutes.
- Metro 154 – Line 154 is an east/west line that provides service between Tarzana and Downtown Burbank via Reseda, Encino, Van Nuys, and North Hollywood. Line 154 travels along Burbank Boulevard and Oxnard Street. Major stops include the Van Nuys Orange Line station, the North Hollywood Red and Orange Line stations, and Burbank-Downtown Metrolink station. Service is provided on weekdays only between 5:15 AM and 8:00 PM. Peak hour headways on Line 154 are 50 minutes in the morning and 60 minutes in the afternoon.
- Metro 155 – Line 155 is an east/west line that provides service from Sherman Oaks to Downtown Burbank via Valley Village, Toluca Lake, and Universal City. Line 155 travels primarily along Riverside Drive and Olive Avenue. Transfer is available to the Metro Red Line at Universal City station, and to Metrolink at the Burbank-Downtown station. Service is provided between 6:00 AM and 8:00 PM, seven days per week. Peak hour headways on Line 155 are 25 to 40 minutes in the morning and 30 to 45 minutes in the afternoon.
- Metro 164 – Line 164 is an east/west line that provides service from West Hills to Downtown Burbank via Woodland Hills, Canoga Park, Reseda, Lake Balboa, Van Nuys, and North Hollywood. Line 164 travels primarily along Victory Boulevard. Major stops include the Warner Center Orange Line station and the Burbank-Downtown Metrolink station. Service is provided seven days per week, with weekday service provided between 4:30 AM and 11:00 PM. Peak hour headways on Line 164 are 20 to 40 minutes in the morning and 15 to 30 minutes in the afternoon.
- Metro 165 – Line 165 is an east/west line that provides service from West Hills to Downtown Burbank via Woodland Hills, Canoga Park, Reseda, Lake Balboa, Van Nuys, and North Hollywood. Line 165 travels primarily along Vanowen Street. Major stops include the Warner Center Orange Line station and the Burbank-Bob Hope and Burbank-Downtown Metrolink stations. Service is provided seven days per week, with weekday service provided between 4:30 AM and 11:00 PM. Peak hour headways on Line 164 are 20 to 40 minutes in the morning and 15 to 30 minutes in the afternoon.
- Metro 183 – Line 183 is an east/west line that provides service from Sherman Oaks to Glendale via Van Nuys, Valley Glen, Studio City, North Hollywood, Universal City, and Burbank. Within the study area, Line 183 travels primarily along Magnolia Boulevard. Major stops include the North Hollywood Red and Orange Line station, the Burbank-Downtown and Glendale Metrolink stations. Service is provided seven days per week, with weekday service provided between 5:00 AM and 10:00 PM. Peak hour headways on Line 183 are 30 minutes in the morning and 45 to 55 minutes in the afternoon.
- Burbank Bus Metrolink/Media District– This line begins and ends at the downtown Burbank Metrolink Station and travels along Olive Avenue, Buena Vista Street, Alameda Avenue, Bob Hope Drive, and Riverside Drive. Service is provided all-day on weekdays only with 12-minute headways.



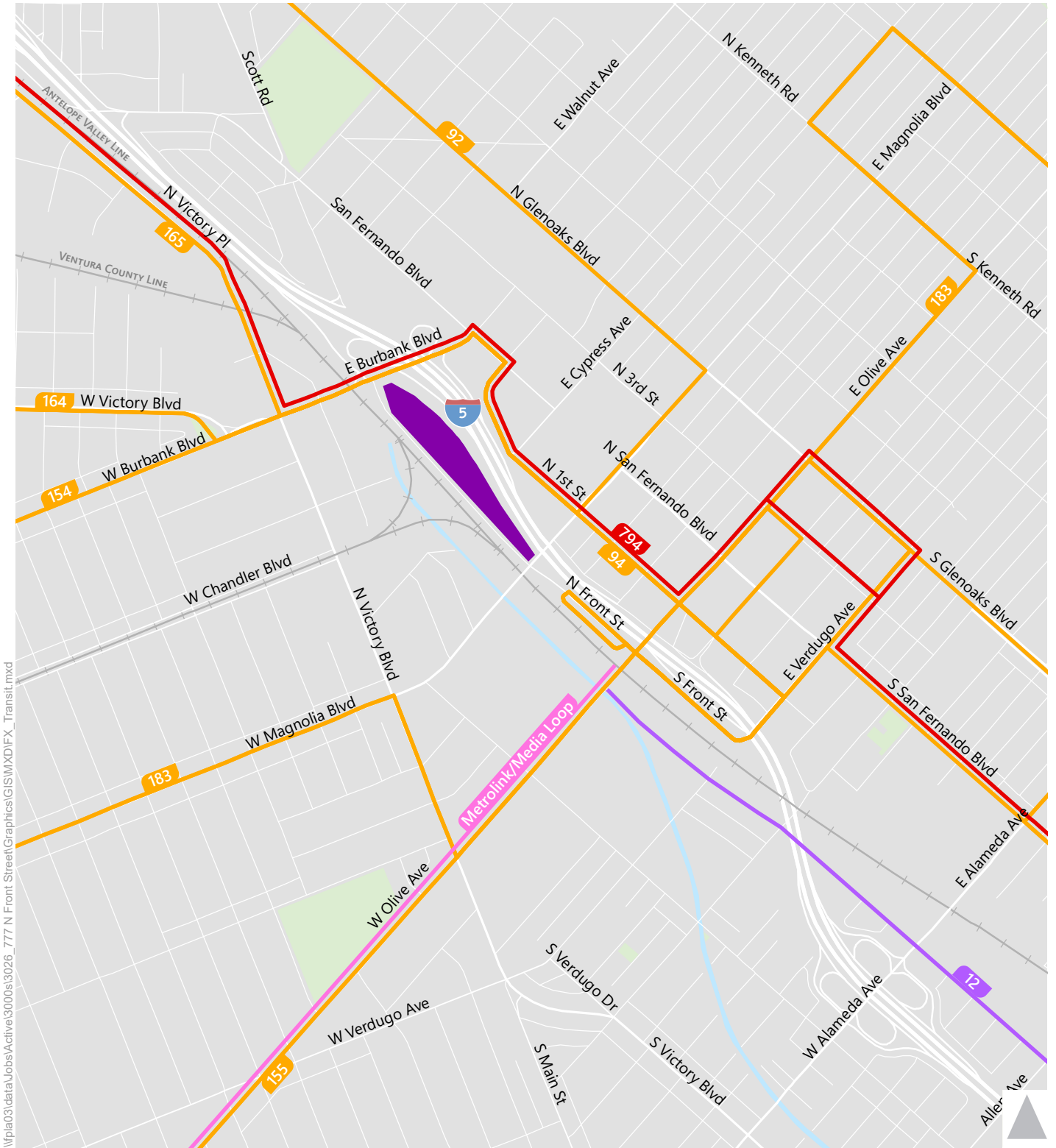
- Glendale Beeline 12 – Line 12 is a north/south express line that provides service from the Glendale Train Station to the Burbank Train Station. The line travels primarily along Flower Street in the study area. Service is provided from 6:00 AM – 9:30 AM and 3:00 PM – 6:30 PM, Monday through Friday. Peak hour headways are 15 to 30 minutes in the morning and 20 minutes in the afternoon.

## EXISTING BICYCLE FACILITIES

Figure 4 shows the existing bicycle facilities. The existing facilities include a bicycle lane fronting the project site along Front Street from Burbank Boulevard to Verdugo Avenue. There is also a bicycle lane in the project vicinity on 3<sup>rd</sup> Street from Burbank Boulevard to Verdugo Avenue. There is a bicycle route (Class III facility) on Burbank Boulevard between Victory Boulevard and 3<sup>rd</sup> Street. There are also existing facilities along San Fernando Road, Angeleno Avenue, Verdugo Road, Ikea Way, and Providencia Avenue.

Proposed bicycle facilities are also shown in Figure 4. There are several bicycle lanes and bicycle routes planned throughout the study area, including the extension of the bicycle path along San Fernando Road, the extension of the Chandler Bikeway to the Downtown Burbank Metrolink Station, and a Class I Burbank Channel Bikeway from the Downtown Burbank Metrolink Station to Alameda Avenue; Class II Facilities on 3<sup>rd</sup> Street, Olive Avenue north of 3<sup>rd</sup> Street Burbank Boulevard from Victory Boulevard to 3<sup>rd</sup> Street, 3<sup>rd</sup> Street between Burbank Boulevard and Amherst Drive, and Magnolia Boulevard from 3<sup>rd</sup> Street to Victory Boulevard; and Class III Facilities on Olive Avenue, Glenoaks Boulevard, and Verdugo Avenue. The proposed facilities come from the City of Burbank's General Plan and Bicycle Master Plan. The project will also install a 2-way Class IV cycle track along the east side of the street, from Front Street to the Metrolink Station, where it will continue along Front Street to 1<sup>st</sup> Street/Ikea Way & Verdugo Avenue. This cycle track will replace the existing Class II bicycle lane on both sides of the street.





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- Project Site
- Metro Rapid
- Metro Local
- Burbank Bus
- Glendale Beeline



Figure 3  
777 N Front St Existing Transit Service





## **EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE**

This section presents the existing intersection peak hour traffic volumes, a description of the methodology used to analyze the intersection traffic conditions, and the resulting level of service conditions at each of the study intersections. Traffic counts are provided in Appendix A.

### ***Existing Traffic Volumes - Intersections***

Traffic volumes at the 24 study intersections were collected during the morning and afternoon peak hours, from 7:00 to 10:00 AM and from 4:30 to 7:30 PM, respectively. The peak 1-hour period for the morning and afternoon is found by identifying the four consecutive 15-minute periods with the highest traffic volumes. Three sets of weekday counts were collected by the National Data & Surveying Services (NDS) in April 2018. Two sets of weekday counts were collected for three intersections in October 2017. Weekday counts were averaged to determine volumes for weekday existing conditions. Counts were provided by the City of Burbank staff. Local schools were in session on the days of the counts.

Due to construction at I-5 SB Off-Ramp/Front Street & Burbank Boulevard when existing counts were taken, several movements were restricted. In order to develop future forecasts at this intersection as well as adjacent intersections, count data from January 2017 was used when construction was not occurring and all available movements were possible at these intersections. These counts were grown using the same growth factor established in the model, 0.72% per year, to create existing base volumes (year 2018). January 2017 historic counts were used for the following intersections:

7. San Fernando Boulevard & Burbank Boulevard
9. I-5 SB Off-Ramp/Front Street & Burbank Boulevard
10. Victory Place & Burbank Boulevard
11. Victory Boulevard & Burbank Boulevard

The existing weekday and weekend traffic volumes, shown in Figure 5, represent the existing 2018 conditions.

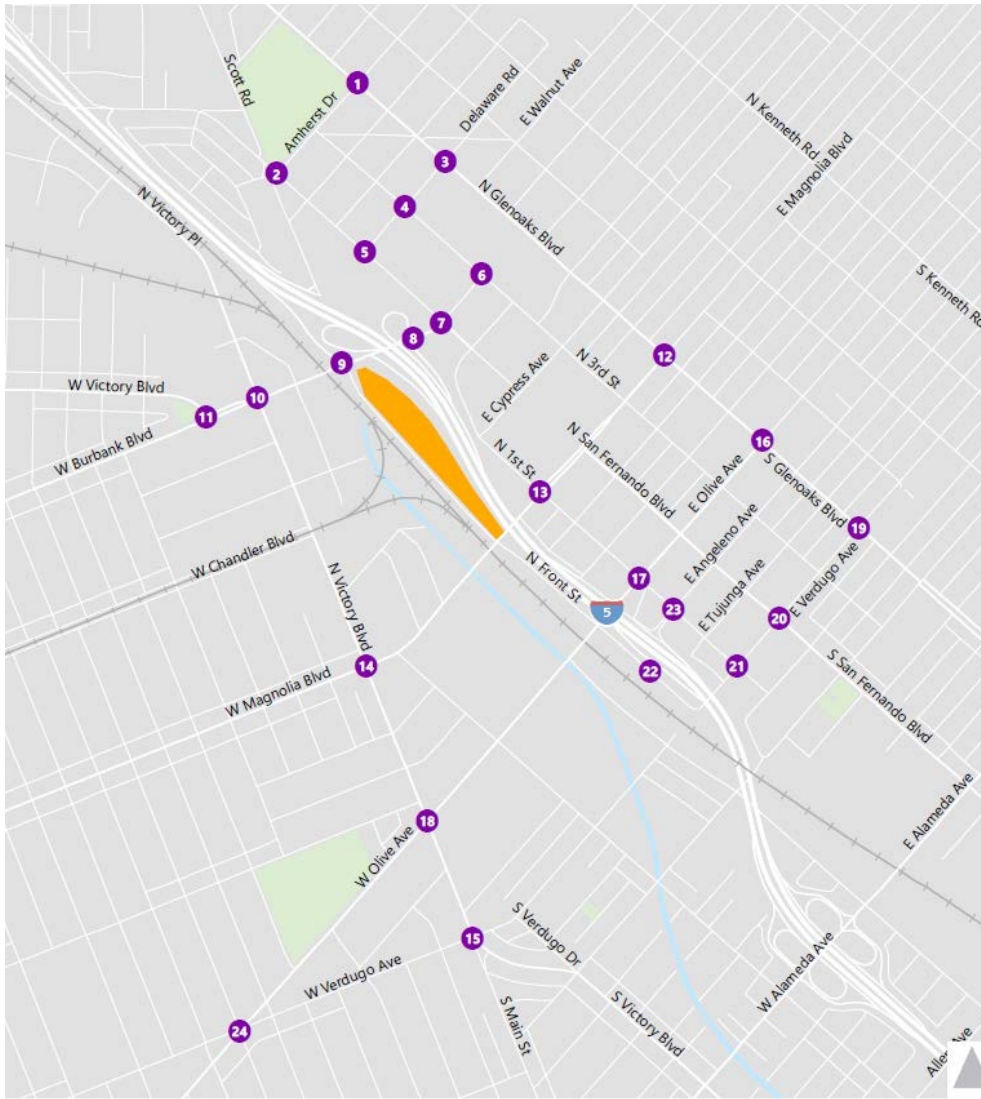
### ***Existing Traffic Volumes – Roadway Segment***

Three days of 24-hour traffic counts on Front Street were collected by the National Data & Surveying Services (NDS) in April 2018. The average of the three 24-hour daily counts revealed an average of 2,698 daily vehicles on Front Street. Counts were provided by the City of Burbank staff. Local schools were in session on the days of the counts. Count sheets can be found in Appendix A.

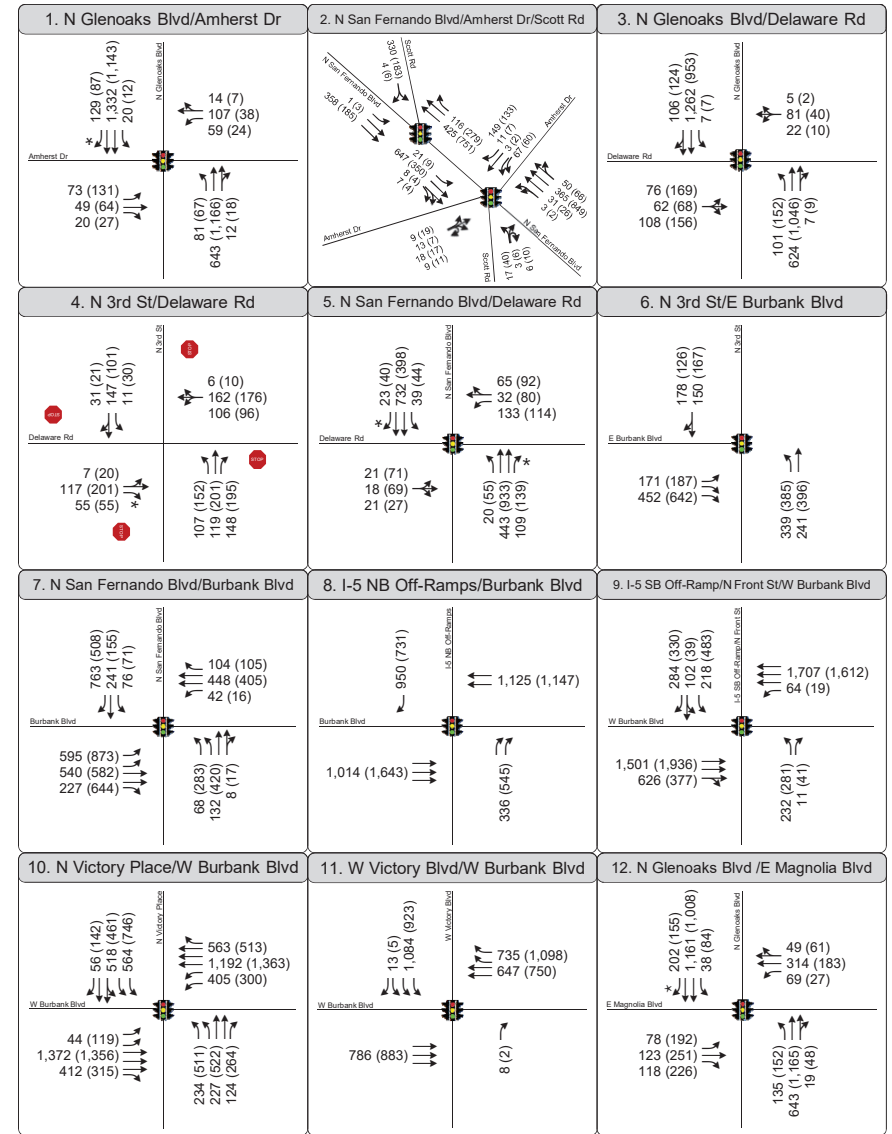
### ***Level of Service Methodology***

Level of service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent, nearly free-flow conditions at LOS A to overloaded, stop-and-go conditions at LOS F. LOS D is typically recognized as the minimum acceptable level of service in urban areas. Level of service definitions for signalized intersections can be found in Table 1. Levels of service definitions for unsignalized intersections are provided in Table 2.





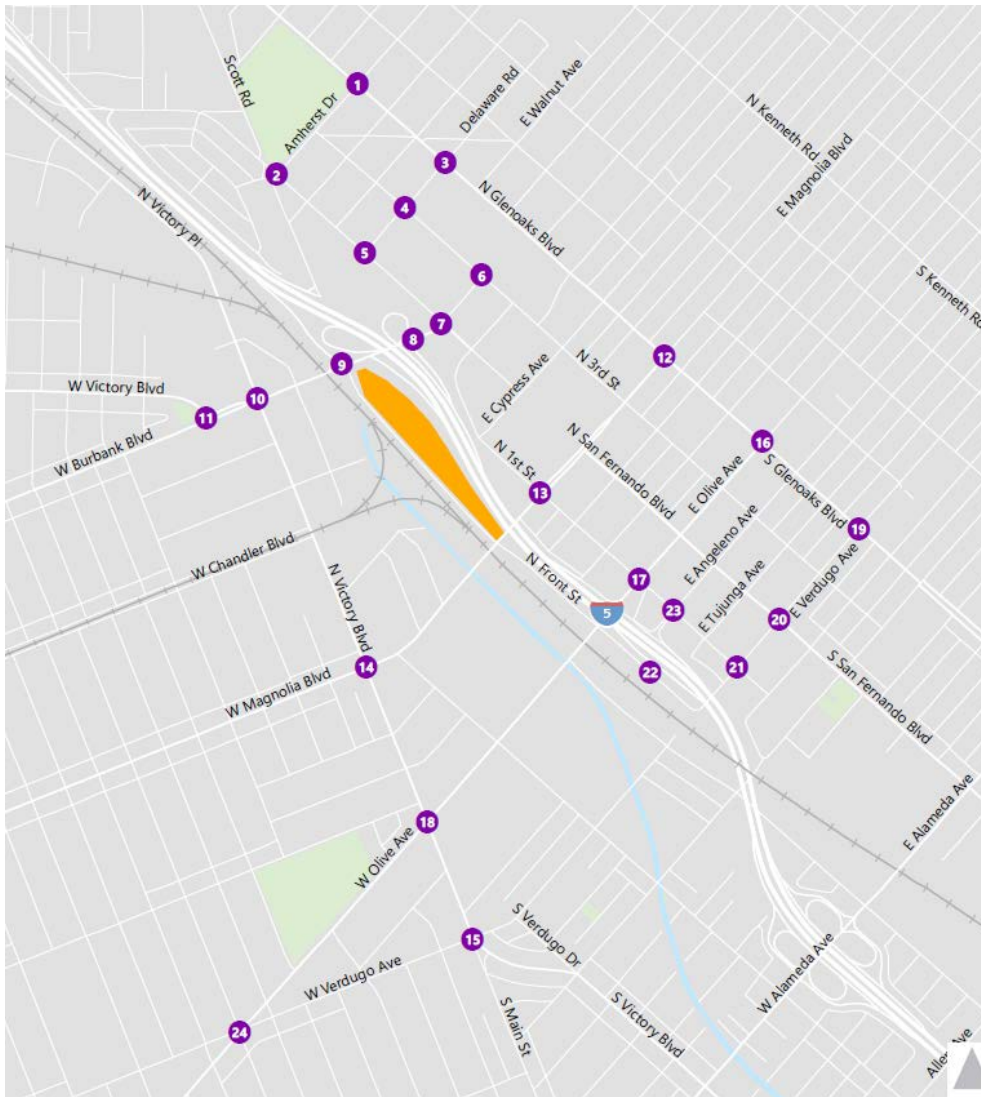
- Study Intersection
- Project Site



\*De facto right turn lane

Figure 5  
Peak Hour Traffic Volumes and Lane Configurations  
Existing Conditions (2018)





- Study Intersection
- Project Site

<p><b>13. N 1st St/E Magnolia Blvd</b></p> <p>N 1st St</p> <p>E Magnolia Blvd</p> <p>196 (207) 236 (365) 32 (126)</p> <p>18 (113) 610 (507) 48 (89)</p> <p>66 (287) 409 (747) 167 (341)</p> <p>171 (220) 94 (363) 44 (134)</p>	<p><b>14. Victory Blvd/W Magnolia Blvd</b></p> <p>Victory Blvd</p> <p>W Magnolia Blvd</p> <p>122 (165) 950 (852) 196 (248)</p> <p>123 (210) 544 (639) 212 (128)</p> <p>109 (160) 526 (888) 215 (169)</p> <p>148 (222) 472 (812) 77 (139)</p>	<p><b>15. Victory Blvd/W Verdugo Ave</b></p> <p>Victory Blvd</p> <p>W Verdugo Ave</p> <p>67 (54) 1,018 (915) 38 (46)</p> <p>65 (59) 98 (105) 36 (17)</p> <p>95 (84) 117 (100) 190 (192)</p> <p>72 (109) 443 (777) 14 (16)</p>
<p><b>16. S Glenoaks Blvd/E Olive Ave</b></p> <p>S Glenoaks Blvd</p> <p>E Olive Ave</p> <p>190 (111) 1,057 (1,032) 50 (93)</p> <p>44 (61) 449 (218) 124 (63)</p> <p>99 (213) 125 (340) 82 (162)</p> <p>155 (126) 638 (1,076) 33 (68)</p>	<p><b>17. S 1st St/E Olive Ave</b></p> <p>S 1st St</p> <p>E Olive Ave</p> <p>85 (141) 192 (359) 52 (66)</p> <p>80 (123) 746 (494) 41 (58)</p> <p>117 (374) 400 (801) 104 (254)</p> <p>237 (175) 166 (328) 50 (61)</p>	<p><b>18. S Victory Blvd/W Olive Ave</b></p> <p>S Victory Blvd</p> <p>W Olive Ave</p> <p>257 (219) 880 (879) 161 (191)</p> <p>111 (204) 760 (631) 112 (113)</p> <p>156 (205) 466 (1,008) 50 (39)</p> <p>104 (75) 449 (705) 98 (171)</p>
<p><b>19. S Glenoaks Blvd/E Verdugo Ave</b></p> <p>S Glenoaks Blvd</p> <p>E Verdugo Ave</p> <p>206 (106) 1,017 (1,066) 36 (46)</p> <p>40 (45) 300 (129) 54 (46)</p> <p>52 (111) 92 (205) 62 (129)</p> <p>90 (88) 683 (1,113) 15 (60)</p>	<p><b>20. S San Fernando Blvd/E Verdugo Ave</b></p> <p>S San Fernando Blvd</p> <p>E Verdugo Ave</p> <p>41 (62) 163 (219) 13 (17)</p> <p>13 (22) 576 (354) 92 (90)</p> <p>18 (37) 157 (350) 135 (176)</p> <p>108 (156) 140 (294) 97 (223)</p>	<p><b>21. South Ikea Way/E Verdugo Ave</b></p> <p>South Ikea Way</p> <p>E Verdugo Ave</p> <p>140 (290) 56 (125) 82 (124)</p> <p>123 (147) 610 (436) 5 (13)</p> <p>87 (135) 218 (405) 32 (70)</p> <p>14 (87) 20 (163) 6 (16)</p>
<p><b>22. S Front St/I-5 SB Ramps</b></p> <p>S Front St</p> <p>I-5 SB Ramps</p> <p>29 (59) 4 (11)</p> <p>24 (27) 316 (536)</p> <p>197 (227) 572 (595)</p>	<p><b>23. S 1st St/E Angeleno Ave</b></p> <p>S 1st St</p> <p>E Angeleno Ave</p> <p>26 (79) 248 (504) 44 (91)</p> <p>61 (110) 96 (115) 21 (46)</p> <p>216 (173) 267 (303) 63 (71)</p> <p>101 (145) 171 (206) 16 (49)</p>	<p><b>24. Sparks St/Olive Ave/Verdugo Ave</b></p> <p>Verdugo Ave</p> <p>Olive Ave</p> <p>6 (10) 15 (11) 37 (21) 50 (30) 9 (22)</p> <p>6 (15) 86 (221) 51 (16) 1 (2) 1 (1)</p> <p>5 (11) 194 (197) 108 (82) 4 (1)</p> <p>4 (11) 154 (254) 272 (269) 16 (14) 4 (6)</p> <p>21 (12) 44 (32) 20 (25) 16 (15) 4 (4)</p>

\*De facto right turn lane

Figure 5  
Peak Hour Traffic Volumes and Lane Configurations  
Existing Conditions (2018)



**TABLE 1**  
**LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS**

<b>Level of Service</b>	<b>Volume/Capacity Ratio</b>	<b>Definition</b>
A	0.000 - 0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	>0.600 - 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat what restricted within groups of vehicles.
C	>0.700 - 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>0.800 - 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>0.900 - 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths

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

**TABLE 2  
LEVEL OF SERVICE DEFINITIONS FOR  
UNSIGNALIZED INTERSECTIONS**

<b>Level of Service</b>	<b>Average Control Delay (seconds/vehicle)</b>
A	$\leq 10.0$
B	$> 10.0$ and $\leq 15.0$
C	$> 15.0$ and $\leq 25.0$
D	$> 25.0$ and $\leq 35.0$
E	$> 35.0$ and $\leq 50.0$
F	$> 50.0$

Source: *Highway Capacity Manual*, Transportation Research Board, 2010.

The intersections were analyzed according to City of Burbank traffic study policies and procedures. The City of Burbank requires the use of Critical Movement Analysis (CMA) methodology (*Transportation Research Circular No. 212, Interim Materials on Highway Capacity*, Transportation Research Board, 1980) to evaluate intersection operations. The CMA method of intersection capacity analysis determines the intersection volume-to-capacity (V/C) ratio and corresponding LOS for turning movements and intersection characteristics at signalized intersections. Traffix for Windows was selected as the software to calculate the intersection LOS for this analysis. Traffix for Windows is an interactive computer software program that evaluates and forecasts traffic operating conditions.

The City of Burbank's timing and interconnected network of signals on major corridors provides improved signal coordination that allows for increased traffic flow. This system is in place on major arterials within the study area. A 0.02 V/C reduction was applied in locations where the network is active, with the exception of intersection on Glenoaks Boulevard, where a 0.05 V/C reduction was applied, as that corridor is now running a newer adaptive signal control that responds to traffic volumes in real time to further improve vehicle throughput.

For the stop-controlled intersections, the City of Burbank requires application of the *Highway Capacity Manual* (HCM) (Transportation Research Board, 2000) methodology to evaluate capacity and performance. The HCM operational method determines the average stopped delay experienced per vehicle (i.e., delay resulting from initial deceleration, queue move-up time, time actually stopped, and final acceleration). At 4-way stop-controlled intersections, the reported delay is the average delay experienced by all vehicles at an intersection across an entire hour. At side-street stop-controlled intersections, delay is evaluated separately for each individual movement, and the reported delay is the worst-case delay experienced at the intersection across an entire hour.

LOS worksheets for signalized and unsignalized intersections are included in Appendix B.

### **Existing Levels of Service**

The traffic volumes shown in Figure 5 were analyzed using the methodologies described above to determine the current operating conditions at the existing analyzed intersections. The calculation is expressed as a V/C ratio for signalized intersections, and in delay in terms of seconds per vehicle for unsignalized intersections located in the City of Burbank. Table 3 summarizes the existing LOS for the 24 study intersections. Detailed intersection traffic analysis LOS calculations are provided in Appendix B. As indicated, one intersection is projected to operate at LOS E during both peak hours: I-5 SB Off-Ramp/Front Street & Burbank Boulevard. The remaining study intersections operate at LOS D or better under existing peak hour traffic conditions.



**TABLE 3**  
**777 N FRONT STREET PROJECT**  
**EXISTING (2018) INTERSECTION LEVEL OF SERVICE ANALYSIS**

NO.	INTERSECTION	INTERSECTION CONTROL	PEAK HOUR	Existing (2018)	
				V/C or Delay	LOS
1	N Glenoaks Boulevard & Amherst Drive	Signalized	AM	0.629	B
			PM	0.544	A
2	N San Fernando Boulevard & Amherst Drive [1]	Signalized	AM	0.687	B
			PM	0.689	B
3	N Glenoaks Boulevard & Delaware Road	Signalized	AM	0.669	B
			PM	0.694	B
4	N 3rd Street & Delaware Road	AWSC	AM	12.1	B
			PM	14.0	B
5	N San Fernando Boulevard & Delaware Road	Signalized	AM	0.386	A
			PM	0.528	A
6	N 3rd Street & E Burbank Boulevard	Signalized	AM	0.588	A
			PM	0.607	B
7	N San Fernando Boulevard & Burbank Boulevard	Signalized	AM	0.745	C
			PM	0.722	C
8	I-5 NB Off-Ramps & Burbank Boulevard	Signalized	AM	0.498	A
			PM	0.582	A
9	I-5 SB Off-Ramp/N Front Street & W Burbank Boulevard	Signalized	AM	0.905	E
			PM	0.983	E
10	N Victory Place & W Burbank Boulevard	Signalized	AM	0.780	C
			PM	0.869	D
11	W Victory Boulevard & W Burbank Boulevard	Signalized	AM	0.502	A
			PM	0.494	A
12	N Glenoaks Boulevard & E Magnolia Boulevard	Signalized	AM	0.652	B
			PM	0.671	B
13	N 1st Street & E Magnolia Boulevard	Signalized	AM	0.488	A
			PM	0.753	C
14	Victory Boulevard & W Magnolia Boulevard	Signalized	AM	0.783	C
			PM	0.874	D
15	Victory Boulevard & W Verdugo Avenue	Signalized	AM	0.616	B
			PM	0.584	A
16	S Glenoaks Boulevard & E Olive Avenue	Signalized	AM	0.713	C
			PM	0.689	B
17	South First Street & E Olive Avenue	Signalized	AM	0.599	A
			PM	0.709	C
18	S Victory Boulevard & W Olive Avenue	Signalized	AM	0.806	D
			PM	0.841	D
19	S Glenoaks Boulevard & E Verdugo Avenue	Signalized	AM	0.663	B
			PM	0.643	B
20	S San Fernando Boulevard & E Verdugo Avenue	Signalized	AM	0.604	B
			PM	0.702	C
21	South Ikea Way & E Verdugo Avenue	Signalized	AM	0.585	A
			PM	0.636	B
22	S Front Street & I-5 SB Ramps	Signalized	AM	0.508	A
			PM	0.610	B
23	South First Way & E Angeleno Avenue	Signalized	AM	0.367	A
			PM	0.524	A
24	Olive Avenue/Sparks Road & W Verdugo Avenue [1]	Signalized	AM	0.663	B
			PM	0.755	C

Notes:

AWSC All-way stop controlled intersections

[1] 5/6-legged intersection, v/c calculated by hand

### 3. TRAFFIC PROJECTIONS

#### PROJECT TRAFFIC

The development of traffic generation estimates for the proposed project involves the use of a three-step process: trip generation, trip distribution, and traffic assignment. For the purposes of this report, the terms “traffic” and “trips” generally refer to vehicle trips.

#### ***Project Traffic Generation***

The proposed project consists of, retail, restaurant, residential units, and a hotel. Trip generation rates from the Institute of Transportation Engineers (ITE) using the *Trip Generation, 10th Edition*, (ITE, 2017), in conjunction with the City of Burbank were used to estimate trip making characteristics for these land uses. In case of trips to the hotel and residential units, the ITE trip generation equations were used instead of the linear trip generation rate. For all other land uses, the ITE trip generation rate has been used.

The total number of project trips have been reduced by attributing a portion of the trips to and from the mixed-use site using transit, in consultation with the City of Burbank. The total number of project trips have also been reduced by the expected internal capture of the proposed project. Internal capture refers to trips generated by mixed use developments where trips to or from two land uses in the proposed project are made by just one vehicle trip entering or leaving the project site. Such trips may include those made by residents patronizing the on-site retail before or after their commute to work. Internal capture results in a lower number of total vehicles entering and leaving the project site, which in turn reduces the total number of vehicles on the roadway network.

The proposed project, following the application of the trip generation credits described above, would generate approximately 5,261 net daily trips, including 314 and 398 trips in the AM and PM peak hours, respectively. Table 4 shows the trip generation for the project.





**TABLE 4  
777 N FRONT STREET PROJECT  
PROJECT TRIP GENERATION ESTIMATES**

Land Use	Size	ITE Code	Trip Generation Rates [a]						Estimated Trip Generation							
			Daily Rate	AM Peak Hour		PM Peak Hour		Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips				
				Rate	In	Out	Rate		In	Out	In	Out	Total	In	Out	Total
<b>Proposed Land Uses</b>																
<b>Mid-Rise Apartments [b]</b>	573 DU	221	Equation	Equation	26%	74%	Equation	61%	39%	3,121	49	140	189	144	93	237
Less: Internal capture [b]			1%		1%	2%		1%	5%	(31)	(1)	(2)	(3)	(2)	(5)	(7)
Less: Walk/transit/bike credit [c]			10%	10%			10%			(312)	(5)	(14)	(19)	(14)	(9)	(23)
Total Driveway Trips										2,778	43	124	167	128	79	207
<b>Retail/Gallery Space</b>	1.067 ksf	820	37.75	0.94	62%	38%	3.81	48%	52%	40	1	0	1	2	2	4
Less: Internal capture [b]			13%		0%	0%		67%	67%	(5)	0	0	0	(1)	(1)	(2)
Less: Walk/transit/bike credit [c]			5%	5%			5%			(2)	0	0	0	0	0	0
Total Driveway Trips										33	1	0	1	1	1	2
<b>Hotel [d]</b>	307 rooms	310	8.36	Equation	59%	41%	Equation	51%	49%	2,567	87	61	148	104	100	204
Less: Internal capture [b]			1%		0%	2%		5%	1%	(26)	0	(1)	(1)	(5)	(1)	(6)
Less: Walk/transit/bike credit [c]			10%	10%			10%			(257)	(9)	(6)	(15)	(10)	(10)	(20)
Total Driveway Trips										2,284	78	54	132	89	89	178
<b>High-Turnover (Sit-Down) Restaurant</b>	1.800 ksf	932	112.18	9.94	55%	45%	9.77	62%	38%	202	10	8	18	11	7	18
Less: Internal capture [b]			13%		24%	7%		26%	42%	(26)	(2)	(1)	(3)	(3)	(3)	(6)
Less: Walk/transit/bike credit [c]			5%	5%			5%			(10)	(1)	0	(1)	(1)	0	(1)
Total Driveway Trips										166	7	7	14	7	4	11
<b>TOTAL DRIVEWAY TRIPS</b>										<b>5,261</b>	<b>129</b>	<b>185</b>	<b>314</b>	<b>225</b>	<b>173</b>	<b>398</b>

Notes:

- a. Source for trip generation rates: *Trip Generation Manual, 10th Edition*, Institute of Transportation Engineers (ITE), 2017.
- b. ITE code 221 Multifamily Housing Mid-Rise was used with the General Urban/Suburban setting rate.  
 Daily Equation:  $T = 5.45(X) - 1.75$   
 AM Equation:  $\ln(T) = 0.98 \ln(X) - 0.98$   
 PM Equation:  $\ln(T) = 0.96 \ln(X) - 0.63$
- c. Internal capture represents the percentage of trips between land uses that occur within the site. Transportation Research Board (TRB) National Cooperative Highway Research Program (NCHRP) Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments, 2011.
- d. A 5-10% walk/transit/bike credit was applied to account for the number and frequency of local bus service within walking distance of the Project.
- e. AM Equation:  $T = 0.50(X) - 5.34$   
 PM Equation:  $T = 0.75(X) - 26.02$

### ***Project Traffic Distribution***

The geographic distribution of the traffic generated by the proposed project depends on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of population from which the employees and potential patrons of the proposed development are drawn, and the location of the project in relation to the surrounding street system.

The City's Travel Demand Model was used to develop the project trip distribution and represents a localized version of the regional Southern California Association of Governments (SCAG) model. The distribution pattern illustrated in Figure 6 was applied for project traffic, under both existing and future conditions.

### ***Project Traffic Assignment***

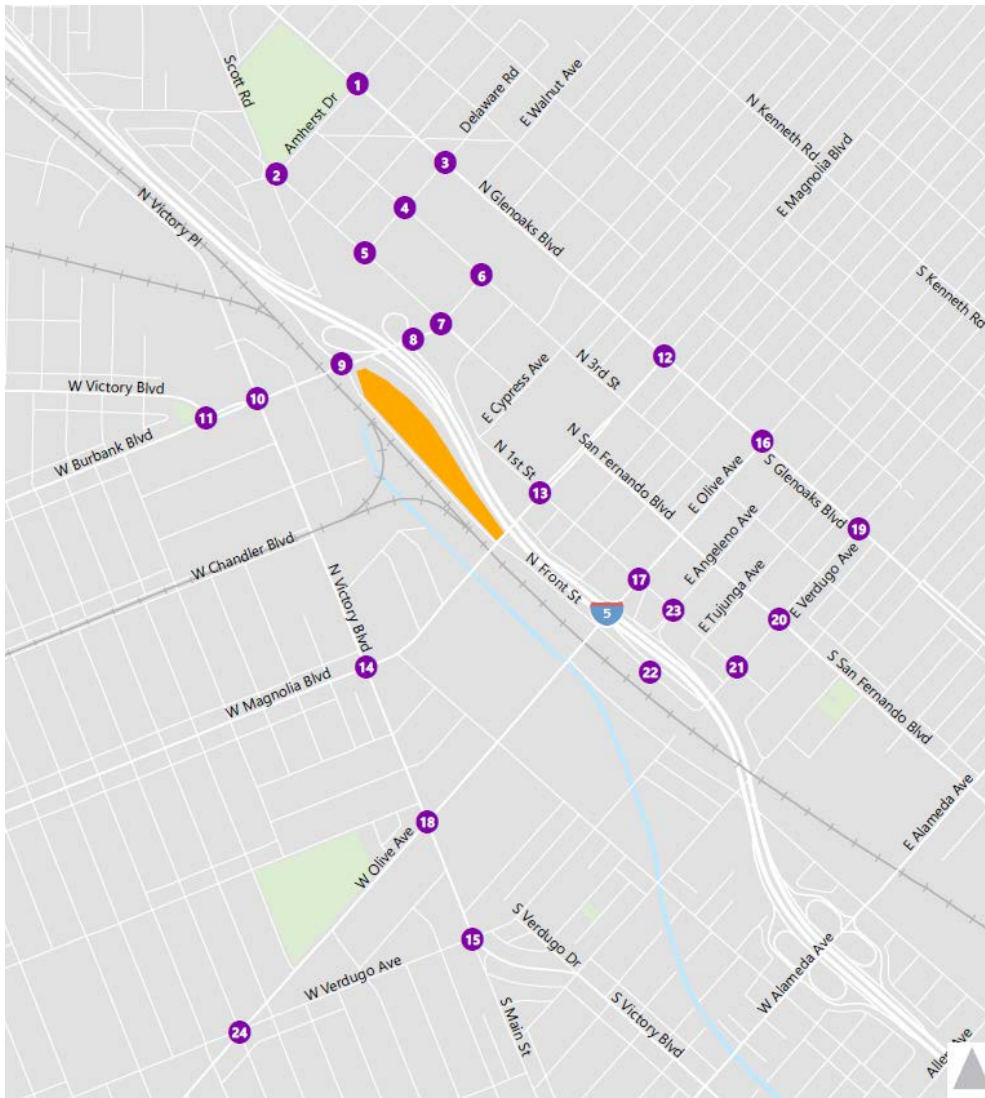
The traffic generated by the proposed project was assigned to the street network using the distribution patterns described in Figure 6. Figure 7 and Figure 8 illustrate how project generated trips were assigned in the peak hours for the Existing plus Project scenario and the Future plus Project scenario. The assignment of project volumes differs between the existing and future conditions due to the opening of the reconfigured ramps for Interstate 5 at Burbank Boulevard.

## **EXISTING PLUS PROJECT TRAFFIC CONDITIONS AND LEVEL OF SERVICE**

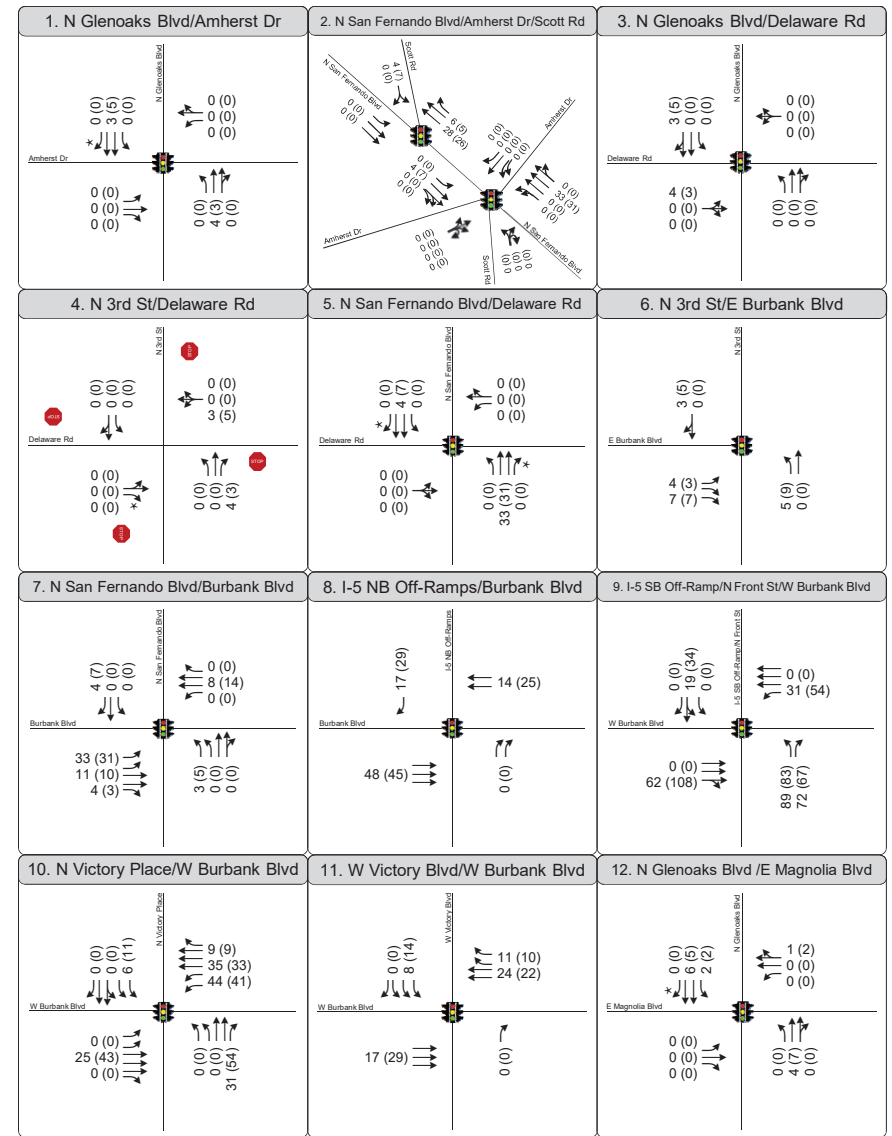
The project traffic estimated under the aforementioned section was added to the existing (Year 2018) traffic volumes to estimate existing plus project traffic volumes. Existing plus Project traffic volumes presented in Figure 9 were analyzed to determine the projected V/C ratios or delay and LOS for each of the analyzed intersections under this scenario. Table 5 summarizes the Existing plus Project LOS. As indicated, I-SB Off-Ramp/Front Street & Burbank Boulevard is projected to operate at LOS F during both peak hours. The remaining study intersections operate at LOS D or better under existing plus project peak hour traffic conditions.







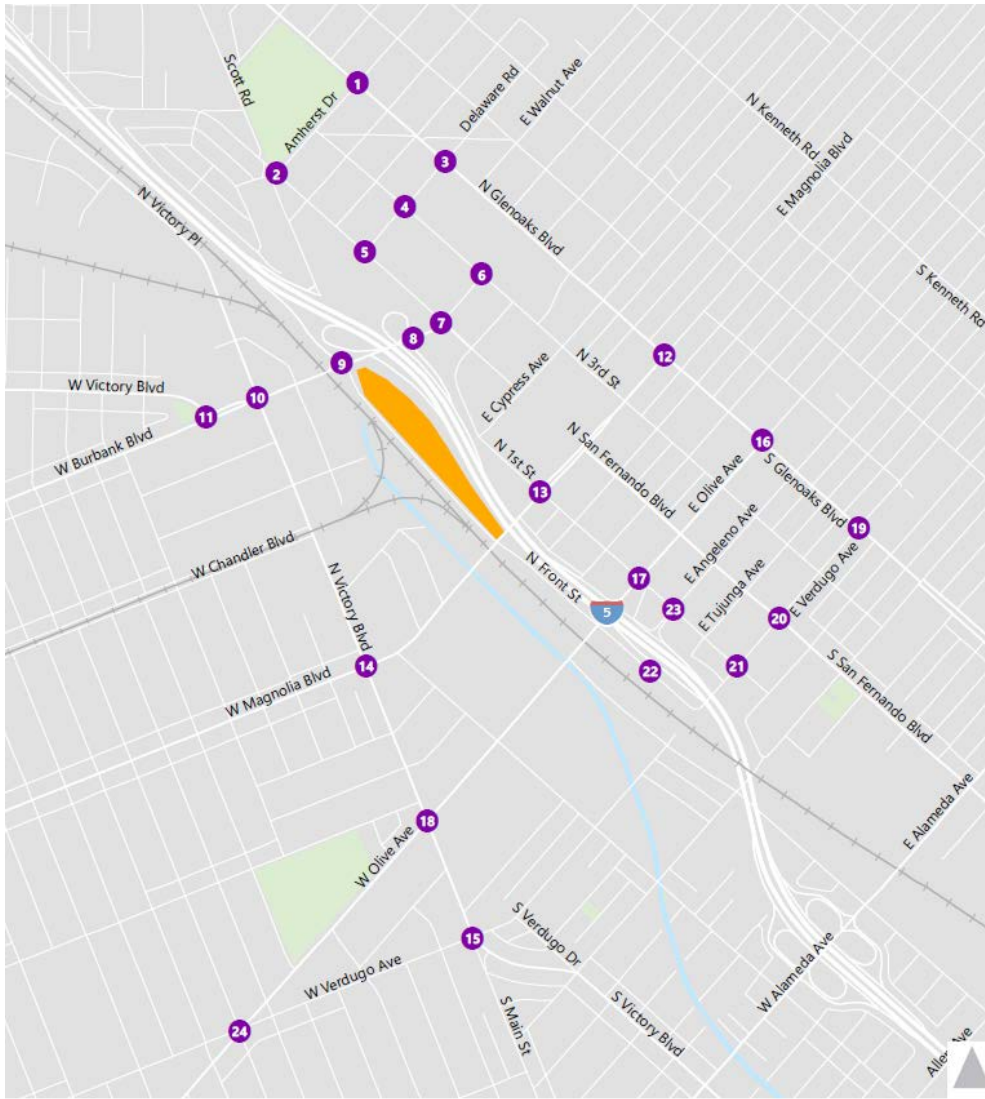
- Study Intersection
- Project Site



\*De facto right turn lane

Figure 7  
Peak Hour Traffic Volumes and Lane Configurations  
Project Only - Existing Conditions (2018)



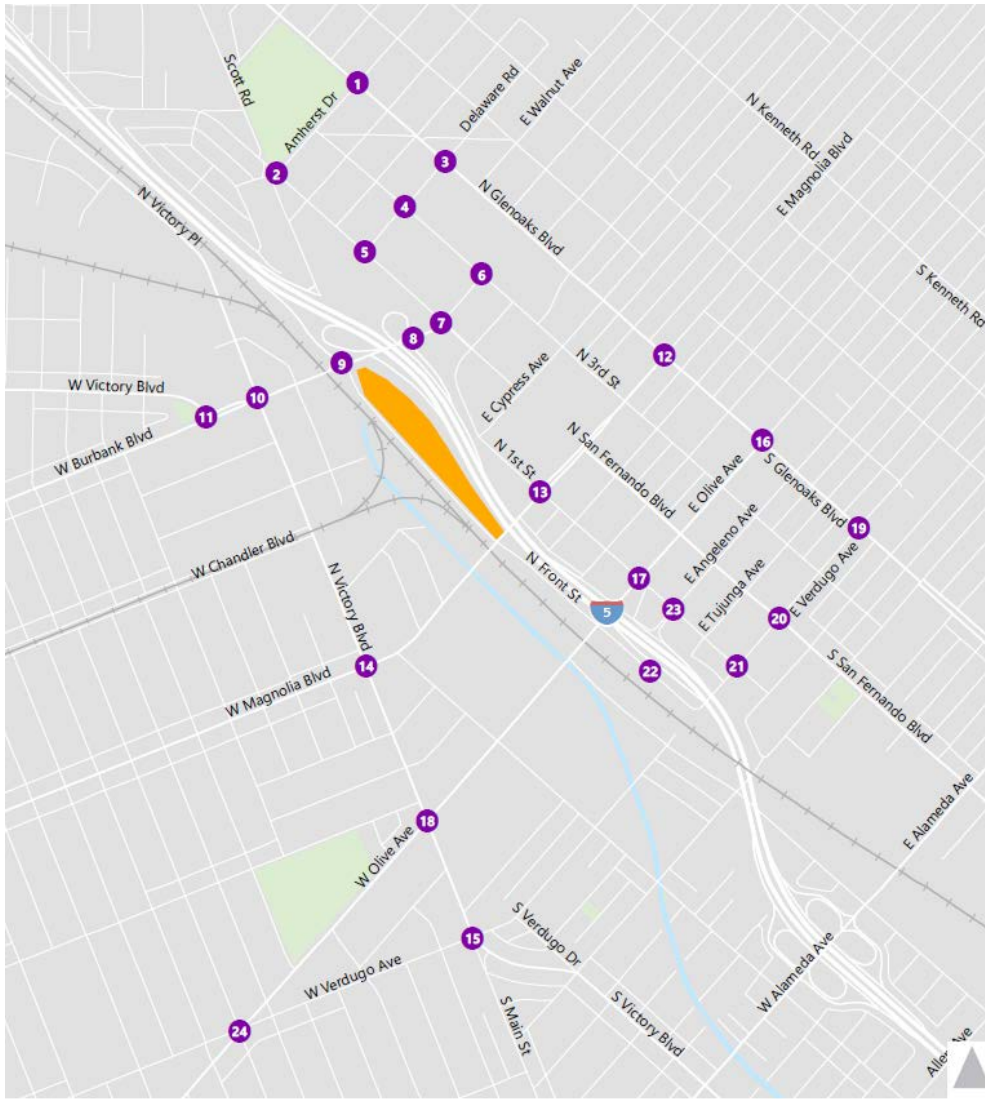


13. N 1st St/E Magnolia Blvd	14. Victory Blvd/W Magnolia Blvd	15. Victory Blvd/W Verdugo Ave
16. S Glenoaks Blvd/E Olive Ave	17. S 1st St/E Olive Ave	18. S Victory Blvd/W Olive Ave
19. S Glenoaks Blvd/E Verdugo Ave	20. S San Fernando Blvd/E Verdugo Ave	21. South Ikea Way/E Verdugo Ave
22. S Front St/I-5 SB Ramps	23. S 1st St/E Angeleno Ave	24. Sparks St/Olive Ave/Verdugo Ave

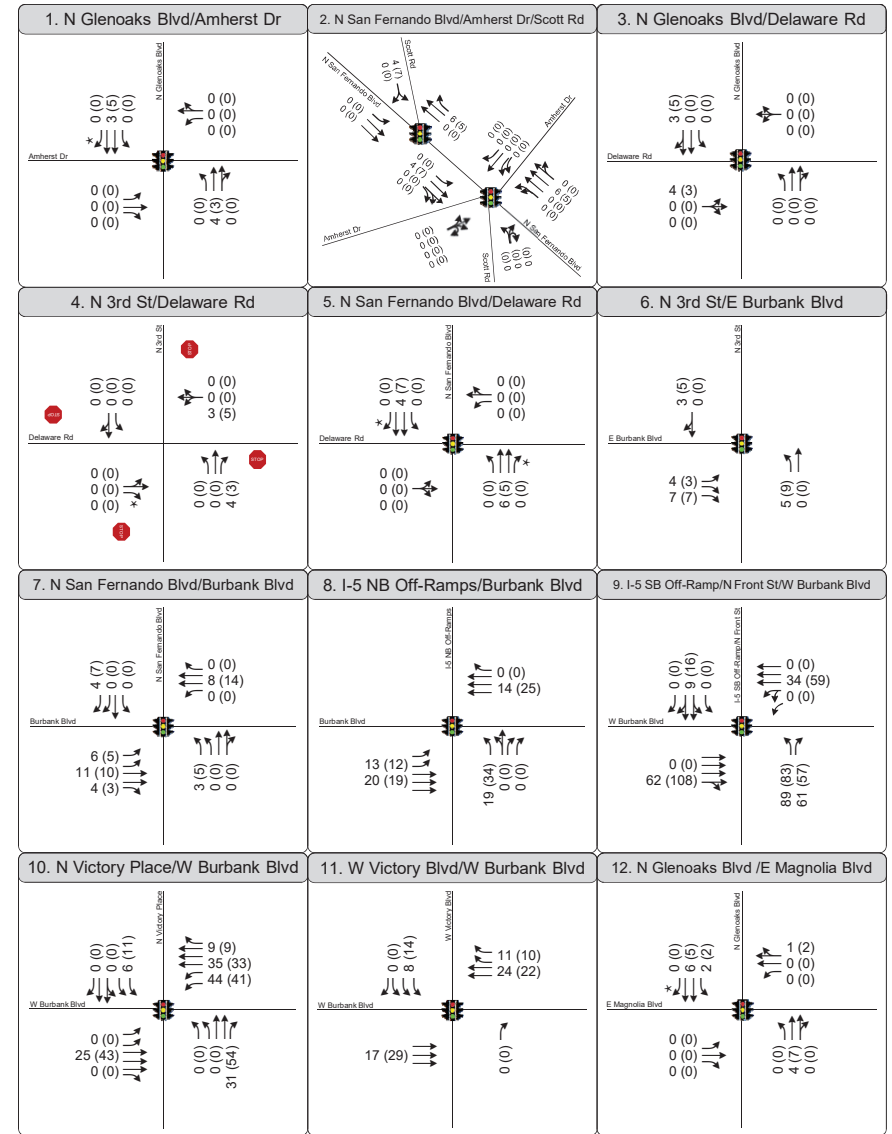
\*De facto right turn lane

Figure 7  
Peak Hour Traffic Volumes and Lane Configurations  
Project Only - Existing Conditions (2018)





- Study Intersection
- Project Site

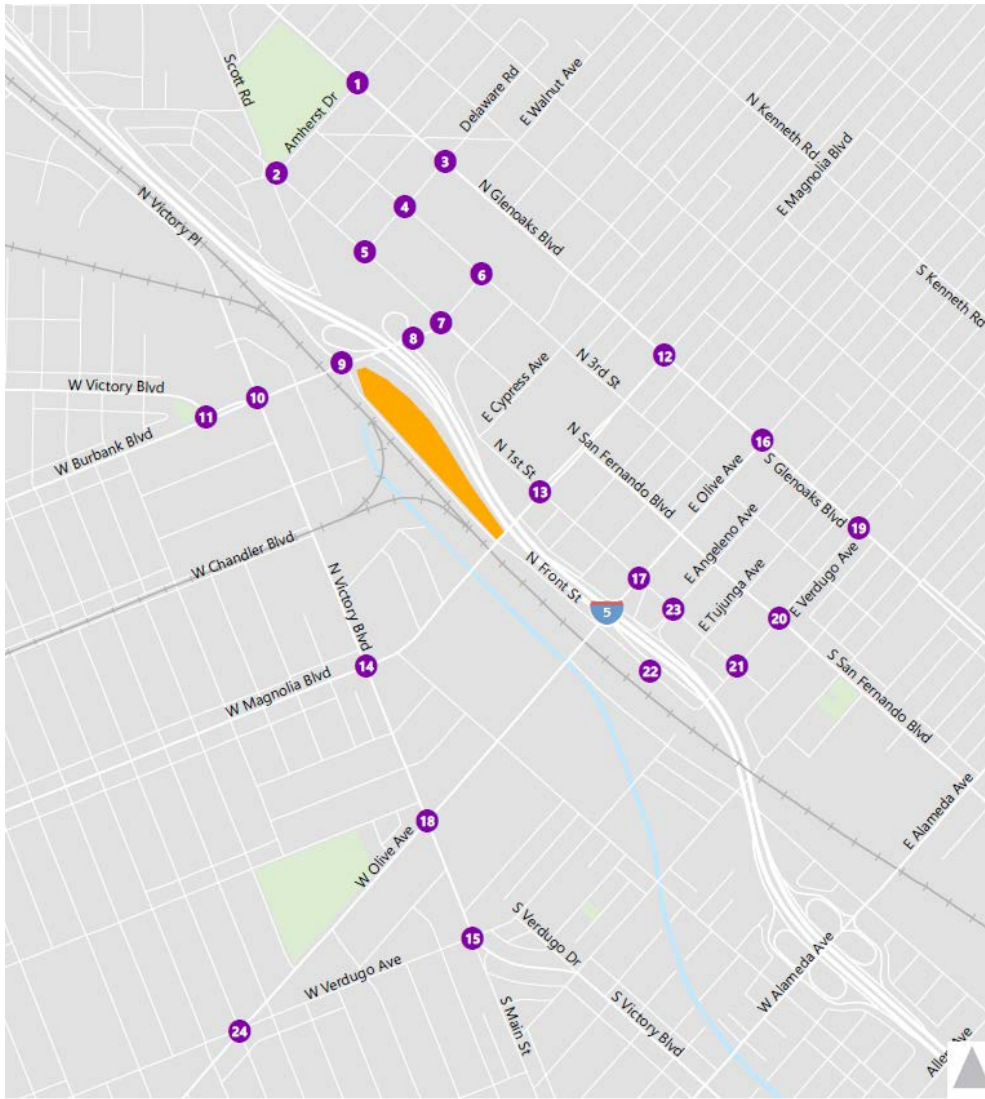


\*De facto right turn lane

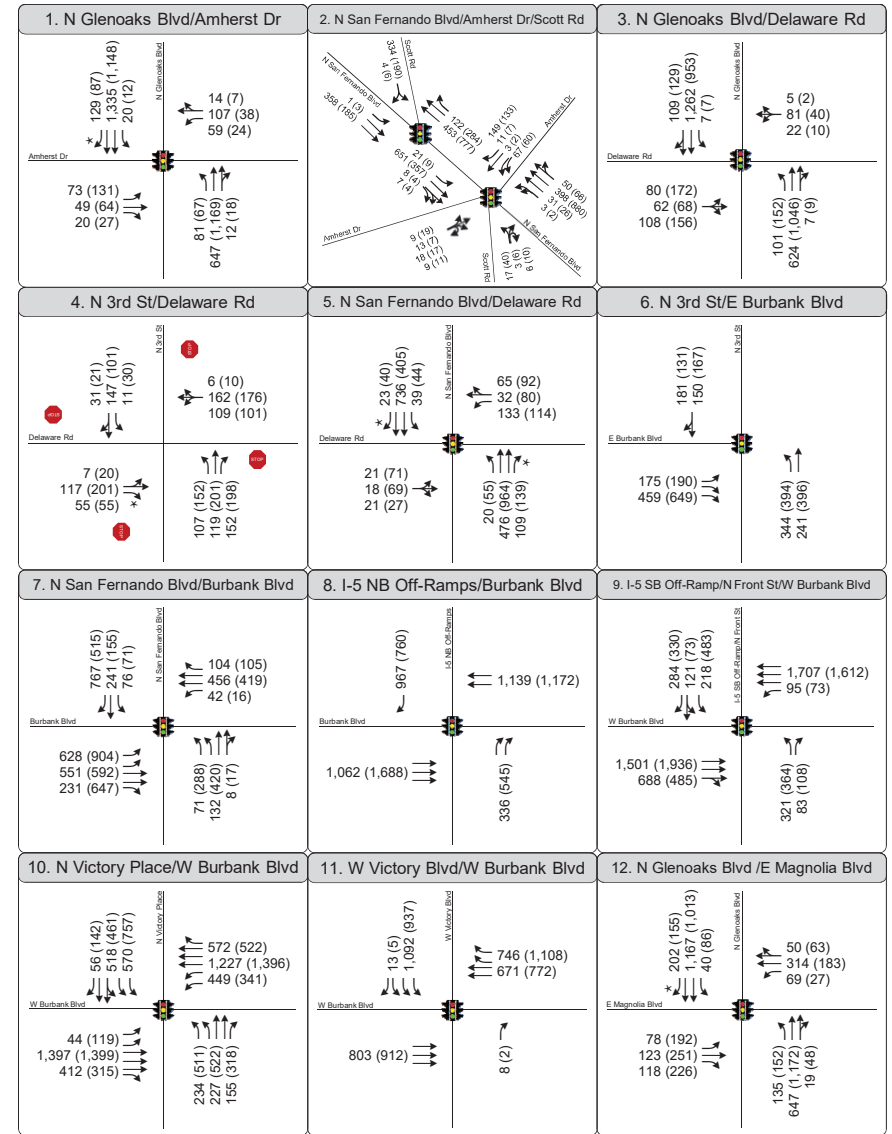
Figure 8  
Peak Hour Traffic Volumes and Lane Configurations  
Project Only - Future Base Conditions (2022)







- Study Intersection
- Project Site

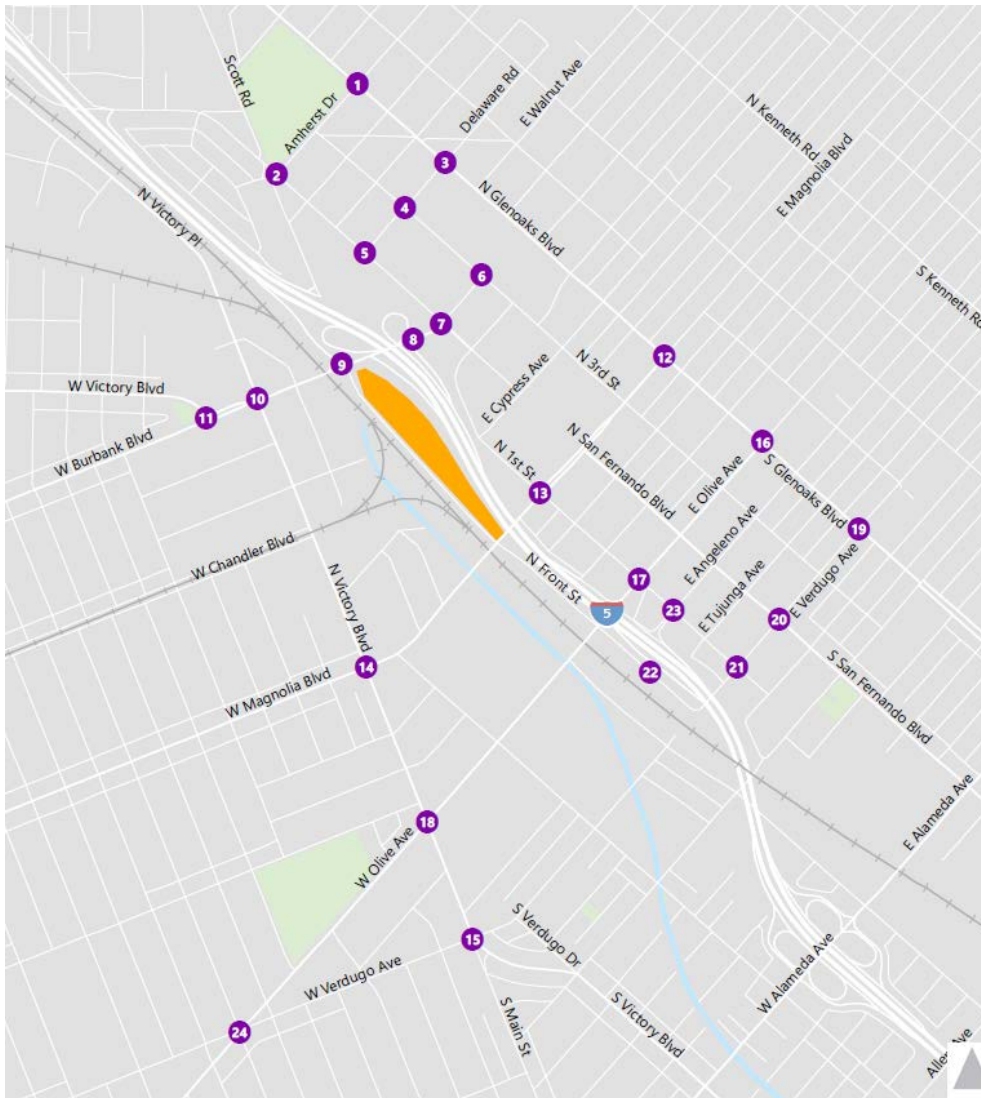


\*De facto right turn lane

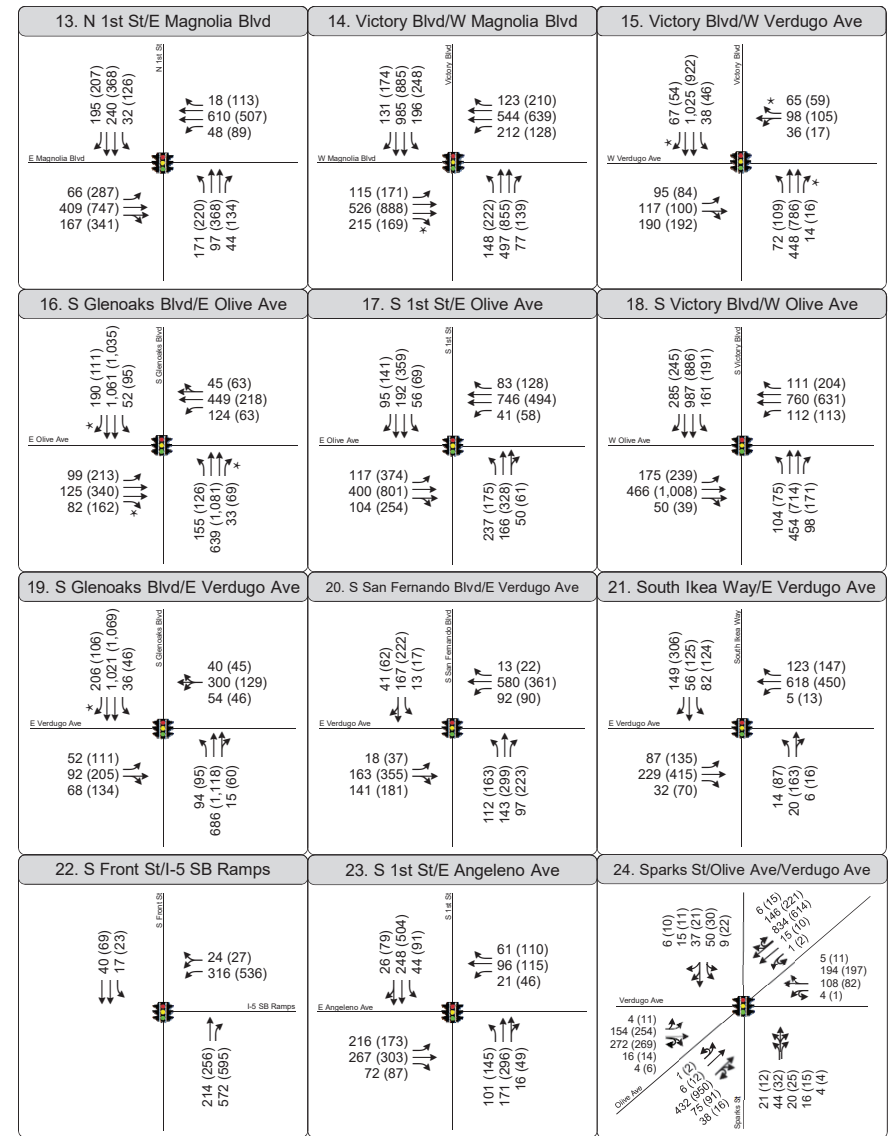
Figure 9  
Peak Hour Traffic Volumes and Lane Configurations  
Existing + Project Conditions (2018)







- Study Intersection
- Project Site



\*De facto right turn lane

Figure 9  
Peak Hour Traffic Volumes and Lane Configurations  
Existing + Project Conditions (2018)



**TABLE 5  
777 N FRONT STREET PROJECT  
EXISTING (2018) + PROJECT INTERSECTION LEVEL OF SERVICE ANALYSIS**

NO.	INTERSECTION	INTERSECTION CONTROL	PEAK HOUR	Existing (2018)		Existing (2018) + Project		Impacts	
				V/C or Delay	LOS	V/C or Delay	LOS	Change in V/C or Delay	Significant?
1	N Glenoaks Boulevard & Amherst Drive	Signalized	AM	0.629	B	0.630	B	0.001	No
			PM	0.544	A	0.546	A	0.002	No
2	N San Fernando Boulevard & Amherst Drive [1]	Signalized	AM	0.687	B	0.699	B	0.012	No
			PM	0.689	B	0.708	C	0.019	No
3	N Glenoaks Boulevard & Delaware Road	Signalized	AM	0.669	B	0.672	B	0.003	No
			PM	0.694	B	0.698	B	0.004	No
4	N 3rd Street & Delaware Road	AWSC	AM	12.1	B	12.2	B	0.1	No
			PM	14.0	B	14.2	B	0.2	No
5	N San Fernando Boulevard & Delaware Road	Signalized	AM	0.386	A	0.387	A	0.001	No
			PM	0.528	A	0.538	A	0.010	No
6	N 3rd Street & E Burbank Boulevard	Signalized	AM	0.588	A	0.596	A	0.008	No
			PM	0.607	B	0.619	B	0.012	No
7	N San Fernando Boulevard & Burbank Boulevard	Signalized	AM	0.745	C	0.752	C	0.007	No
			PM	0.722	C	0.742	C	0.020	No
8	I-5 NB Off-Ramps & Burbank Boulevard	Signalized	AM	0.498	A	0.503	A	0.005	No
			PM	0.582	A	0.591	A	0.009	No
9	I-5 SB Off-Ramp/N Front Street & W Burbank Boulevard	Signalized	AM	0.905	E	1.003	F	0.098	Yes
			PM	0.983	E	1.105	F	0.122	Yes
10	N Victory Place & W Burbank Boulevard	Signalized	AM	0.780	C	0.804	D	0.024	Yes
			PM	0.869	D	0.897	D	0.028	Yes
11	W Victory Boulevard & W Burbank Boulevard	Signalized	AM	0.502	A	0.512	A	0.010	No
			PM	0.494	A	0.505	A	0.011	No
12	N Glenoaks Boulevard & E Magnolia Boulevard	Signalized	AM	0.652	B	0.654	B	0.002	No
			PM	0.671	B	0.676	B	0.005	No
13	N 1st Street & E Magnolia Boulevard	Signalized	AM	0.488	A	0.488	A	0.000	No
			PM	0.753	C	0.754	C	0.001	No
14	Victory Boulevard & W Magnolia Boulevard	Signalized	AM	0.783	C	0.795	C	0.012	No
			PM	0.874	D	0.889	D	0.015	No
15	Victory Boulevard & W Verdugo Avenue	Signalized	AM	0.616	B	0.618	B	0.002	No
			PM	0.584	A	0.586	A	0.002	No
16	S Glenoaks Boulevard & E Olive Avenue	Signalized	AM	0.713	C	0.714	C	0.001	No
			PM	0.689	B	0.691	B	0.002	No
17	South First Street & E Olive Avenue	Signalized	AM	0.599	A	0.599	A	0.000	No
			PM	0.709	C	0.709	C	0.000	No
18	S Victory Boulevard & W Olive Avenue	Signalized	AM	0.806	D	0.822	D	0.016	No
			PM	0.841	D	0.845	D	0.004	No
19	S Glenoaks Boulevard & E Verdugo Avenue	Signalized	AM	0.663	B	0.667	B	0.004	No
			PM	0.643	B	0.648	B	0.005	No
20	S San Fernando Boulevard & E Verdugo Avenue	Signalized	AM	0.604	B	0.612	B	0.008	No
			PM	0.702	C	0.715	C	0.013	No
21	South Ikea Way & E Verdugo Avenue	Signalized	AM	0.585	A	0.591	A	0.006	No
			PM	0.636	B	0.646	B	0.010	No
22	S Front Street & I-5 SB Ramps	Signalized	AM	0.508	A	0.517	A	0.009	No
			PM	0.610	B	0.618	B	0.008	No
23	South First Way & E Angeleno Avenue	Signalized	AM	0.367	A	0.367	A	0.000	No
			PM	0.524	A	0.524	A	0.000	No
24	Olive Avenue/Sparks Road & W Verdugo Avenue [1]	Signalized	AM	0.663	B	0.672	B	0.009	No
			PM	0.755	C	0.767	C	0.012	No

Notes:

[1] 5/6-legged intersection, v/c calculated by hand

## 4. FUTURE TRAFFIC CONDITIONS

To evaluate the potential impacts of the proposed project on Future Base (Year 2022) conditions, it was necessary to develop estimates of future traffic conditions in the area both without and with project traffic. First, estimates of traffic growth were developed for the study area to forecast future conditions without the project. These forecasts included traffic increases as a result of both regional ambient traffic growth and traffic generated by specific developments in the vicinity of the project (related projects). These projected traffic volumes, identified herein as the Future Base conditions, represent the future study year conditions without the proposed project. The traffic generated by the proposed project was then estimated and assigned to the surrounding street system. The project traffic was added to the Future Base to form the Future plus Project traffic conditions, which were analyzed to determine the incremental traffic impacts attributable to the project itself.

### FUTURE BASE TRAFFIC PROJECTIONS

The Future Base traffic projections reflect growth in traffic from two primary sources: background or ambient growth in the existing traffic volumes to reflect the effects of overall regional growth both in and outside of the study area, and traffic generated by specific projects in, or in the vicinity of, the study area.

#### ***Areawide Traffic Growth***

The City of Burbank General Plan forecasts growth of traffic volumes of approximately 0.72% per year in the vicinity of the study area. Future increases in background traffic volumes due to regional growth and development are expected to continue at this rate at least through the year 2022. This adjustment was applied to the existing (year 2018) traffic volume data to reflect the effect of ambient growth by the year 2022.

#### ***Future Project Traffic Generation and Assignment***

The second part of background traffic growth is the traffic generated by related projects. Related projects or cumulative projects are planned developments to be completed in the same timeframe as the proposed project. Future projects are taken into account in terms of the extent of growth, the location of growth, and the origins/destinations of trips.

Information on future projects was collected from the City of Burbank. A total of 22 related projects that affect the study area were identified. Three related projects within the City of Glendale were also identified. The projects are summarized in Table 6 and their locations illustrated in Figure 10.

Trip generation estimates for each of the related projects listed in Table 6 were provided by the respective city or developed using trip generation rates from Trip Generation, 10th Edition, (ITE, 2017), unless otherwise noted. Combined, the future projects are estimated to generate approximately 86,588 daily weekday trips, of which 10,588 vehicles per hour (vph) will occur during the morning peak hour and 11,108 vph during the evening peak hour. A significant portion of these trips would be attributed to development of the Studio Master Plans, specifically the Warner Brothers Studio located at 4000 Warner Boulevard (Related Project No. 17). Development of the Warner Brothers Studio is anticipated to generate approximately 19,150 net daily trips, including 3,110 net peak hour AM trips and 3,293 net peak hour PM trips.



The opening year for the Warner Brothers Studio is 2027. The opening year for all the other future development projects is not known in all cases and frequently changes. All future development projects were assumed to be built and operational by the Project's buildout year of 2022. This would make the Future Base (Year 2022) conditions conservative from a traffic impacts perspective. The peak hour future project traffic volumes for the analyzed intersections are illustrated in Figure 11.

The geographic distribution of the traffic generated by the related projects is dependent on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of population from which the employees and potential patrons of the proposed developments are drawn, and the location of the projects in relation to the surrounding street system. The trip generation estimates were assigned to the local street system using the trip distribution pattern described above, or taken from existing traffic studies when available.

### ***Background Shifts Due to Reconfiguration of Burbank Boulevard Interchange***

As part of the Interstate-5 reconstruction, the interchange at Burbank Boulevard is being reconfigured to provide on- and off-ramps for both northbound and southbound travel. Currently the interchange at Burbank Boulevard does not include a northbound on-ramp. The study used the City model and existing counts to estimate background shifts. Background shifts related to the new interchange are included in Figure 11.

### ***Future Base Intersection Improvements***

As part of the I-5 reconstruction, the Burbank Boulevard interchange ramps are being reconfigured. The lane geometry changes associated with the Burbank Boulevard interchange improvements were incorporated in the future scenarios.

The San Fernando Boulevard & Burbank Boulevard intersection will be improved as well. The existing signal provides split phasing for each intersection approach. With the signal improvements, the signal will operate with protected left-turn phasing. The signal phasing improvement was incorporated in the future scenarios. In addition, the intersection will be reconfigured to add a second southbound right turn lane on San Fernando Boulevard. These changes were incorporated into the future scenarios.

### ***Future Base Traffic Volumes***

The Future Base year 2022 AM and PM peak hour traffic volumes for the analyzed intersections are illustrated in Figure 11. The Future Base traffic conditions represent an estimate of future conditions without the proposed project.



### **Future Base Traffic Conditions**

The year 2022 Future Base peak hour traffic volumes were analyzed to determine the projected V/C ratio or delay and LOS for each of the analyzed intersections. Table 7 summarizes the Future Base LOS. As indicated, 19 of the 24 study intersections are projected to operate at LOS D or better during the morning and/or afternoon peak hours. The following four intersections are projected to operate at LOS E or worse during one or both peak hours:

9. I-5 SB Off-Ramp/Front Street & Burbank Boulevard
10. Victory Place & Burbank Boulevard
14. Victory Boulevard & Magnolia Boulevard
18. Victory Boulevard & Olive Avenue



**TABLE 6  
777 N FRONT STREET PROJECT  
RELATED PROJECTS TRIP GENERATION ESTIMATES**

No.	Project Name/Location	Description/Land Use	ITE Land Use Code/Source	Size	Units	Net Daily Trips	Net A.M. Peak Hour Trips			Net P.M. Peak Hour Trips		
							In	Out	Total	In	Out	Total
<b>CITY OF BURBANK DEVELOPMENT PROJECTS</b>												
1	Mixed-Use Project 3901 Riverside Drive Riverside Drive & Kenwood Street (Media District)	Retail Restaurant Residential	Shopping Center - 820 Quality Restaurant - 931 Apartment - 220	3.0 KSF 4.6 KSF 8 DU		598	5	6	11	31	20	51
2	Mixed-Use Project 3805 Olive Avenue Riverside Drive & Screenland Drive	Restaurant Coffee Shop General Office Luxury Apartments Less Passby/Captured Trips	Quality Restaurant - 931 Fast-Food w/out D.T. (coffee shop) - 933,SANDAG General Office - 710 Apartment - 220	12.9 KSF 1.8 KSF 9.5 KSF 5.0 DU		1,980	65	47	111	90	128	218
3	Media Studios North Original Remaining Entitlement 3333 Empire Avenue	General Office	General Office - 710	95.0 KSF		1,046	129	17	147	24	117	141
4	Media Studios North Expanded Entitlement 3333 Empire Avenue	General Office	General Office - 710	73.0 KSF		724	89	13	102	17	81	98
5	Talanía (Mixed-Use) 3401 West Olive Avenue	Whole Foods Luxury Apartments	Supermarket - 850 Mid-Rise Apartments - 223	43.0 KSF 241 DU		3,204	75	151	226	189	141	330
6	First Street Village Mixed Use Project Area bounded by First, Magnolia, I-5, and alley south of Palm	Residential Restaurant Retail	Apartment - 220 High Turnover Sit Down Restaurant Shopping Center - 820	220 DU 9.3 KSF 12.0 KSF		2,078	(33)	104	71	139	24	163
7A	Premiere at First Street - First, Tujunga, San Fernando, Verdugo Phase I	High-Rise Condo Retail	Traffic Study Trip Generation Traffic Study Trip Generation	154 DU 10.6 KSF		840	13	56	69	42	25	67
7B	Phase IIB [a]	General Office Retail	Traffic Study Trip Generation Traffic Study Trip Generation	158.0 KSF 14.1 KSF		1,194	141	19	160	26	128	154
8 [b]	Opportunity Site 6B (Overton Moore Proposal - Avion) 3001 N Hollywood Way	Industrial / Flex Creative Office Restaurant Hotel Less Passby	General Light Industrial - 110 General Office - 710 High Turnover Sit Down Restaurant - 932 Hotel - 310 (restaurant only)	1,020.2 KSF 142.3 KSF 15.0 KSF 150 Rooms		8,984	723	174	897	254	345	599
9	AC Hotel Project 550 N Third Street	Hotel	Hotel - 310	196 Rooms		1,518	56	39	95	56	51	107
10	Airport Hotels - 2500 N Hollywood Way Phase I Phase IIA Phase IIB	Hotel Hotel General Office	Hotel - 310 Hotel - 310 General Office - 710	200 Rooms 216 Rooms 120.0 KSF		4,722	295	113	408	158	271	428
11	115 N Screenland Drive	Apartments Retail	Apartment - 220 Shopping Center - 820	40 Rooms 3.7 KSF		425	6	18	24	12	27	39
12 [c]	Burbank Town Center Redevelopment (NOMA) 600 N San Fernando Blvd	Apartments Condominiums Retail/Restaurant Hotel Restaurant	Apartment - 220 Apartment - 220 High Turnover Sit Down Restaurant - 932 Hotel - 310 High Turnover Sit Down Restaurant - 932	1,024 DU 70 DU 37 KSF 200 Rooms 10.0 KSF		6,117	215	291	506	256	214	470
13	Olive Station (Mixed-Use) [d] 160 W Olive Avenue	Apartments Grocery Retail Creative Office General Office Amenity space	Apartment - 220 Supermarket - 850 Shopping Center - 820 General Office - 710 General Office - 710 Custom Rate	327 DU 17.9 KSF 4.9 KSF 3.2 KSF 3.2 KSF 19.8 KSF		4,549	85	146	231	210	165	374
14	Lycees International de Los Angeles (LILA) [d] 1105 Riverside Drive	Increase of School Enrollment from 350 to 450 Students	Private School (K-12) - 536	100 Students		248	49	32	81	7	10	17
15	Burbank Common (Mixed-Use) [d] 10 W Magnolia Boulevard	Event space: Roller Derby/Convention Restaurant/Cafe/Brewpub/Retail/Special Event Outdoor Eating/Leisure	Recreational Community Center - 495 High-Turnover (Sit-Down) Restaurant - 932 Public Park - 411	33.0 KSF 19.0 KSF 47.0 KSF		3,247	150	109	259	162	118	280
<b>STUDIO MASTER PLANS</b>												
16	The Burbank Studios (formerly NBC) - 3000 W Alameda Ave [d] Phase II (assume Ph II OE of 329,098) Main Studio Lot Remaining Entitlement	General Office	Traffic Study Trip Generation Traffic Study Trip Generation	289.4 KSF 670.8 KSF		8,522	1,166	159	1,325	210	1,023	1,232
17	Warner Brothers - 4000 Warner Blvd [d] Main Campus Ranch	General Office General Office	Traffic Study Trip Generation Traffic Study Trip Generation	2,017.8 KSF 782.6 KSF		19,150	2,736	373	3,110	560	2,734	3,293
18	Disney - 500 S Buena Vista St [d] Remaining Entitlement	General Office	Traffic Study Trip Generation	665.3 KSF		5,543	767	105	872	140	684	824
<b>OTHER SPECIAL GENERATORS</b>												
19	Bob Hope Center Bounded by Olive Avenue, Alameda Avenue, and Lima Street	General Office	Traffic Study Trip Generation	109.5 KSF		1,430	177	24	202	34	167	201
<b>CITY OF GLENDALE DEVELOPMENT PROJECTS</b>												
20	1407 W Glenoaks Boulevard [d]	Condominiums	Apartment - 220	55 DU		403	6	19	25	19	11	31
21	1412-1422 5th Street & 1116 Sonora Avenue [d]	Senior Housing	Senior Adult Housing - 252	90 DU		244	5	9	13	9	8	17
22	1058 Ruberta Avenue [d]	Living Facility	Assisted Living - 254	12 Beds		31	1	1	2	1	2	3

Notes:

KSF = thousand square feet  
DU = dwelling unit

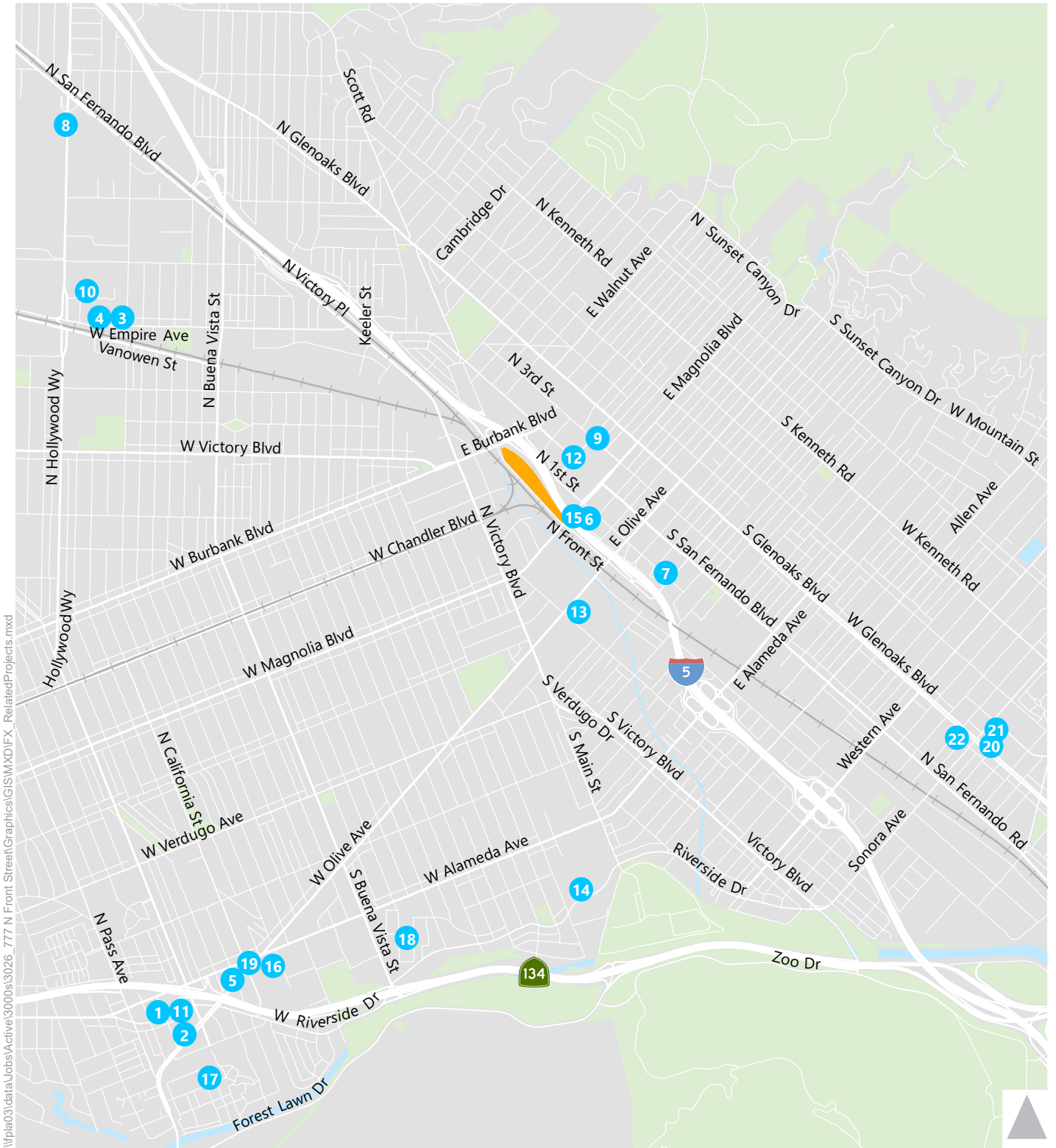
Source: Related projects list provided by City of Burbank, June 2018 and City of Glendale, May 2018. Unless noted, Trip Generation Rates were provided by the City of Burbank.

[a] Project would construct either Phase IIA or IIB. Trip generation assumes phase IIB with higher trip generation would be constructed.

[b] Peak Hour trip volumes from the Avion Project Draft Traffic Impact Study.

[c] Peak Hour trip volumes from the Burbank Town Center Project Draft Traffic Impact Study.

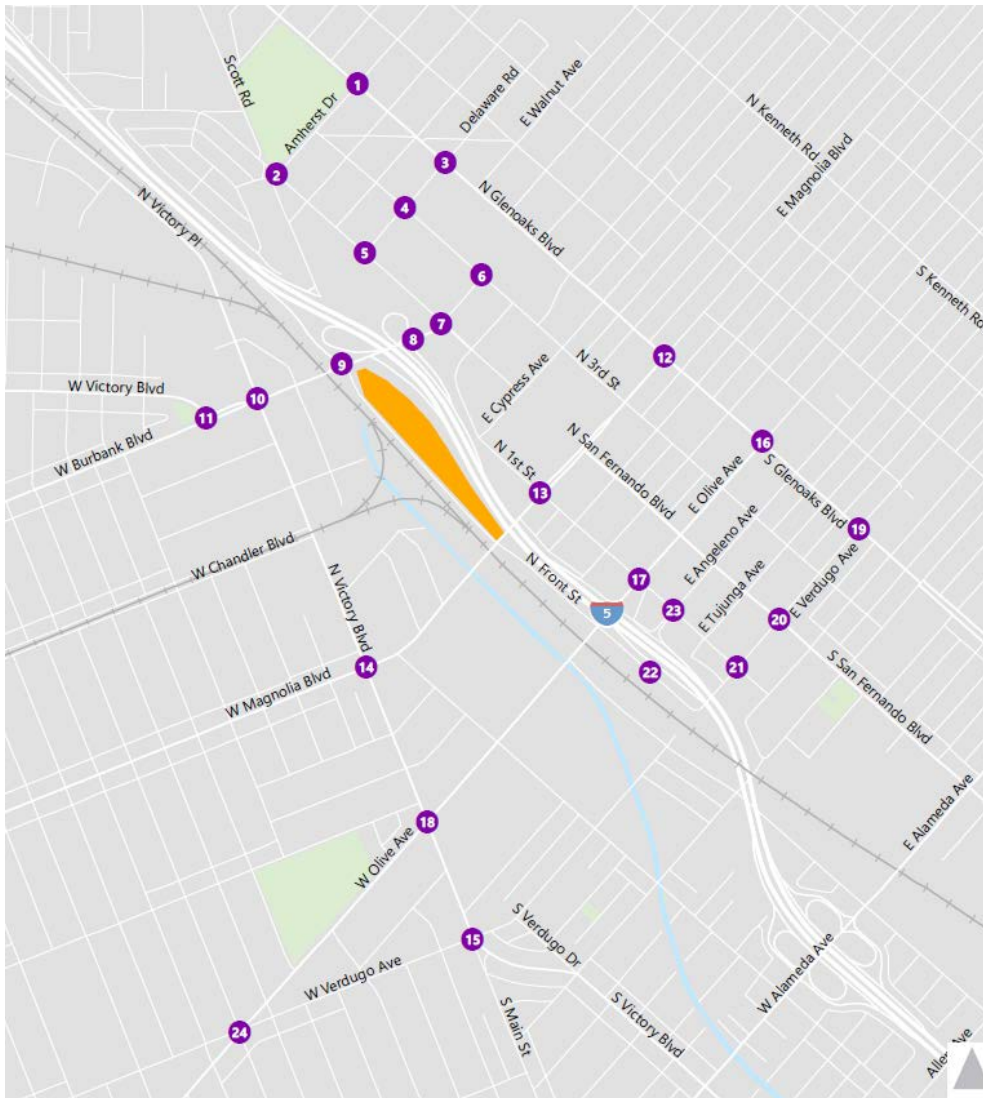
[d] Peak Hour trip generation rates were determined based on ITE 10th Edition Trip Generation Manual (2017).



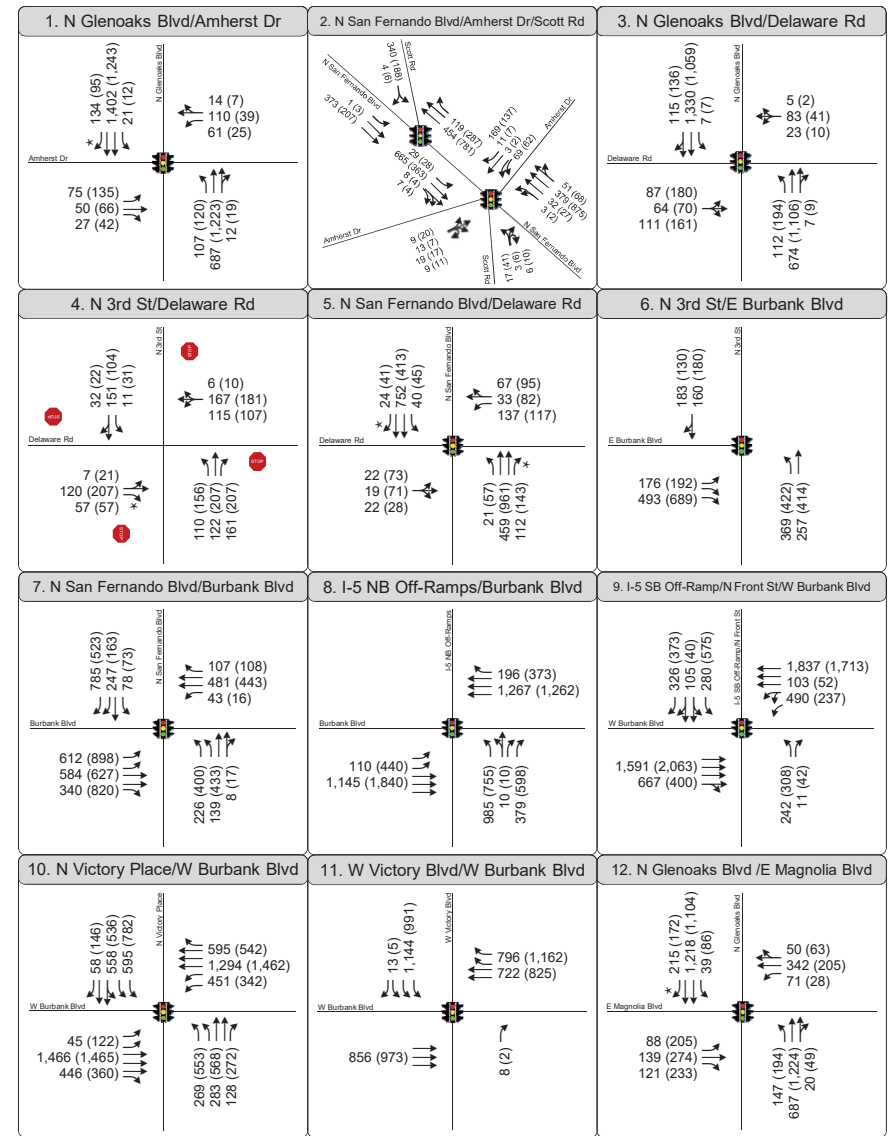
- Related Project
- Project Site



Figure 10  
Related Projects



- Study Intersection
- Project Site

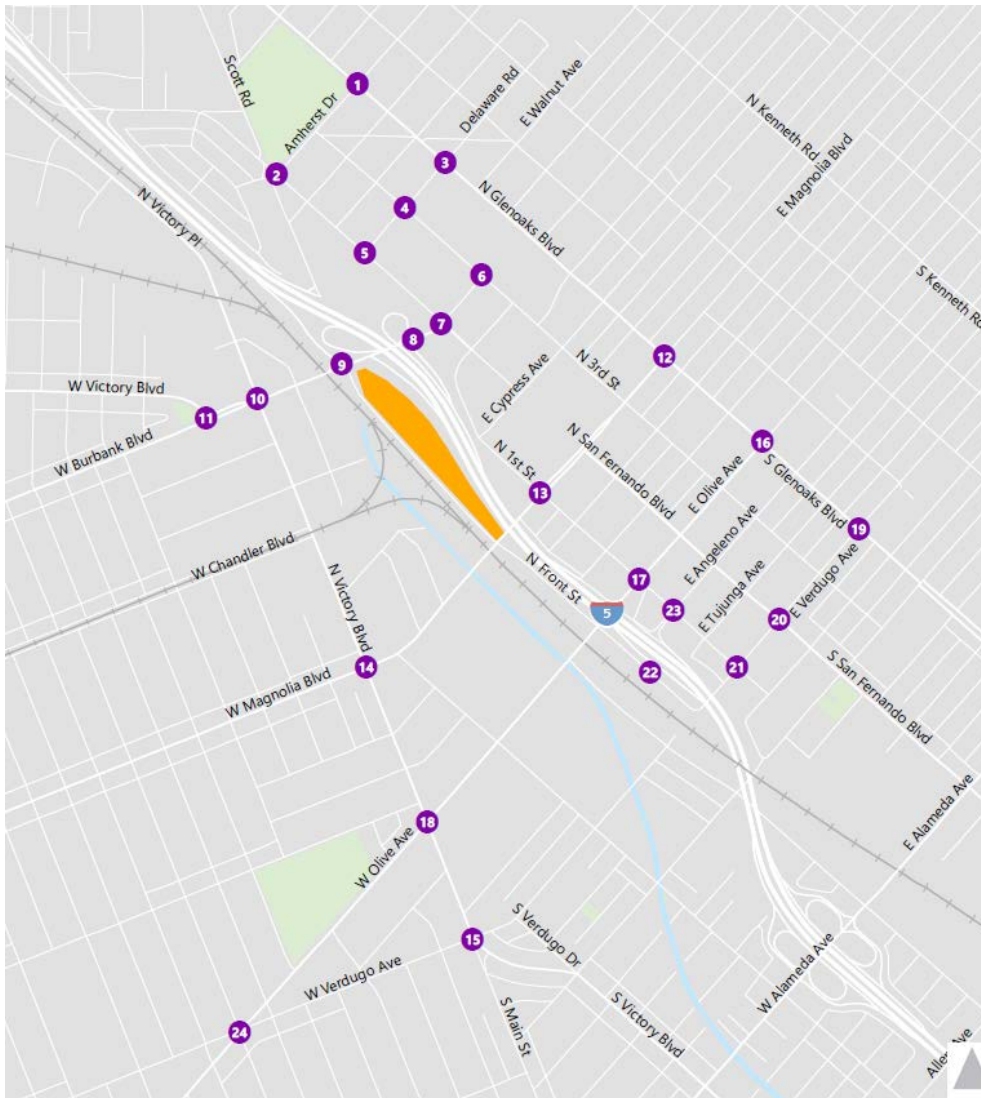


\*De facto right turn lane

Figure 11  
Peak Hour Traffic Volumes and Lane Configurations  
Future Base Conditions (2022)







- Study Intersection
- Project Site

<p><b>13. N 1st St/E Magnolia Blvd</b></p> <p>N 1st St</p> <p>E Magnolia Blvd</p> <p>303 (288) 266 (425) 39 (134)</p> <p>23 (121) 662 (556) 48 (95)</p> <p>143 (385) 447 (800) 205 (391)</p> <p>188 (241) 127 (397) 48 (139)</p>	<p><b>14. Victory Blvd/W Magnolia Blvd</b></p> <p>Victory Blvd</p> <p>W Magnolia Blvd</p> <p>126 (170) 1,035 (971) 226 (292)</p> <p>153 (244) 636 (730) 293 (188)</p> <p>112 (165) 603 (1,004) 221 (174)</p> <p>152 (238) 510 (893) 136 (210)</p>	<p><b>15. Victory Blvd/W Verdugo Ave</b></p> <p>Victory Blvd</p> <p>W Verdugo Ave</p> <p>69 (56) 1,163 (1,087) 39 (47)</p> <p>67 (61) 101 (108) 37 (17)</p> <p>98 (86) 120 (103) 196 (198)</p> <p>74 (112) 568 (957) 14 (16)</p>
<p><b>16. S Glenoaks Blvd/E Olive Ave</b></p> <p>S Glenoaks Blvd</p> <p>E Olive Ave</p> <p>199 (119) 1,112 (1,117) 53 (103)</p> <p>47 (70) 471 (237) 128 (65)</p> <p>106 (226) 135 (366) 91 (175)</p> <p>172 (172) 674 (1,132) 34 (71)</p>	<p><b>17. S 1st St/E Olive Ave</b></p> <p>S 1st St</p> <p>E Olive Ave</p> <p>135 (161) 244 (383) 55 (68)</p> <p>83 (129) 790 (549) 45 (61)</p> <p>166 (503) 441 (863) 135 (266)</p> <p>248 (206) 173 (419) 52 (68)</p>	<p><b>18. S Victory Blvd/W Olive Ave</b></p> <p>S Victory Blvd</p> <p>W Olive Ave</p> <p>277 (228) 1,097 (1,020) 196 (229)</p> <p>114 (210) 866 (735) 141 (146)</p> <p>162 (215) 565 (1,192) 51 (40)</p> <p>107 (77) 542 (646) 122 (213)</p>
<p><b>19. S Glenoaks Blvd/E Verdugo Ave</b></p> <p>S Glenoaks Blvd</p> <p>E Verdugo Ave</p> <p>215 (110) 1,075 (1,160) 37 (47)</p> <p>41 (46) 308 (136) 56 (47)</p> <p>54 (114) 97 (211) 67 (147)</p> <p>113 (124) 728 (1,181) 15 (62)</p>	<p><b>20. S San Fernando Blvd/E Verdugo Ave</b></p> <p>S San Fernando Blvd</p> <p>E Verdugo Ave</p> <p>42 (64) 190 (238) 13 (17)</p> <p>13 (23) 609 (370) 95 (93)</p> <p>19 (38) 167 (375) 140 (189)</p> <p>119 (163) 150 (331) 100 (229)</p>	<p><b>21. South Ikea Way/E Verdugo Ave</b></p> <p>South Ikea Way</p> <p>E Verdugo Ave</p> <p>176 (328) 58 (128) 139 (146)</p> <p>126 (154) 632 (475) 5 (13)</p> <p>88 (149) 267 (426) 33 (72)</p> <p>14 (90) 21 (168) 6 (16)</p>
<p><b>22. S Front St/I-5 SB Ramps</b></p> <p>S Front St</p> <p>I-5 SB Ramps</p> <p>51 (65) 4 (11)</p> <p>25 (28) 344 (568)</p> <p>206 (253) 622 (649)</p>	<p><b>23. S 1st St/E Angeleno Ave</b></p> <p>S 1st St</p> <p>E Angeleno Ave</p> <p>27 (81) 332 (539) 45 (94)</p> <p>63 (113) 99 (118) 22 (47)</p> <p>222 (213) 275 (312) 93 (78)</p> <p>104 (149) 182 (361) 16 (60)</p>	<p><b>24. Sparks St/Olive Ave/Verdugo Ave</b></p> <p>Verdugo Ave</p> <p>Olive Ave</p> <p>Sparks St</p> <p>6 (10) 15 (11) 36 (22) 51 (31) 9 (23)</p> <p>6 (15) 96 (227) 15 (10)</p> <p>5 (11) 201 (203) 111 (84) 4 (1)</p> <p>4 (11) 158 (261) 290 (277) 16 (14) 4 (6)</p> <p>22 (12) 45 (33) 21 (26) 16 (15) 4 (4)</p>

\*De facto right turn lane

Figure 11  
Peak Hour Traffic Volumes and Lane Configurations  
Future Base Conditions (2022)



**TABLE 7**  
**777 N FRONT STREET PROJECT**  
**FUTURE (2022) INTERSECTION LEVEL OF SERVICE ANALYSIS**

NO.	INTERSECTION	INTERSECTION CONTROL	PEAK HOUR	Future Base (2022)	
				V/C or Delay	LOS
1	N Glenoaks Boulevard & Amherst Drive	Signalized	AM	0.673	B
			PM	0.617	B
2	N San Fernando Boulevard & Amherst Drive [1]	Signalized	AM	0.715	C
			PM	0.723	C
3	N Glenoaks Boulevard & Delaware Road	Signalized	AM	0.711	C
			PM	0.770	C
4	N 3rd Street & Delaware Road	AWSC	AM	12.6	B
			PM	14.8	B
5	N San Fernando Boulevard & Delaware Road	Signalized	AM	0.419	A
			PM	0.572	A
6	N 3rd Street & E Burbank Boulevard	Signalized	AM	0.623	B
			PM	0.648	B
7	N San Fernando Boulevard & Burbank Boulevard	Signalized	AM	0.690	B
			PM	0.799	C
8	I-5 NB Off-Ramps & Burbank Boulevard	Signalized	AM	0.723	C
			PM	0.760	C
9	I-5 SB Off-Ramp/N Front Street & W Burbank Boulevard	Signalized	AM	1.019	F
			PM	0.992	E
10	N Victory Place & W Burbank Boulevard	Signalized	AM	0.847	D
			PM	0.948	E
11	W Victory Boulevard & W Burbank Boulevard	Signalized	AM	0.542	A
			PM	0.537	A
12	N Glenoaks Boulevard & E Magnolia Boulevard	Signalized	AM	0.695	B
			PM	0.725	C
13	N 1st Street & E Magnolia Boulevard	Signalized	AM	0.598	A
			PM	0.832	D
14	Victory Boulevard & W Magnolia Boulevard	Signalized	AM	0.901	E
			PM	1.019	F
15	Victory Boulevard & W Verdugo Avenue	Signalized	AM	0.672	B
			PM	0.649	B
16	S Glenoaks Boulevard & E Olive Avenue	Signalized	AM	0.757	C
			PM	0.769	C
17	South First Street & E Olive Avenue	Signalized	AM	0.677	B
			PM	0.855	D
18	S Victory Boulevard & W Olive Avenue	Signalized	AM	0.892	D
			PM	1.008	F
19	S Glenoaks Boulevard & E Verdugo Avenue	Signalized	AM	0.704	C
			PM	0.704	C
20	S San Fernando Boulevard & E Verdugo Avenue	Signalized	AM	0.653	B
			PM	0.749	C
21	South Ikea Way & E Verdugo Avenue	Signalized	AM	0.644	B
			PM	0.694	B
22	S Front Street & I-5 SB Ramps	Signalized	AM	0.552	A
			PM	0.658	B
23	South First Way & E Angeleno Avenue	Signalized	AM	0.403	A
			PM	0.545	A
24	Olive Avenue/Sparks Road & W Verdugo Avenue [1]	Signalized	AM	0.715	C
			PM	0.777	C

Notes:

[1] 5/6-legged intersection, v/c calculated by hand

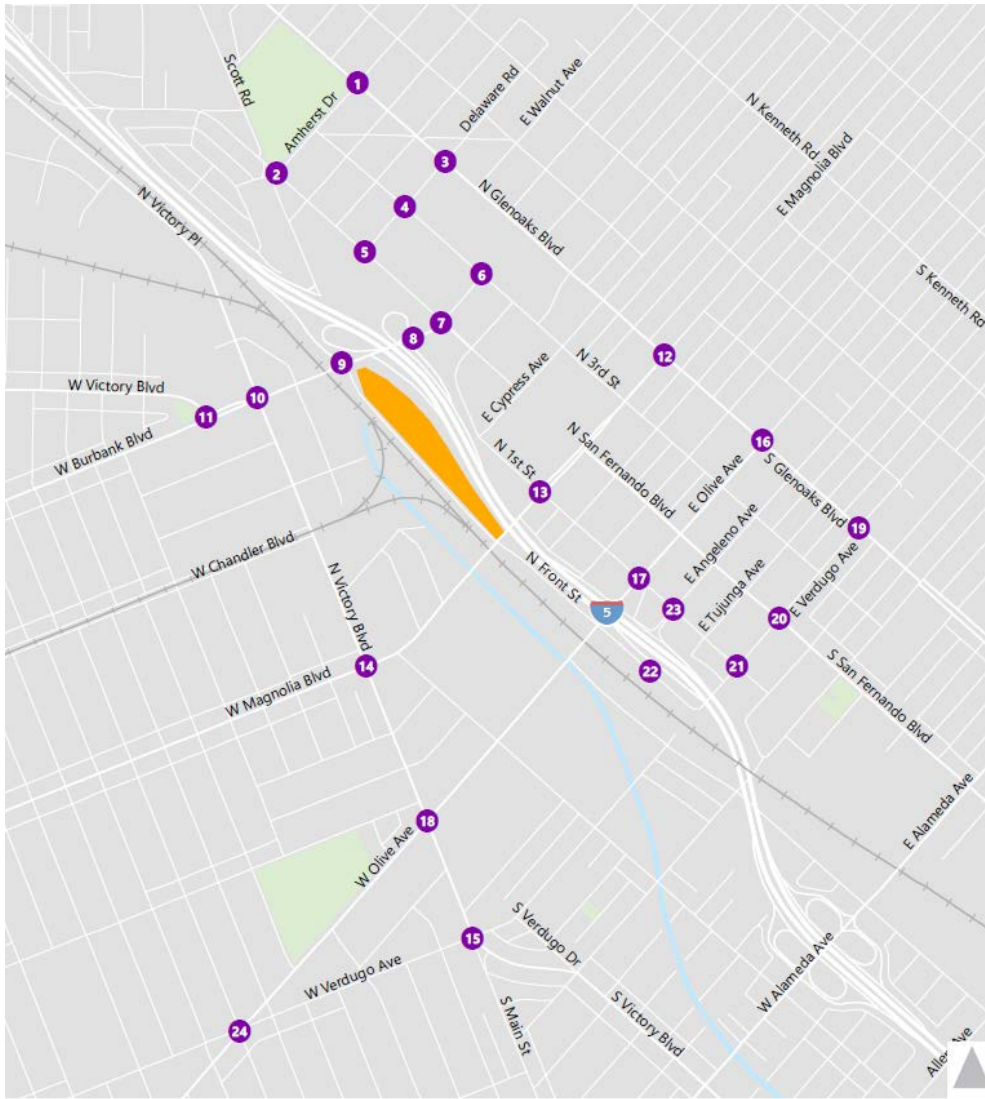
### **Future plus Project Traffic Conditions**

The project-generated traffic volumes were added to the 2022 Future Base traffic volumes develop Future plus Project peak hour traffic volumes. Future plus Project traffic volumes during the AM and PM peak hours are shown in Figure 12.

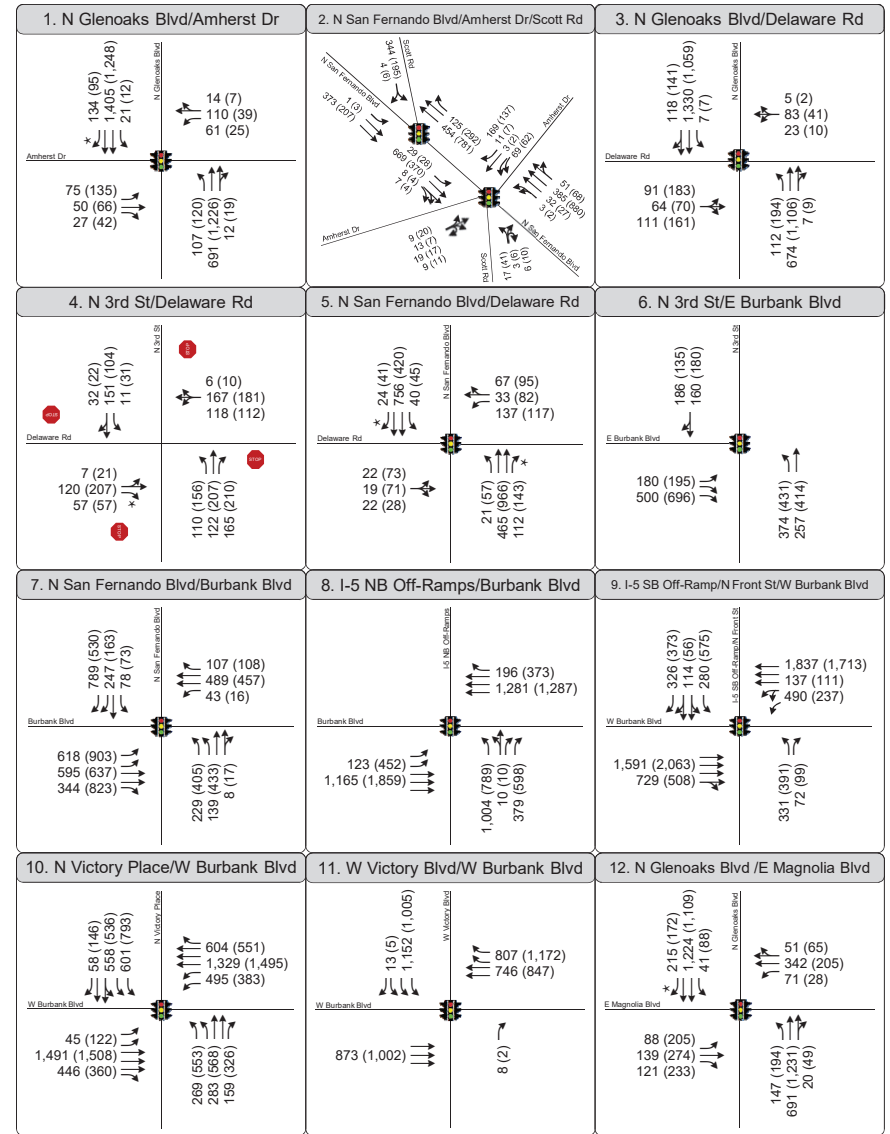
The resulting Future plus Project peak hour traffic volumes were analyzed to determine the projected future operating conditions with the addition of the proposed project traffic. Table 8 summarizes the Future plus Project LOS. As indicated, 19 of the 24 study intersections are projected to operate at LOS D or better during the morning and/or afternoon peak hours. The following four intersections are projected to operate at LOS E or worse during one or both peak hours:

9. I-5 SB Off-Ramp/Front Street & Burbank Boulevard
10. Victory Place & Burbank Boulevard
14. Victory Boulevard & Magnolia Boulevard
18. Victory Boulevard & Olive Avenue





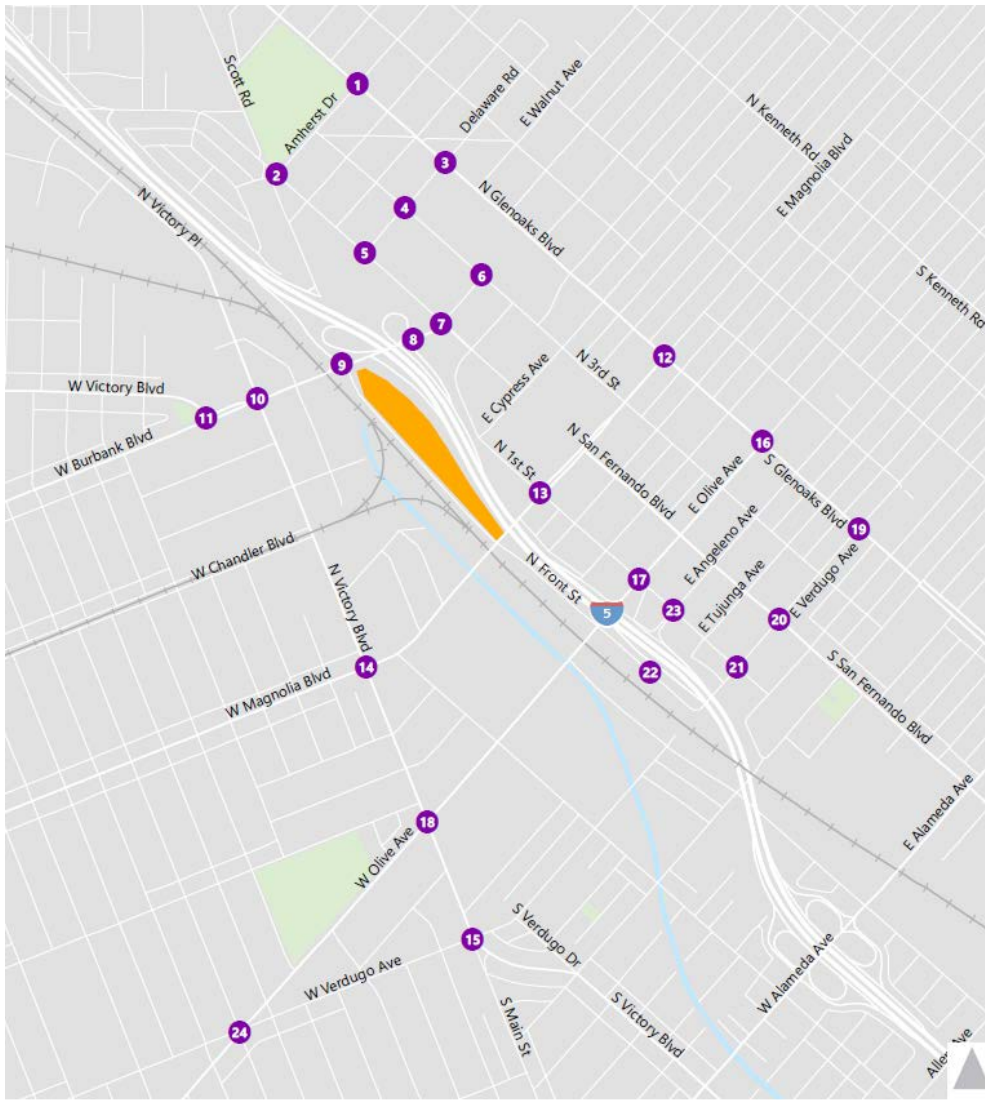
- Study Intersection
- Project Site



\*De facto right turn lane

Figure 12  
Peak Hour Traffic Volumes and Lane Configurations  
Future + Project Conditions (2022)





- Study Intersection
- Project Site

<p><b>13. N 1st St/E Magnolia Blvd</b></p> <p>N 1st St</p> <p>E Magnolia Blvd</p> <p>303 (288) 270 (428) 39 (134)</p> <p>23 (121) 662 (556) 48 (95)</p> <p>143 (385) 447 (800) 205 (391)</p> <p>188 (241) 130 (402) 48 (139)</p>	<p><b>14. Victory Blvd/W Magnolia Blvd</b></p> <p>Victory Blvd</p> <p>W Magnolia Blvd</p> <p>135 (179) 1,070 (1,004) 226 (292)</p> <p>153 (244) 636 (730) 293 (188)</p> <p>118 (176) 603 (1,004) 221 (174)</p> <p>152 (228) 535 (936) 136 (210)</p>	<p><b>15. Victory Blvd/W Verdugo Ave</b></p> <p>Victory Blvd</p> <p>W Verdugo Ave</p> <p>69 (56) 1,170 (1,094) 39 (47)</p> <p>67 (61) 101 (108) 37 (17)</p> <p>98 (86) 120 (103) 196 (198)</p> <p>74 (112) 563 (966) 14 (16)</p>
<p><b>16. S Glenoaks Blvd/E Olive Ave</b></p> <p>S Glenoaks Blvd</p> <p>E Olive Ave</p> <p>199 (119) 1,116 (1,120) 55 (105)</p> <p>48 (72) 471 (237) 128 (65)</p> <p>106 (226) 135 (366) 91 (175)</p> <p>172 (172) 677 (1,137) 34 (71)</p>	<p><b>17. S 1st St/E Olive Ave</b></p> <p>S 1st St</p> <p>E Olive Ave</p> <p>135 (161) 244 (383) 59 (71)</p> <p>86 (134) 790 (549) 45 (61)</p> <p>166 (503) 441 (863) 135 (266)</p> <p>248 (206) 173 (419) 52 (68)</p>	<p><b>18. S Victory Blvd/W Olive Ave</b></p> <p>S Victory Blvd</p> <p>W Olive Ave</p> <p>305 (254) 1,104 (1,027) 196 (229)</p> <p>114 (210) 866 (735) 141 (146)</p> <p>181 (249) 565 (1,192) 51 (40)</p> <p>107 (77) 547 (855) 122 (213)</p>
<p><b>19. S Glenoaks Blvd/E Verdugo Ave</b></p> <p>S Glenoaks Blvd</p> <p>E Verdugo Ave</p> <p>215 (110) 1,079 (1,163) 37 (47)</p> <p>41 (46) 308 (136) 56 (47)</p> <p>54 (114) 97 (211) 73 (152)</p> <p>117 (131) 731 (1,186) 15 (62)</p>	<p><b>20. S San Fernando Blvd/E Verdugo Ave</b></p> <p>S San Fernando Blvd</p> <p>E Verdugo Ave</p> <p>42 (64) 194 (242) 13 (17)</p> <p>13 (23) 613 (377) 95 (93)</p> <p>19 (38) 173 (380) 146 (194)</p> <p>123 (170) 153 (336) 100 (229)</p>	<p><b>21. South Ikea Way/E Verdugo Ave</b></p> <p>South Ikea Way</p> <p>E Verdugo Ave</p> <p>193 (357) 58 (128) 139 (146)</p> <p>126 (154) 640 (489) 5 (13)</p> <p>88 (149) 278 (436) 33 (72)</p> <p>14 (90) 21 (168) 6 (16)</p>
<p><b>22. S Front St/I-5 SB Ramps</b></p> <p>S Front St</p> <p>I-5 SB Ramps</p> <p>62 (75) 28 (33)</p> <p>25 (28) 344 (568)</p> <p>231 (286) 622 (649)</p>	<p><b>23. S 1st St/E Angeleno Ave</b></p> <p>S 1st St</p> <p>E Angeleno Ave</p> <p>27 (81) 332 (539) 45 (94)</p> <p>63 (113) 99 (118) 22 (47)</p> <p>222 (213) 275 (312) 110 (107)</p> <p>104 (149) 182 (361) 16 (60)</p>	<p><b>24. Sparks St/Olive Ave/Verdugo Ave</b></p> <p>Verdugo Ave</p> <p>Sparks St</p> <p>Olive Ave</p> <p>6 (10) 15 (11) 38 (22) 51 (31) 9 (23)</p> <p>6 (15) 85 (227) 1 (21) 1 (5)</p> <p>5 (11) 201 (203) 111 (84) 4 (1)</p> <p>4 (11) 153 (261) 290 (277) 16 (14) 4 (6)</p> <p>22 (12) 45 (33) 21 (28) 16 (15) 4 (4)</p> <p>50 (67) 39 (16)</p>

\*De facto right turn lane

Figure 12  
Peak Hour Traffic Volumes and Lane Configurations  
Future + Project Conditions (2022)



**TABLE 8  
777 N FRONT STREET PROJECT  
FUTURE (2022) + PROJECT INTERSECTION LEVEL OF SERVICE ANALYSIS**

NO.	INTERSECTION	INTERSECTION CONTROL	PEAK HOUR	Future Base (2022)		Future (2022) + Project		Impacts	
				V/C or Delay	LOS	V/C or Delay	LOS	Change in V/C or Delay	Significant?
1	N Glenoaks Boulevard & Amherst Drive	Signalized	AM	0.673	B	0.674	B	0.001	No
			PM	0.617	B	0.618	B	0.001	No
2	N San Fernando Boulevard & Amherst Drive [1]	Signalized	AM	0.715	C	0.721	C	0.006	No
			PM	0.723	C	0.730	C	0.007	No
3	N Glenoaks Boulevard & Delaware Road	Signalized	AM	0.711	C	0.714	C	0.003	No
			PM	0.770	C	0.773	C	0.003	No
4	N 3rd Street & Delaware Road	AWSC	AM	12.6	B	12.7	B	0.1	No
			PM	14.8	B	15.0	B	0.2	No
5	N San Fernando Boulevard & Delaware Road	Signalized	AM	0.419	A	0.420	A	0.001	No
			PM	0.572	A	0.573	A	0.001	No
6	N 3rd Street & E Burbank Boulevard	Signalized	AM	0.623	B	0.632	B	0.009	No
			PM	0.648	B	0.660	B	0.012	No
7	N San Fernando Boulevard & Burbank Boulevard	Signalized	AM	0.690	B	0.696	B	0.006	No
			PM	0.799	C	0.808	D	0.009	No
8	I-5 NB Off-Ramps & Burbank Boulevard	Signalized	AM	0.723	C	0.738	C	0.015	No
			PM	0.760	C	0.784	C	0.024	No
9	I-5 SB Off-Ramp/N Front Street & W Burbank Boulevard	Signalized	AM	1.019	F	1.140	F	0.121	Yes
			PM	0.992	E	1.092	F	0.100	Yes
10	N Victory Place & W Burbank Boulevard	Signalized	AM	0.847	D	0.871	D	0.024	Yes
			PM	0.948	E	0.977	E	0.029	Yes
11	W Victory Boulevard & W Burbank Boulevard	Signalized	AM	0.542	A	0.553	A	0.011	No
			PM	0.537	A	0.548	A	0.011	No
12	N Glenoaks Boulevard & E Magnolia Boulevard	Signalized	AM	0.695	B	0.697	B	0.002	No
			PM	0.725	C	0.727	C	0.002	No
13	N 1st Street & E Magnolia Boulevard	Signalized	AM	0.598	A	0.598	A	0.000	No
			PM	0.832	D	0.833	D	0.001	No
14	Victory Boulevard & W Magnolia Boulevard	Signalized	AM	0.901	E	0.914	E	0.013	Yes
			PM	1.019	F	1.034	F	0.015	Yes
15	Victory Boulevard & W Verdugo Avenue	Signalized	AM	0.672	B	0.675	B	0.003	No
			PM	0.649	B	0.651	B	0.002	No
16	S Glenoaks Boulevard & E Olive Avenue	Signalized	AM	0.757	C	0.759	C	0.002	No
			PM	0.769	C	0.771	C	0.002	No
17	South First Street & E Olive Avenue	Signalized	AM	0.677	B	0.677	B	0.000	No
			PM	0.855	D	0.855	D	0.000	No
18	S Victory Boulevard & W Olive Avenue	Signalized	AM	0.892	D	0.908	E	0.016	Yes
			PM	1.008	F	1.011	F	0.003	No
19	S Glenoaks Boulevard & E Verdugo Avenue	Signalized	AM	0.704	C	0.708	C	0.004	No
			PM	0.704	C	0.713	C	0.009	No
20	S San Fernando Boulevard & E Verdugo Avenue	Signalized	AM	0.653	B	0.661	B	0.008	No
			PM	0.749	C	0.762	C	0.013	No
21	South Ikea Way & E Verdugo Avenue	Signalized	AM	0.644	B	0.650	B	0.006	No
			PM	0.694	B	0.704	C	0.010	No
22	S Front Street & I-5 SB Ramps	Signalized	AM	0.552	A	0.568	A	0.016	No
			PM	0.658	B	0.672	B	0.014	No
23	South First Way & E Angeleno Avenue	Signalized	AM	0.403	A	0.403	A	0.000	No
			PM	0.545	A	0.545	A	0.000	No
24	Olive Avenue/Sparks Road & W Verdugo Avenue [1]	Signalized	AM	0.715	C	0.724	C	0.009	No
			PM	0.777	C	0.788	C	0.011	No

Notes:

[1] 5/6-legged intersection, v/c calculated by hand

## 5. TRAFFIC IMPACT ANALYSIS

The traffic impact analysis compares the projected levels of service at each study intersection under with and without project conditions to estimate the incremental change in the V/C ratio at signalized intersections and the increase in trips caused by the proposed project. This provides the information needed to assess the potential impact of the project using significance criteria established by the City of Burbank.

### INTERSECTION SIGNIFICANT TRAFFIC IMPACT CRITERIA

Signalized intersections within the City of Burbank's were analyzed using the following criteria:

- The increase in the V/C ratio from future base conditions to future base plus project conditions is 0.020 or more with the intersection operating at LOS D after the addition of project traffic, or;
- The increase in the V/C ratio from future base conditions to future base plus project conditions is 0.010 or more with the intersection operating at LOS E after the addition of project traffic, or;
- The increase in the V/C ratio from future base conditions to future base plus project conditions is 0.005 or more with the intersection operating at LOS F after the addition of project traffic.

The City of Burbank's impact criteria for unsignalized intersections uses delay-based LOS and percent increase in number of project trips travelling through the intersection. An impact is triggered in accordance with the following parameters:

Level of Service	Final Average Control Delay per Vehicle (seconds)	Project-Related Increase in vehicle trips through intersection
D	25 to 35 seconds	Two percent
E	35 to 50 seconds	One percent
F	> 50 seconds	Five or more project trips

### AFFECTED INTERSECTION TRAFFIC CRITERIA

According to the City of Burbank's traffic study guidelines, an intersection is affected when the increase in the V/C ratio from the project is 0.040 or more with the intersection operating at LOS C after the addition of project traffic.

Affected Intersections are not considered significant impacts for the purposes of environmental review. However, project-related capacity reductions at Affected Intersections must be reviewed in the context of projected growth in the area and long-range transportation improvements planned at the intersection to determine if project traffic may substantially influence traffic operations at an Affected Intersection.



**Existing plus Project Intersection Impacts**

As shown in Table 5, after applying the aforementioned City of Burbank significant impact criteria, the proposed project would result in significant impacts to two study intersections under Existing plus Project conditions:

9. I-5 SB Off-Ramp/Front Street & Burbank Boulevard
10. Victory Place & Burbank Boulevard.

**Future plus Project Intersection Impacts**

As shown in Table 8, using the criteria for determination of significant impacts, the proposed project would result in significant traffic impacts at four study intersections under Future plus Project conditions.

9. I-5 SB Ramps/Front Street & Burbank Boulevard
10. Victory Place & Burbank Boulevard
14. Victory Boulevard & Magnolia Boulevard
18. Victory Boulevard & Olive Avenue





## PROPOSED MITIGATION MEASURES

The following section discusses the mitigation measures proposed to mitigate the proposed project's significant impacts under Existing plus Project and/or Future plus Project conditions and their effectiveness.

Significant impacts were identified at two locations under Existing plus Project conditions and four locations under Future plus Project conditions. The following sections describe the proposed mitigation measures.

### ***Physical Mitigation Measures***

The mitigation program for the project includes measures to increase the capacity and/or efficiency of the roadway system at impacted locations. Opportunities for physical and operational mitigation measures such as restriping of intersection approaches to add turn lanes and improving traffic control devices or signal phasing were investigated. The emphasis was to identify physical and/or operational improvements that could be implemented efficiently and maintain consistency with General Plan goals.

Burbank2035 provides the City with a framework for determining the feasibility of intersection improvements based upon right-of-way constraints or instances where the physical layout of intersection improvements causes a conflict between Burbank2035 Goals and Policies and the City's LOS D standard. Burbank2035 includes the following policies that provide criteria for determining the feasibility of intersection improvements based on whether or not they conflict with general plan goals and policies. This policy-based screening framework is described in Table 9 and can be found in the Transportation Analysis Report included in the Burbank2035 EIR.

The screening analysis used in Burbank2035 and in this analysis relies on the following four overarching City policy groups that support Burbank2035: Any transportation improvement should: (1) be achievable within the existing right-of-way; (2) be in conformity with the existing scale and design of the location they serve; (3) allow for complete streets; and (4) maintain pedestrian opportunities. These four overarching policies are supported by Burbank2035 through several Land Use and Mobility Element Policies. The relationship between the policy-based screening framework and the Burbank2035 Goals and Policies is further described below.

#### **(1) Right-of-Way Needs**

A policy conflict is triggered if any right-of-way acquisition is needed to implement the proposed mitigation, assuming lane width minimum and 6-foot sidewalks.

#### *Supporting Burbank2035 Policies*

##### **Mobility Element**

- Policy 1.2: Recognize that Burbank is a built-out city and wholesale changes to street rights-of-way are infeasible.
- Policy 3.4: All street improvements should be implemented within the existing right-of-way. Consider street widening and right-of-way acquisition as a method of last resort.



## (2) Scale and Design

A policy conflict is triggered if the scale and design goes beyond the Maximum Acceptable Mitigations 'template' identified in the Burbank2035 FEIR, or if the mitigation needed increases the existing travel-way width (measured from curb-to-curb) along a "residential/mixed-use" area.

Supporting Burbank2035 Policies

### Mobility Element

- Policy 1.5 Design transportation improvements to be compatible with the scale and design of existing infrastructure.

## (3) Complete Streets

A conflict is triggered if the mitigation increases the travel-way width along the intersection so as to narrow existing sidewalks, decrease bike lane widths, or greatly disturb transit/bus stop locations.

Supporting Burbank2035 Policies

### Mobility Element

- Policy 3.2: Complete city streets by providing facilities for all transportation modes.

### Land Use Element

- Policy 4.1: Maintain complete streets that create functional places meeting the needs of pedestrians, bicyclists, wheelchair users, equestrians, and motorists.

## (4) Pedestrian Opportunities

A conflict is triggered if the proposed mitigation requires sidewalks to go below the minimum sidewalk width standards specified in Table M-2 of the Mobility Element.

Supporting Burbank2035 Policies

### Mobility Element

- Policy 3.3: Provide attractive, safe street designs that improve transit, bicycle, pedestrian, and equestrian connections between homes and other destinations
- Policy 5.5: Require new development to provide land necessary to accommodate pedestrian infrastructure, including sidewalks at the standard widths specified in Table M-2

### Land Use Element

- Policy 4.5: Require pedestrian-oriented areas to include amenities such as sidewalks of adequate width, benches, street trees and landscaping, decorative paving, art, kiosks, and restrooms.



Under Burbank2035, a mitigation measure is considered to have significant land use impacts when the proposed improvement conflicts with the “Right-of-Way Needs” policies or with two or more of the “Scale and Design,” “Complete Streets,” or “Pedestrian Opportunities” policies. The following mitigation measures were evaluated against the policy based screening analysis discussed above, as shown in Table 9. Table 10 presents the LOS results for Existing plus Project with Mitigations and Table 11 presents the LOS results for Future plus Project with Mitigations.



**TABLE 9  
777 N FRONT STREET PROJECT  
PHYSICAL MITIGATION POLICY-BASED SCREENING ANALYSIS**

NO.	INTERSECTION	Project or Future Impact?	Physical Mitigation Conflicts with General Plan Policies				Conflicts with ROW or 2 Policies
			Right-of-way (6' min. sidewalk)	Scale & Design	Complete Streets	Pedestrian Opportunities	
9	I-5 SB Off-Ramp/N Front Street & W Burbank Boulevard [1]	Project & Future	NO	NO	NO	NO	NO
10	N Victory Place & W Burbank Boulevard	Project & Future	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>
14	Victory Boulevard & W Magnolia Boulevard	Future	<b>YES</b>	NO	<b>YES</b>	NO	<b>YES</b>
18	S Victory Boulevard & W Olive Avenue	Future	NO	NO	<b>YES</b>	NO	NO

Notes:

[1] Mitigation for this intersection is a partial mitigation

**TABLE 10**  
**777 N FRONT STREET PROJECT**  
**EXISTING (2018) + PROJECT WITH MITIGATION INTERSECTION LEVEL OF SERVICE ANALYSIS**

NO.	INTERSECTION	PEAK HOUR	Existing (2018)		Existing (2018) + Project		Impacts		Existing (2018) + Project with Mitigations		Impacts	
			V/C	LOS	V/C	LOS	Change in V/C	Significant?	V/C	LOS	Change in V/C	Significant?
9	I-5 SB Off-Ramp/N Front Street & W Burbank Boulevard [1]	AM	0.905	E	1.003	F	0.098	Yes	0.931	E	0.026	Yes
		PM	0.983	E	1.105	F	0.122	Yes	1.028	F	0.045	Yes
10	N Victory Place & W Burbank Boulevard [2]	AM	0.780	C	0.804	D	0.024	Yes	0.794	C	0.014	No
		PM	0.869	D	0.897	D	0.028	Yes	0.870	D	0.001	No

Notes:

- [1] Partial mitigation. Impact significant and unavoidable.
- [2] Mitigation not feasible. Impact remains significant and unavoidable.

**TABLE 11  
777 N FRONT STREET PROJECT  
FUTURE (2022) + PROJECT WITH MITIGATION INTERSECTION LEVEL OF SERVICE ANALYSIS**

NO.	INTERSECTION	INTERSECTION CONTROL	PEAK HOUR	Future Base (2022)		Future (2022) + Project		Impacts		Future (2022) + Project with Mitigations		Impacts	
				V/C	LOS	V/C	LOS	Change in V/C	Significant?	V/C	LOS	Change in V/C	Significant?
9	I-5 SB Off-Ramp/N Front Street & W Burbank Boulevard [1]	Signalized	AM	1.019	F	1.140	F	0.121	Yes	1.060	F	0.041	Yes
			PM	0.992	E	1.092	F	0.100	Yes	1.003	F	0.011	Yes
10	N Victory Place & W Burbank Boulevard [2]	Signalized	AM	0.847	D	0.871	D	0.024	Yes	0.862	D	0.015	No
			PM	0.948	E	0.977	E	0.029	Yes	0.951	E	0.003	No
14	Victory Boulevard & W Magnolia Boulevard [2] <i>Burbank2035 mitigation</i>	Signalized	AM	0.901	E	0.914	E	0.013	Yes	0.865	D	-0.036	No
			PM	1.019	F	1.034	F	0.015	Yes	0.939	E	-0.080	No
14	Victory Boulevard & W Magnolia Boulevard <i>CSCS mitigation</i>	Signalized	AM	0.901	E	0.914	E	0.013	Yes	0.888	D	-0.013	No
			PM	1.019	F	1.034	F	0.015	Yes	1.004	F	-0.015	No
18	S Victory Boulevard & W Olive Avenue <i>Burbank2035 mitigation</i>	Signalized	AM	0.892	D	0.908	E	0.016	Yes	0.850	D	-0.042	No
			PM	1.008	F	1.011	F	0.003	No	0.903	E	-0.105	No
18	S Victory Boulevard & W Olive Avenue <i>CSCS mitigation</i>	Signalized	AM	0.892	D	0.908	E	0.016	Yes	0.882	D	-0.010	No
			PM	1.008	F	1.011	F	0.003	No	0.969	E	-0.039	No

Notes:

- [1] Partial mitigation. Impact significant and unavoidable.
- [2] Mitigation not feasible. Impact remains significant and unavoidable.

## **Mitigation Analysis – Existing Plus Project Scenario**

### **#9 Interstate 5 Southbound Off-Ramp/N Front Street & Burbank Boulevard**

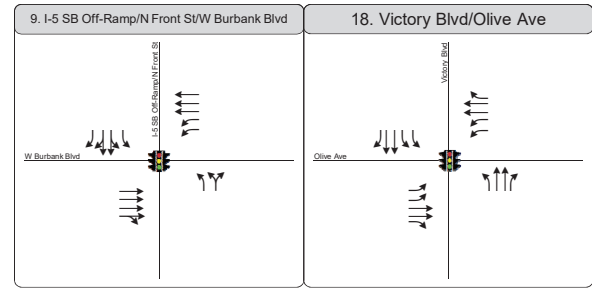
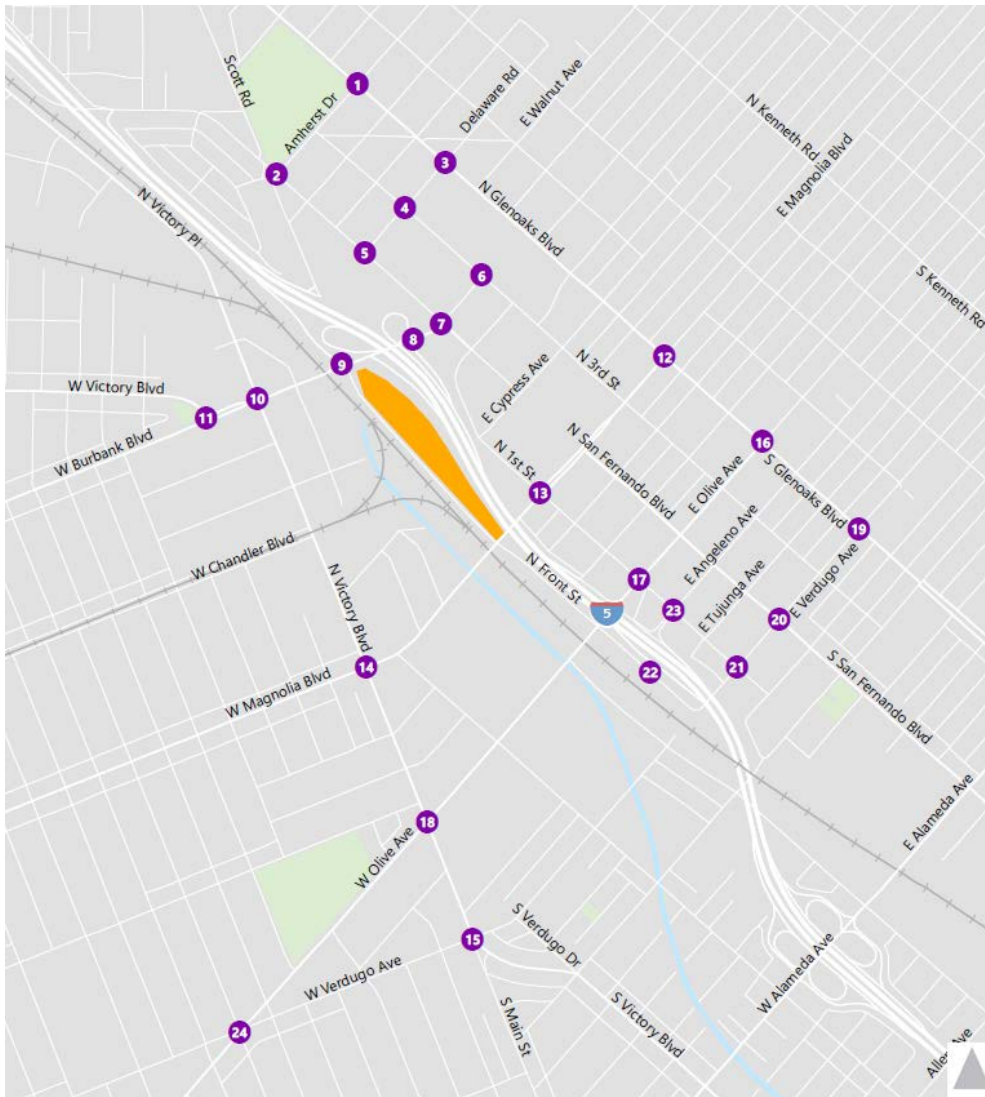
In order to partially mitigate the impact at Interstate 5 Southbound Off-Ramp/N Front Street & Burbank Boulevard, the northbound approach would have to be restriped. The existing right-turn lane on northbound Front Street would be converted to a left/right-turn lane to provide one left turn lane and one shared left-right lane. Figure 13 shows the proposed lane configuration. This partial mitigation does not require additional right-of-way or violate any of the policy-based screening analysis. This mitigation does not completely reduce the project's impact to less than significant, and therefore a residual impact would remain at this location. Further, this intersection is under the jurisdiction of Caltrans and would therefore require Caltrans approval. Therefore, because the mitigation results in a residual significant impact and because it requires approval from an outside jurisdiction other than the City of Burbank, the impact is considered **significant and unavoidable**.

### **#10 Victory Place & Burbank Boulevard**

In order to mitigate the impact at Victory Place & Burbank Boulevard to a less than significant level, it would have to be widened and restriped at the eastbound approach. Burbank Boulevard would be converted from an eastbound right-turn lane to a through/right-turn lane. This would provide two left-turn lanes, three through lanes, one through/right-turn lane in the eastbound direction.

The existing curb-to-curb width on Burbank Boulevard on the receiving end at this intersection is approximately 103 feet, which is not wide enough to accommodate an additional eastbound through receiving lane. In order to accommodate this mitigation, the street would need to be widened to at least 113 feet, which would require eliminating the sidewalk on the south side of the Burbank Blvd Bridge, or widening the bridge. Therefore, this mitigation conflicts with the Complete Streets and Pedestrian Opportunities portions of the policy-based screening analysis. The mitigation would also conflict with the Scale & Design Portion of the policy-based screening analysis, because the four through lanes would exceed the Maximum Acceptable Mitigations (MAMS) template identified in the Burbank2035 FEIR. Therefore, the impact is considered **significant and unavoidable**.





- Study Intersection
- Project Site



Figure 13  
Proposed Mitigation Lane Configurations  
Future + Project Conditions



## **Mitigation Analysis – Future with Project Scenario**

### **#9 Interstate 5 Southbound Ramps/N Front Street & Burbank Boulevard**

The same partial mitigation used in the Existing plus Project condition to reduce the project's incremental increase in V/C at Interstate 5 Southbound Off-Ramp/N Front Street & Burbank Boulevard could also be used to partially reduce the project's incremental increase in V/C under the Future plus Project condition. However, a residual significant impact would remain at this location and implementation would require approval by Caltrans. For these reasons, the impact is considered **significant and unavoidable**.

### **#10 Victory Place & Burbank Boulevard**

The same mitigation used in the Existing plus Project condition to reduce the project's incremental increase in V/C to a level below significance at Victory Place & Burbank Boulevard could also be used to reduce the project's incremental increase in V/C to a level below significance under the Future plus Project condition. As stated above, this mitigation would require eliminating the sidewalk on the south side of the Burbank Blvd Bridge, or widening the bridge, which would require Right-of-Way acquisition. In addition, it also conflicts with the Complete Streets, the Scale & Design, and the Pedestrian Opportunities portions of the policy-based screening analysis. Therefore, the cumulative impact at this location is considered **significant and unavoidable**.

### **#14 Victory Boulevard & Magnolia Boulevard**

To mitigate the significant impact at Victory Boulevard and Magnolia Boulevard, a Burbank2035 General Plan mitigation measure was analyzed that would restripe the northbound and southbound approaches to provide two exclusive left-turn lanes, two through lanes, and one exclusive right-turn lane. This mitigation measure would reduce the project's incremental increase in V/C to a level below significance under Future plus Project conditions. To construct this improvement, the northbound and southbound approaches of Victory Boulevard would have to be widened by 13 feet on each side of Magnolia Boulevard. This would require property acquisition of approximately 7 to 12 feet for at least 300 feet on both sides of Victory Boulevard north and south of Magnolia Boulevard to provide the required right-of-way for the additional lanes while maintaining minimum 10-foot sidewalk widths. Because additional right-of-way is required, this improvement conflicts with the Right-of-Way portion as well as the Complete Streets portion of the policy-based screening analysis. Therefore, this mitigation is considered infeasible.

An alternate mitigation was evaluated by optimizing Burbank's Citywide Signal Control System (CSCS), which accounts for optimized traffic signal timing, coordination, time-of-day coordination plans, and adaptive control. These improvements would be implemented along the Victory Boulevard corridor between Burbank Boulevard and Alameda Avenue and would have to be completed prior to the project opening date. To implement adaptive signal control, the City's traffic signal control hardware would need to be programmed to upgrade eight traffic signals along the corridor to have adaptive control and additional traffic loop detectors and traffic monitoring hardware would need to be installed. This mitigation measure reduces the project's incremental increase in V/C to a level below significance under Future plus Project conditions, which would fully mitigate the project's cumulative impact.

The City is prioritizing the completion of the CSCS system over street widening. Completing CSCS at this location implements a portion of a mitigation identified in the Burbank2035 FEIR. Also, Policy 3.4 of the Burbank2035 Mobility Element considers street widening as methods of last resort. Therefore, this mitigation is selected to mitigate this intersection.



### **#18 Victory Boulevard & Olive Avenue**

To mitigate the significant impact at Victory Boulevard and Olive Avenue, two mitigations discussed in the Burbank2035 General Plan mitigation measure were analyzed: (1) optimize the Citywide Signal Control System (CSCS); and (2) physically widen the eastbound, westbound, and southbound approaches to provide two left-turn lanes, two through lanes, and one right-turn lane. Figure 13 shows the proposed lane configuration. The physical mitigation measure would require widening the eastbound, westbound, and southbound approaches by 6 feet on both sides of the street for approximately 300 feet, while maintaining minimum 10-foot sidewalks. This mitigation would reduce the project's incremental increase in V/C to a level below significance under Future plus Project conditions. The physical mitigations described do not conflict with the goals and policies identified in Burbank2035; therefore, this mitigation is considered feasible.

While the physical mitigation is feasible and mitigates the project impact, an alternate mitigation was evaluated by optimizing Burbank's Citywide Signal Control System (CSCS), which accounts for optimized traffic signal timing, coordination, time-of-day coordination plans, and adaptive signal control. These improvements would be implemented along the Victory Boulevard corridor between Burbank Boulevard and Alameda Avenue and would have to be completed prior the project opening date. To implement adaptive control, the City's traffic signal control hardware would need to be programmed to upgrade eight traffic signals in the corridor to adaptive control, and additional traffic loops and traffic monitoring hardware would need to be installed. This mitigation measure reduces the project's incremental increase in V/C to a level below significance under Future plus Project conditions.

The City is prioritizing the completion of the CSCS system over street widening. Completing CSCS at this location implements a portion of a mitigation identified in the Burbank2035 FEIR. Also, Policy 3.4 of the Burbank2035 Mobility Element considers street widening as methods of last resort. Therefore, this mitigation is selected to mitigate this intersection.



## EFFECTIVENESS OF MITIGATION MEASURES

### ***Existing plus Project***

The following intersections are considered to have significant and unavoidable impacts under Existing plus Project conditions:

- Intersection 9: Interstate 5 Southbound Off-Ramp/Front Street & Burbank Boulevard does pass the policy-based screening analysis, but the impact remains significant and unavoidable under Existing plus Project conditions because the mitigation is partial. This mitigation also requires approval from Caltrans.
- Intersection 10: Victory Place & Burbank Boulevard is considered significant and unavoidable under Existing plus Project conditions as the mitigation measure does not pass the policy-based screening analysis.

### ***Future plus Project***

The following intersections can be mitigated to less than significant because physical mitigation measures were identified that are physically feasible and pass the policy-based screening analysis and/or mitigated by optimizing CSCS:

- Intersection 14: Victory Boulevard & Magnolia Boulevard
- Intersection 18: Victory Boulevard & Olive Avenue

The following intersections are considered to have significant and unavoidable impacts under Future plus Project conditions:

- Intersection 9: Interstate 5 Southbound Off-Ramp/Front Street & Burbank Boulevard does pass the policy-based screening analysis, but the impact remains significant and unavoidable under Existing plus Project conditions because the mitigation is partial. This mitigation also requires approval from Caltrans.
- Intersection 10: Victory Place & Burbank Boulevard is considered significant and unavoidable under Future plus Project conditions as the mitigation measure does not pass the policy-based screening analysis.

### ***Mitigation Conceptual Drawings***

Conceptual drawings of the proposed physical mitigations were developed for Intersection 9: Interstate 5 Southbound Ramps/Front Street & Burbank Boulevard and Intersection 18: Victory Boulevard & Olive Avenue. These conceptual drawings are shown in Figure 14 and Figure 15. HCM LOS analysis of the proposed partial mitigation is shown for informational purposes in Table 12 with analysis sheets shown in Appendix B.



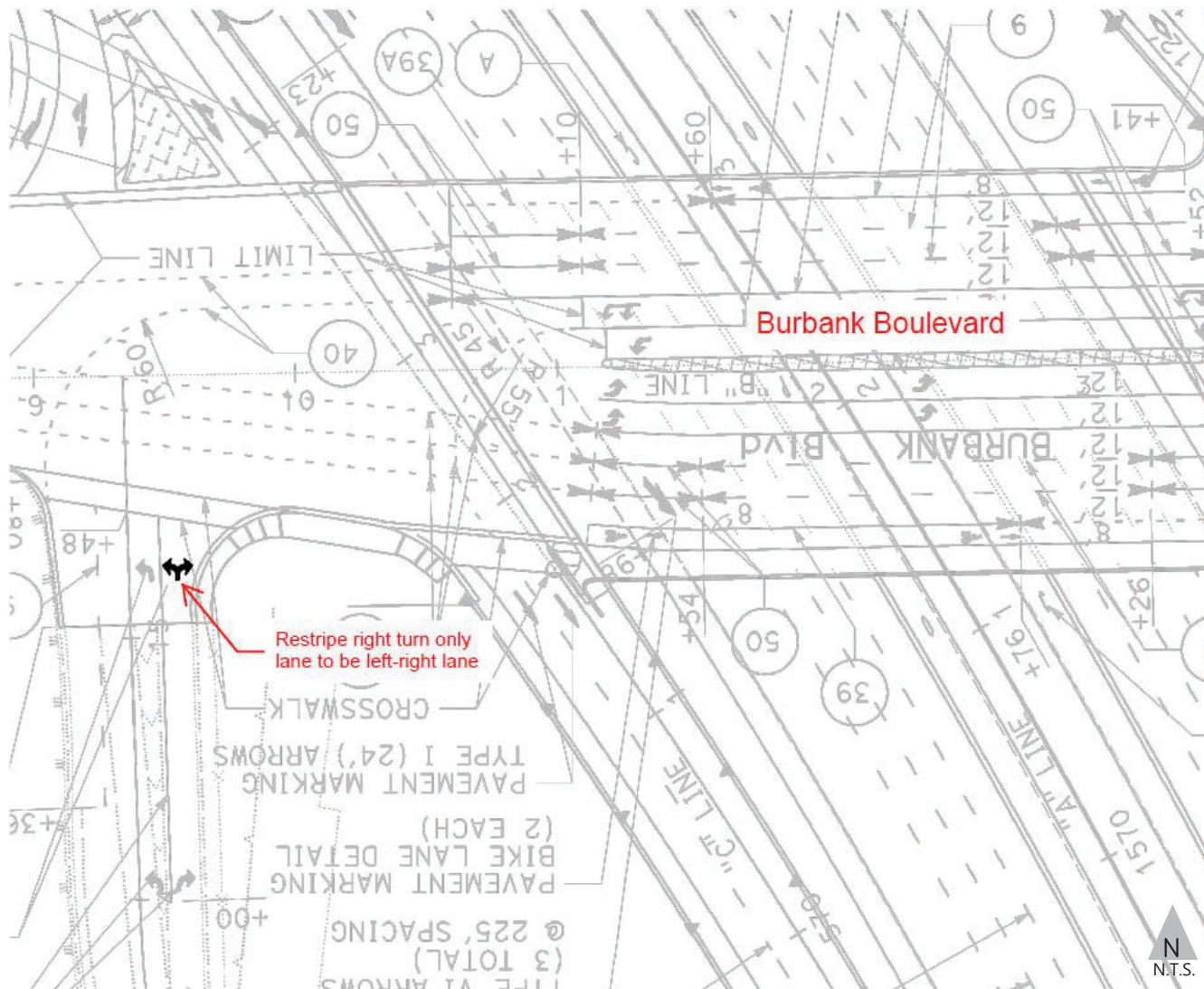


Figure 14  
 Burbank Boulevard Conceptual Partial Mitigation  
 Burbank Boulevard & I-5 Off-Ramps/Front Street  
 777 N Front Street Project



CONCEPTUAL - NOT FOR CONSTRUCTION  
 DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED



**TABLE 12  
777 N FRONT STREET PROJECT  
MITIGATION HCM INTERSECTION LEVEL OF SERVICE ANALYSIS**

NO.	INTERSECTION	PEAK HOUR	Existing (2018)		Existing + Project		Existing + Project + Mitigations		Change in Delay	Future (2022)		Future + Project		Future + Project + Mitigations		Change in Delay
			Delay	LOS	Delay	LOS	Delay	LOS		Delay	LOS	Delay	LOS	Delay	LOS	
9	I-5 SB Off-Ramp/N Front Street & W Burbank Boulevard	AM	55.8	E	72.4	E	62.0	E	-10.4	81.5	F	95.5	F	86.8	F	-8.7
		PM	66.3	E	98.5	F	88.4	F	-10.1	77.0	E	99.8	F	89.8	F	-10.0
18	S Victory Boulevard & W Olive Avenue <i>Burbank2035 mitigation</i>	AM	39.6	D	40.0	D	37.2	D	-2.8	48.4	D	48.9	D	44.9	D	-4.0
		PM	64.9	E	60.7	E	58.4	E	-2.3	86.4	F	78.2	E	79.7	E	1.5

## **FREEWAY RAMP QUEUING ADJACENT TO PROJECT SITE**

A freeway ramp queuing analysis was conducted at three freeway ramp terminal intersections under the Existing and Existing plus Project conditions, and the Future and Future plus Project conditions. The Synchro traffic analysis software was used to implement the HCM methodology to calculate the 95<sup>th</sup> percentile queues at and compare them with the available vehicle storage on these ramps. Traffic signal-related information such as phasing and timing plans (minimum green, maximum green, gap, etc.) were obtained from the City of Burbank for each location and the morning and evening peak hour traffic volumes from this study were used. Additional detail such as turn pocket lengths and ramp lengths was coded based on scaled distances from on-line aerial photographs. Detailed queue calculations are provided in Appendix C.

Table 13 shows the results of the analysis. Based on the analysis, all ramps would not experience queuing greater than the available storage during all four scenarios.



**TABLE 13**  
**777 N FRONT STREET PROJECT**  
**PEAK HOUR OFF-RAMP INTERSECTION 95TH PERCENTILE QUEUES**

ID	Ramp	Cross Street	Ramp Length (ft) [a]	Ramp Turning Movements by Lanes at Intersection			Existing Conditions						Existing + Project							
							AM 95th Percentile Queue		PM 95th Percentile Queue		Queue Exceeds Storage?		AM 95th Percentile Queue		PM 95th Percentile Queue		Queue Length Increase (ft)		Queue Exceeds Storage?	
				Lanes	Move	Length [a]	Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	AM	PM	Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	AM	PM	AM	PM
8	I-5 Northbound Off-Ramp	Burbank Blvd	600	2	Right Right	430 600	65 [b]	65	213 [b]	213	No	No	69 [b]	69	213 [b]	213	4	0	No	No
9	I-5 Southbound Off-Ramp	Burbank Blvd	1,060	3	Left Through/Left Right	1,060 690 380	326 335 536 [b]	536	595 [b] 594 [b] 689 [b]	689	No	No	347 352 536 [b]	536	647 [b] 661 [b] 689 [b]	689	0	0	No	No
22	I-5 Southbound Off-Ramp	Front Street	610	2	Left Left/Right	610 275	59 [b]	59	111 [b]	111	No	No	59 [b]	59	111 [b]	111	0	0	No	No

ID	Ramp	Cross Street	Ramp Length (ft) [a]	Ramp Turning Movements by Lanes at Intersection			Future Conditions						Future + Project							
							AM 95th Percentile Queue		PM 95th Percentile Queue		Queue Exceeds Storage?		AM 95th Percentile Queue		PM 95th Percentile Queue		Queue Length Increase (ft)		Queue Exceeds Storage?	
				Lanes	Move	Length [c]	Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	AM	PM	Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	AM	PM	AM	PM
8	I-5 Northbound Off-Ramp	Burbank Blvd	1,340	4	Right Right Through/Left Left	785 1,325 1,340 885	109 [b] 488 [b] 473 [b]	488	220 [b] 329 342 [b]	342	No	No	111 [b] 506 [b] 490 [b]	506	220 [b] 374 [b] 385 [b]	385	18	43	No	No
9	I-5 Southbound Off-Ramp	Burbank Blvd	1,060	4	Left Through/Left Through/Right Right	625 1,060 780 780	290 290 425 352	425	689 [b] 692 [b] 393 345	692	No	No	290 290 444 357	444	689 [b] 692 [b] 434 352	692	19	0	No	No
22	I-5 Southbound Off-Ramp	Front Street	610	2	Left Left/Right	610 275	69 [b]	69	129 [b]	129	No	No	69 [b]	69	136 [b]	136	0	7	No	No

Notes:

- [a]: Ramp capacity determined based on scaled distances from on-line aerial photographs.
- [b]: 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
- [b]: Queue same as in adjacent lane.
- [c]: Future ramp capacity for Intersection 8 & 9 estimated based on Caltrans plans.



## TRANSIT SYSTEM PROJECT IMPACTS

This section discusses impacts related to the transit system. This section evaluates whether impacts could include disruptions to existing transit service, interference with planned transit facilities, conflict with adopted transit system plans, guidelines, policies, or standards, or create demand for public transit above the available capacity.

### ***Disruptions to Existing Transit Service***

#### Significance Criteria

A significant impact would occur if a project or project-related mitigation disrupts existing transit services or facilities. This includes disruptions on transit streets caused by proposed project driveways, impacts to transit stops/shelters, and impacts to transit operations from traffic improvements proposed or resulting from a project.

#### Project Impact

Bus stops, and ADA-accessible sidewalks and curb ramps that provide access to the bus stops exist on Front Street. The project is not anticipated to impact transit circulation near the project site. Therefore, the impact is less than significant.

### ***Interference with Planned Transit Services***

#### Significance Criteria

A significant impact occurs if a project interferes with planned transit services or facilities.

#### Project Impact

Based on a review of available documents, including Burbank Bus's website and Metro's *Long Range Transportation Plan* (2009), there are no planned transit services that would be impacted by the development of the project site. Therefore, the impact is less than significant.

### ***Inconsistencies with Adopted Transit System Plans, Guidelines, Policies, or Standards***

#### Significance Criteria

A significant impact occurs if a project conflicts or creates inconsistencies with adopted transit system plans, guidelines, policies, or standards.

#### Project Impact

The Burbank2035 General Plan Mobility Element includes policies supporting the development of alternative transportation programs. Key goals and objectives described by the Mobility Element are to:

- Policy 2.1 Improve Burbank's alternative transportation access to local and regional destinations through land use decisions that support multimodal transportation (Page 4-3).
- Policy 4.1 Ensure that local transit service is reliable, safe, and provides high-quality service to major employment centers, shopping districts, regional transit centers, and residential areas (Page 4-3).



In addition, increased transit usage is a key goal of regional transportation plans and policies:

- The SCAG *Regional Transportation Plan* (2016) includes specific goals of sustainable mobility. As noted in the comment letter from SCAG, this includes plans to reduce energy consumption and promote transit-friendly development.
- The SCAG *Regional Comprehensive Plan* (2008) includes an adopted policy supporting local jurisdiction programs that encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bicycle.

The proposed project will not result in any significant impacts to increased transit usage. Therefore, the impact is less than significant.

## **BICYCLE NETWORK PROJECT IMPACTS**

This section reviews project-related impacts on the bicycle network in the study area. Potential impacts include disruptions to existing facilities, interference with planned facilities, and conflicts with adopted plans, guidelines, policies, or standards relating to bicycles.

### ***Disruptions to Existing Facilities***

#### Significance Criteria

A significant impact occurs if a project disrupts existing bicycle facilities.

#### Project Impact

Bicycle facilities within the study area include on-street bicycle lanes on Front Street, San Fernando Boulevard, 3<sup>rd</sup> Street, and Burbank Boulevard. In addition, the Project is proposing to install a raised and protected Class IV cycle track on Front Street. No physical mitigation measures have been proposed at study intersections that would eliminate or alter these existing bicycle facilities, or conflict with plans for the proposed facilities. Therefore, no existing or proposed bicycle facilities would be impacted by the development of the project site. The impact is less than significant.

### ***Interference with Planned Bicycle Facilities***

#### Significance Criteria

A significant impact occurs if a project interferes with planned bicycle facilities. This includes failure to dedicate rights-of-way for planned on- and off-street bicycle facilities included in an adopted Bicycle Specific Plan or to contribute towards construction of planned bicycle facilities along the project frontage.



### Project Impact

Bicycle facilities planned within the study area include on-street bicycle lanes along Glenoaks Boulevard, 3<sup>rd</sup> Street, San Fernando Boulevard, 1<sup>st</sup> Street (Ikea Way), Front Street, Chandler Boulevard, Burbank Boulevard, Olive Avenue, and Magnolia Boulevard.

Neither the project nor planned mitigations would interfere with the planned facilities. Thus, the project impact is not significant.

### ***Conflicts with Adopted Bicycle Plans, Guidelines, Policies, or Standards***

#### Significance Criteria

A significant impact occurs if the project conflicts or creates inconsistencies with adopted bicycle system, plans, guidelines, policies, or standards.

### Project Impact

In 2009, the City of Burbank adopted a Bicycle Master Plan. The Bicycle Master Plan recognized the importance of the bicycle as a viable means of transportation, and provides specific recommendations for facilities and programs for the next 25 years. Policy 2 of the Bicycle Master Plan requires that the City provide bicycle-friendly connections to major employment centers. The project plans to construct a raised and protected bi-directional Class IV bicycle facility from Burbank Boulevard to the Downtown Burbank Metrolink Station along the east side of Front Street. This facility will connect bicyclists to the Downtown Burbank Metrolink Station. The project's connection to the Downtown Burbank Metrolink Station will introduce new bicycle trips that will be required to cross Front Street from the project site, where there are currently no existing signalized intersections or crossings. Because of the high posted speed limit of 40 miles per hour (mph) on Front Street and the increased bicyclist activity at this location due to the project, the project creates a significant impact at this location.

#### Project Impact Mitigation

Project bicycle trips travelling between the Downtown Burbank Metrolink Station and the project site will need to cross Front Street to access the station. To mitigate the bicycle network impact, a crosswalk and rectangular rapid flashing beacons (RRFBs) should be installed at the northernmost parking lot driveway of the Downtown Burbank Metrolink Station to facilitate access for bicyclists to cross from the eastern side of Front Street to the western side of Front Street where the station is located. The project applicant will be responsible for the installation of crosswalks and RRFB at the Downtown Burbank Metrolink Station's northern driveway.

## **PEDESTRIAN NETWORK PROJECT IMPACTS**

This section reviews project-related impacts on the pedestrian network in the study area. Potential impacts include disruptions on existing facilities, interference with planned facilities, and conflicts with adopted plans, guidelines, policies, or standards relating to pedestrians.



## ***Disruptions to Existing Facilities***

### Significance Criteria

A significant impact occurs if a project disrupts existing pedestrian facilities. This can include adding new vehicular, pedestrian, or bicycle traffic at locations experiencing pedestrian safety concerns including: reduction in the number of pedestrian-acceptable gaps at unsignalized crossings or queues spilling back through pedestrian crossings.

### Project Impact

Pedestrian walkways exist near the project site along Front Street, Burbank Boulevard, Victory Place and Victory Boulevard. The pedestrian network will be maintained along these ways. Along Front Street, there is currently a 6-foot sidewalk along the eastern side of the street. This sidewalk will be widened to 11-feet along the project site per dedication to the City by the project. There is currently no sidewalk along the western side of Front Street. The project will introduce new pedestrian trips, some of which will need to cross from the eastern side of Front Street to access the Downtown Burbank Metrolink Station, which is located on the western side of Front Street. There are no existing signalized intersections along Front Street between the project site and the Downtown Burbank Metrolink Station that would connect the east side and the west side of the street. There is one pedestrian crossing south of the Magnolia Boulevard overcrossing facilitated through curb ramps, but no crosswalk striping or signage is present and there is no sidewalk on the west side of Front Street. Because of the high posted speed limit of 40 mph on Front Street and the increased pedestrian activity at this location due to the project, the project creates a significant pedestrian impact at this location.

### Project Impact Mitigation

Project pedestrian trips travelling between the Downtown Burbank Metrolink Station and the project site need to cross Front Street to access the station. To mitigate the pedestrian network impact, a pedestrian crosswalk with RRFBs should be installed south of Magnolia Boulevard at the Downtown Burbank Metrolink Station's northernmost driveway. The project applicant will be responsible for the installation of the pedestrian crosswalk with appropriate signage, ADA ramps, and rectangular rapid flashing beacons (RRFBs) at the Downtown Burbank Metrolink Station's northernmost driveway.

There are also existing ADA curb ramps that provide access to Front Street at the northern part of the Metrolink Station directly south of the Magnolia Boulevard overcrossing. These ramps are intended to provide ADA and pedestrian access from the east side of the street to the west side of the street. However, it is not facilitated by any signage or striping and has poor sight lines for visibility by motorists. The existing ADA curb ramps should be removed at this location.

The widened sidewalk along the eastern edge of Front Street should be extended south of the project site to the Downtown Burbank Metrolink Station. The project applicant will be responsible for the installation of the pedestrian crosswalk, ADA ramps, and RRFBs.



### ***Interference with Planned Pedestrian Facilities***

#### Significance Criteria

A significant impact occurs if a project interferes with planned pedestrian facilities. In existing or planned urbanized areas, main streets, or pedestrian districts, this can include impacts to the quality of the walking environment.

#### Project Impact

No planned pedestrian facilities would be affected by the project. The project impact is less than significant.

### ***Conflicts with Adopted Pedestrian Plans, Guidelines, Policies, or Standards***

#### Significance Criteria

A significant impact occurs if a project conflicts or creates inconsistencies with adopted pedestrian system plans, guidelines, policies, or standards.

#### Project Impact

The project does not conflict with adopted pedestrian system plans, guidelines, policies, or standards.



## 6. PARKING AND SITE CIRCULATION ANALYSIS

This chapter presents an analysis of the parking supply and access system proposed by the project. Based on a combination of the applicable code requirements as specified by the City of Burbank, the parking need was estimated. Issues relating to the project's proposed site access scheme were also evaluated.

### CITY OF BURBANK PARKING CODE REQUIREMENTS

The parking analysis for the proposed project compared the proposed parking supply to the requirements of the City of Burbank Municipal Code (Code). According to the Code, a proposed development project is required to provide an adequate supply of parking spaces based on the proposed land uses on the site. The proposed project is considered to have a significant parking impact if the proposed parking supply is below that specified by the Code.

The project involves the development of 1,067 square feet of retail, a 307-room hotel with 1,800 square feet of high-turnover restaurant space, and a 573-unit residential building. Table 14 provides a summary of the City of Burbank parking code requirements for the project by land use. Based on City of Burbank code requirements, the project requires 1,463 parking spaces. The project will provide the required number of spaces by City code requirements.

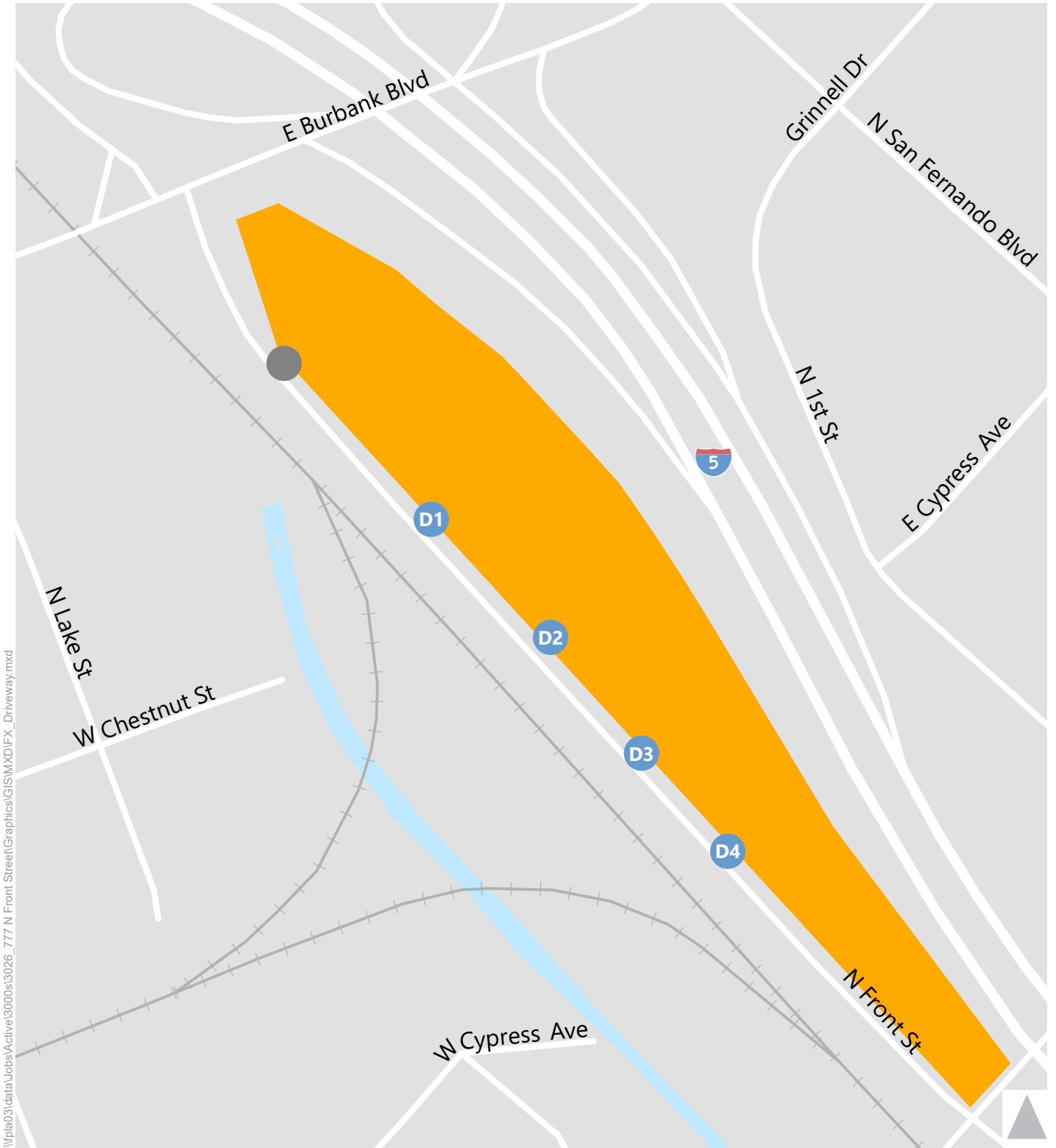
### SITE ACCESS AND CIRCULATION

As shown in Figure 16, the proposed project includes five driveways along Front Street. Primary vehicular access to the site will be from two residential driveways and one hotel driveway. The northernmost driveway is an outbound only driveway providing loading access for the residential units as well as emergency access. The southernmost driveway will be used by both residents and hotel guests as a secondary access point. All driveways are unsignalized, except for the hotel driveway which will be signalized primarily to facilitate bicycle and pedestrian access to the bi-directional Class IV cycle track planned to be built along the west side of Front Street.

There are no turn restrictions at any of the driveways. Sidewalks are provided along Front Street on the east side of the street, fronting the project site. These sidewalks will be widened to 15 feet per dedication to the City.

Table 15 provides the anticipated levels of service at the proposed unsignalized driveways. All driveways are projected to operate at LOS B. LOS worksheets for driveways are provided in Appendix D.





\\plao3\data\Jobs\Active\3000s\3026\_777 N Front Street\Graphics\GIS\MXD\FIX\_Driveway.mxd

Figure 16  
Project Driveway Locations



**TABLE 14**  
**777 N FRONT STREET PROJECT**  
**VEHICLE PARKING SPACES REQUIRED BY CITY CODE**

Land Use	Code Requirement	Project Size	Required Vehicle Spaces
General - Retail	3.3 spaces/ ksf [a]	1.067 ksf	4
Residential			
Studio - less than 500 sf	1.25 spaces/ DU [b]	114 DU	143
Studio/1-bedroom - greater than 500 sf	1.75 spaces/ DU [b]	245 DU	429
2 bedroom	2 spaces/ DU [b]	180 DU	360
3 bedroom	2 spaces/ DU [b]	34 DU	68
Guest	0.25 spaces/ DU [b]	573 DU	143
Hotels and Motels	1 spaces/ room [a]	307 room	307
Restaurant part of a hotel	5 spaces/ ksf [a]	1.800 ksf	9
<b>Total Project</b>			<b>1,463</b>

Notes:

[a] City of Burbank Municipal Code 10-1-1408

[b] City of Burbank Municipal Code 10-1-628



**TABLE 15**  
**777 N FRONT STREET PROJECT**  
**DRIVEWAY LEVEL OF SERVICE**

NO.	INTERSECTION	INTERSECTION CONTROL	PEAK HOUR	Future (2022) + Project	
				Delay or V/C	LOS
D1	Front Street Residential Driveway North	TWSC	AM	12.8	B
			PM	13.1	B
D2	Front Street Residential Driveway South	TWSC	AM	12.7	B
			PM	13.0	B
D3	Front Street Hotel Driveway	TWSC	AM	12.6	B
			PM	13.3	B
D4	Front Street Secondary Driveway	TWSC	AM	11.5	B
			PM	11.7	B

Notes:

TWSC Two-way stop controlled intersections

- [1] Unsignalized intersections within the City of Burbank are analyzed in Traffix using the HCM 2000 methodology (average vehicular delay reported is for the worst case approach).

## EMERGENCY ACCESS

Emergency vehicle access is required to provide access by fire, police, and other emergency vehicles into the project site. Providing adequate emergency vehicle access ensures that these vehicles are able to easily and quickly respond to service calls. A review of the site plan indicates that emergency vehicles can access the site via the southernmost driveway. This driveway leads to fire truck access lane on the eastern perimeter of the project site. An outbound only driveway exists at the northern edge of the project site, specifically for emergency and service vehicles only. To access this driveway, a fire truck would be required to exit this driveway heading southbound from the project site as the design of the driveway restricts the truck turning radius from allowing fire trucks to exit and turn right from the site headed on Front Street.

The California Fire Code establishes the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Burbank Fire Department conducts safety inspections in accordance with the California Fire Code to ensure compliance.

All internal roadways that provide fire access, referred to as fire apparatus access roads, should comply with the California Fire Code and are discussed within Section 503.1. Fire apparatus access roads shall extend to within 150 feet of all portions of the facility, shall be no less than 20 feet wide, and should include turning radius that meet the discretion of the local fire code official. For fire apparatus access roads with dead ends where the length of the street is greater than 150 feet, an approved area for turning around fire apparatuses shall be provided. Based on the site plan for the project, all internal streets appear to comply with the California Fire Code with the exception of the outbound only driveway at the northern edge of the property which does not meet the truck turning radius for right-turns. Fire trucks would only be able to turn left from the driveway headed south on Front Street. However, final approval for fire access is at the discretion of local fire officials.



## 7. CONGESTION MANAGEMENT PROGRAM ANALYSIS

This section presents an analysis of potential impacts on the regional transportation system. This analysis was conducted in accordance with the procedures outlined in the CMP. The CMP requires that, when an environmental impact report is prepared for a project, traffic and transit impact analyses be conducted for select regional facilities based on the quantity of project traffic expected to use those facilities.

The CMP guidelines require that the first issue to be addressed is the determination of the geographic scope of the study area. The criteria for determining the study area for CMP arterial monitoring intersections and for freeway monitoring locations are:

- All CMP arterial monitoring intersections where the proposed project will add 50 or more trips during either the AM or PM peak hours of adjacent street traffic.
- All CMP mainline freeway monitoring locations where the proposed project will add 150 or more trips, in either direction, during either the AM or PM peak hours.

### SIGNIFICANT TRAFFIC IMPACT CRITERIA

The CMP traffic impact analysis guidelines establish that a significant project impact occurs when a certain threshold is exceeded. If the proposed project increases traffic demand on a CMP facility by 2% of capacity ( $V/C \geq 0.02$ ), causing LOS F ( $V/C > 1.00$ ), a significant impact would occur. If the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity ( $V/C \geq 0.02$ ).

### ARTERIAL MONITORING ANALYSIS

None of the study area intersections are CMP arterial monitoring locations. The CMP arterial monitoring stations closest to the proposed project site are located at Victory Boulevard & Woodman Avenue (approximately seven miles west of the project site) and Ventura Boulevard & Lankershim Boulevard (approximately four miles south of the project site). Based on the Project trip distribution and trip generation, the Project is not expected to add 50 peak hour vehicle trips through the CMP arterial monitoring station. Project trips are anticipated to disperse among the transportation network due to the extended distance between the project site and the monitoring station. The proposed project is not expected to add enough new traffic to exceed the arterial analysis criteria of 50 vehicle trips at the above-mentioned location. Therefore, no further CMP arterial analysis is required.

### FREEWAY ANALYSIS

Regional access to the project site is provided by Interstate 5, State Route (SR) 170, and SR 134 Freeways. Interstate 5 lies directly north and east of the site, State Route 170 lies approximately 5 miles to the west of the site, and SR-134 lies approximately 2 miles south of the site. The CMP freeway monitoring stations closest to the project site include the following:

- I-5 Freeway north of Burbank Boulevard Burbank Ramps (north of the project site)
- I-5 Freeway at Osborne Street, north of SR-170 (approximately seven miles north of the site)



- I-5 Freeway south of Colorado Boulevard Exit (approximately four south miles from the site)
- SR-134 at Forman Avenue (approximately southwest miles from the site)
- SR-134 east of Central Avenue (approximately southeast miles from the site)
- SR-170 south of Sherman Way (approximately five west miles from the site)

The project is expected to generate 314 trips in the AM peak hour and 398 trips in the PM peak hour. Based on the project distribution patterns shown in Figure 6, approximately 15% of project traffic is expected to travel through the monitoring station at Interstate-5 Freeway north of Burbank Boulevard Burbank Ramps, resulting in approximately 47 trips added during the AM peak hour and 60 trips added during the PM peak hour. For all other monitoring stations, fewer than 150 trips would be added during the AM or PM peak hours in either direction at any of the freeway segments in the vicinity of the study area. Since fewer than 150 trips would be added during the AM or PM peak hours in either direction at any of the freeway segments near the study area, no further analysis of the freeway segments is required for CMP purposes.

## REGIONAL TRANSIT IMPACT ANALYSIS

Potential increases in transit person trips generated by the proposed project were estimated. Appendix B-4 of the 2010 CMP provides a methodology for estimating the number of transit trips expected to result from a proposed project based on the projected number of vehicle trips. This methodology assumes an average vehicle ridership (AVR) factor of 1.4 in order to estimate the number of person trips to and from the project and then provides guidance regarding the percentage of person trips assigned to public transit depending on the type of use (commercial/other versus residential) and the proximity to transit services. Appendix B-4 of the 2004 CMP recommends observing the fixed-route local bus services within ¼ mile of the project site and express bus routes and rail service within two miles of the project site.

The project site is served by a high level of public transit. Figure 3 shows the various transit routes providing service in the study area. The project is located approximately 0.25 miles from the existing Downtown Burbank Metrolink Station. Six Local Metro bus routes, one BurbankBus route, and one Glendale Beeline route have a bus stop at the Downtown Burbank Metrolink Station.

As part of the trip generation estimates presented in Table 4, a combined transit, walk, and bicycle credit of 10% was taken for the hotel and residential land uses and a 5% credit was taken for the retail and restaurant land uses, in consultation with the City of Burbank. Excluding the transit credit in Table 4, the proposed project would have an estimated increase in vehicle trip generation of approximately 349 net vehicle trips during the AM peak hour and 442 during the PM peak hour. Applying the CMP guidelines by converting the vehicle trips to person trips by multiplying by a 1.4 AVR and applying the transit credit would result in approximately 49 new transit person trips during the weekday AM peak hour and 62 during the PM peak hour.

Given the frequency of the transit service in close proximity to the project site, the transit capacity is over 5,700 persons in each the AM and PM peak periods. Of this capacity, approximately 60% is provided by the Downtown Burbank Metrolink Station, and 40% is provided by existing bus service. The proposed project would use approximately 1% of available transit capacity during the peak hours. Based on this estimate, the project impact is expected to be less than significant.



## 8. CONSTRUCTION IMPACTS

### CONSTRUCTION IMPACT CRITERIA

Short-term adverse traffic and parking impacts could occur in the project vicinity during construction of the project. Additional trips generated by the truck deliveries and construction employees could affect traffic flow in the study area; construction activity could impact traffic along Front Street; and pedestrian traffic flow near the project site could be altered as a result of construction.

### CONSTRUCTION IMPACT ASSESSMENT

Construction of the project is anticipated to begin in September 2019 and is expected to take a total of approximately 73 months to complete. The project is anticipated to be constructed in three phases. The expected construction schedule is listed below:

1. Phase 1: Residential Building 1 & Earthwork
  - a. Site preparation – September through December 2019
  - b. Grading – January through March 2020
  - c. Building construction – April 2020 through July 2022
2. Phase 2: Residential Building 2
  - a. Building construction – April 2020 through September 2025
3. Phase 3: Hotel
  - a. Building construction – April 2020 through September 2025

Construction hours are Monday through Friday: 7:00 AM to 7:00 PM, Saturdays: 8:00 AM to 5:00 PM, in accordance with the City of Burbank Building Code Requirements and Construction Regulations.

#### ***Temporary Traffic Impacts***

Lane closures are anticipated along Front Street during construction. Since travel lane closures during construction are anticipated, the temporary construction impacts on the roadway network would be considered significant.

#### ***Temporary Loss of Access***

The existing land uses near the vicinity of the construction site will remain open throughout construction. Pedestrian and vehicular access to properties located nearby to the project site will be open and unobstructed for the duration of construction. Since the Project construction would not block any vehicle or pedestrian access to other parcels fronting the construction area, impacts would be less than significant.



### ***Temporary Loss of Bus Stops or Rerouting of Bus Lines***

Bus stops are not located on Front Street. Construction is not anticipated to affect bus operations as construction and staging is not immediately adjacent to any bus stops. Therefore, the construction impacts on transit operations would be less than significant.

### ***Temporary Loss of On-Street Parking***

On-street parking is not permitted on Front Street along the project frontage. As the construction of the project would not result in the loss of any on-street parking, construction impacts on on-street parking would be less than significant.

### ***Truck Routes***

When the Burbank Bridge is scheduled to be under construction between July 2019 and October 2020, the following haul truck route will be utilized:

- Outbound trucks will head north on Front Street to Burbank Boulevard to Victory Boulevard to the I-5 Freeway to access the two landfill sites.
- Inbound trucks will head south on the I-5 Freeway and exit on Front Street and continue straight to the project site.

When the Burbank Bridge is available for use, the following haul truck route will be utilized:

- Outbound trucks will head north on Front Street over the Burbank Bridge to San Fernando Boulevard to the I-5 Freeway to access the two landfill sites.
- Inbound trucks will head south on the I-5 Freeway and exit on Front Street and continue straight to the project site.

Up to 59 haul truck trips per day are anticipated during site preparation and 73 haul truck trips per day are expected during grading. 201 equipment/deliveries/vendor truck trips per day are expected to occur during the building construction phases.

### ***Construction Employees***

The number of construction workers would vary throughout the construction period with the building construction phases generating the highest number of trips. Site preparation is expected to involve up to 9 workers and grading is expected to involve up to 8 workers. The building construction phases are expected to involve up to a total of 470 workers per day. During the site preparation and grading phases and the first portion of the building construction while the parking garage is under construction, it is anticipated that construction employees would be parked offsite, with the off-street location to be identified at a later date. Once the subterranean parking structure component of the project is complete, construction workers would park in the garage.



## **CONSTRUCTION MITIGATION MEASURES**

Prior to issuance of any grading and/or demolition permits, whichever occurs first, a Construction Management Plan (CMP) shall be submitted for review and approval by the City Traffic Engineer and Building Official. The requirement for a Construction Management Plan shall be incorporated into the Project specifications and subject to verification by the City Traffic Engineer and Building Official prior to final plan approval. The Construction Management Plan shall, at a minimum, address the following:

- Traffic control for any street closure, detour, or other disruption to traffic circulation.
- Identify the routes that construction vehicles will utilize for the delivery of construction materials (i.e., lumber, tiles, piping, windows, etc.), to access the site, traffic controls and detours, and proposed construction phasing plan for the Project.
- Require the Project Applicant to keep all haul routes clean and free of debris, including but not limited to gravel and dirt as a result of its operations. The Project Applicant shall clean adjacent streets, as directed by the City Traffic Engineer (or representative of the City Traffic Engineer), of any material which may have been spilled, tracked, or blown onto adjacent streets or areas.
- Hauling or transport of oversize loads shall be allowed between the hours of 9:00 a.m. and 3:00 p.m. only, Monday through Friday, unless approved otherwise by the City Traffic Engineer. No hauling or transport will be allowed during nighttime hours, weekends, or Federal holidays.
- Use of local streets shall be prohibited unless otherwise provided for in the CMP.
- Haul trucks entering or exiting public streets shall at all times yield to public traffic.
- If hauling operations cause any damage to existing pavement, streets, curbs, and/or gutters along the haul route, the Project Applicant shall be fully responsible for repairs. The repairs shall be completed to the satisfaction of the City Traffic Engineer.
- All construction-related parking and staging of vehicles shall be kept out of the adjacent public roadways and shall occur on-site or at a nearby site approved by the City Traffic Engineer as part of the CMP.
- The Construction Management Plan shall meet standards established in the current California Manual on Uniform Traffic Control Device as well as City of Burbank requirements.

With this mitigation measure, the temporary significant impact due to the lane closures on Front Street would be less than significant.



## 9. SUMMARY AND CONCLUSIONS

This study was undertaken to analyze the potential traffic impacts of the proposed development at 777 N Front Street in the City of Burbank. The following summarizes the results of this analysis:

- The proposed project involves the development of 307-room hotel with 1,800 square feet of high-turnover restaurant space, a 573-unit apartment building, and 1,067 square feet of retail gallery space. The parcel is bounded by Burbank Boulevard to the north, the Interstate 5 (I-5) to the east, Magnolia Boulevard to the south (above grade), and Front Street to the west.
- The proposed project would provide five driveways along Front Street. All driveways would provide full access and would be stop-controlled. All driveways are projected to operate at LOS B or better under existing plus project and future plus project conditions.
- A total of 24 intersections and one roadway segment were analyzed for this project, 23 of which are signalized. Two of the study intersections are part of the new interchange configurations for Interstate 5 at Burbank Boulevard.
- The proposed project is estimated to generate approximately 314 new trips (129 inbound, 185 outbound) during the morning peak hour, 398 new trips (225 inbound and 173 outbound) during the afternoon peak hour, and approximately 5,261 daily trips.
- One of the 24 study intersections operates at LOS E during both peak hours under Existing conditions, and one intersection operates at LOS F during both peak hours under Existing plus Project conditions. Four intersections operate at LOS E or F under Future Base and Future plus Project conditions.
- Analysis of Existing plus Project conditions indicates that, using the significance criteria established by the City of Burbank, the proposed project would have two significant intersection impacts.
- Analysis of projected Future plus Project conditions indicates that, using the significance criteria established by the City of Burbank, the proposed project would have significant impacts at four study intersections.
- The project impacts at Victory Boulevard & Magnolia Avenue and Victory Boulevard & Olive Avenue are able to be fully mitigated under Future plus Project conditions. One partial mitigation is recommended at Burbank Boulevard & I-5 SB off-ramps/Front Street but the intersection would remain significant and unavoidable under Existing plus Project and Future plus Project conditions. The remaining mitigation measure at Victory Place & Burbank Boulevard is not considered feasible and the impacted intersection would be considered significant and unavoidable under Existing plus Project and Future plus Project conditions.
- A total of 1,463 parking spaces are required by the Burbank Municipal Code. The proposed project will provide the Code required number of parking spaces.
- Additional analysis of potential impacts on the regional transportation system conducted in accordance with CMP requirements determined that the project would not have a significant impact on the CMP arterial highway network, freeway network, or transit network.
- Construction impacts related to the lane closures on Front Street during construction were found to be significant. With the Construction Management Plan implemented as a mitigation measure, the impacts would be less than significant.





## **APPENDIX A**

### **Traffic Counts**

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: N Glenoaks Blvd & Amherst Dr  
 City: Burbank  
 Control: Signalized

Project ID: 17-05689-001  
 Date: 10/17/2017

### Total

NS/EW Streets:	N Glenoaks Blvd				N Glenoaks Blvd				Amherst Dr				Amherst Dr				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	19	106	3	0	4	232	13	0	12	4	2	0	4	7	1	0	407
7:15 AM	15	81	1	0	3	333	20	0	10	4	4	0	7	11	1	0	490
7:30 AM	12	140	2	0	11	348	30	0	11	13	7	0	16	27	4	0	621
7:45 AM	26	200	3	0	3	324	48	0	29	20	4	0	27	44	4	0	732
8:00 AM	25	150	3	0	6	296	25	0	24	9	6	0	6	21	7	0	578
8:15 AM	20	152	0	0	5	300	20	0	9	8	4	0	9	19	2	0	548
8:30 AM	12	121	6	0	7	347	23	0	10	4	4	0	9	13	4	0	560
8:45 AM	13	122	2	0	1	343	18	0	17	4	4	0	11	12	2	0	549
9:00 AM	14	127	5	1	4	321	22	0	6	4	8	0	6	10	6	0	534
9:15 AM	10	129	5	1	3	271	19	0	7	5	2	0	2	9	2	0	465
9:30 AM	14	105	2	1	3	249	13	0	16	2	3	0	4	8	3	0	423
9:45 AM	10	104	1	0	3	221	16	0	13	6	4	0	4	8	2	0	392
<b>TOTAL VOLUMES :</b>	190	1537	33	3	53	3585	267	0	164	83	52	0	105	189	38	0	6299
<b>APPROACH %'s :</b>	10.78%	87.18%	1.87%	0.17%	1.36%	91.81%	6.84%	0.00%	54.85%	27.76%	17.39%	0.00%	31.63%	56.93%	11.45%	0.00%	
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	83	642	8	0	25	1268	123	0	73	50	21	0	58	111	17	0	2479
<b>PEAK HR FACTOR :</b>	0.798	0.803	0.667	0.000	0.568	0.911	0.641	0.000	0.629	0.625	0.750	0.000	0.537	0.631	0.607	0.000	0.847
			0.800			0.910				0.679				0.620			
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
4:30 PM	16	241	4	0	4	182	22	0	26	10	6	0	12	14	3	0	540
4:45 PM	17	257	5	0	5	233	13	0	27	11	7	0	3	11	5	0	594
5:00 PM	13	266	5	0	4	253	15	0	26	5	11	0	9	10	1	0	618
5:15 PM	18	298	4	0	5	267	14	0	35	14	8	0	4	5	1	0	673
5:30 PM	11	280	6	0	1	238	20	0	34	30	9	0	5	15	0	0	649
5:45 PM	12	308	5	0	4	254	23	0	31	7	5	0	5	4	1	0	659
6:00 PM	19	298	5	1	5	272	29	0	32	15	4	0	9	9	1	0	699
6:15 PM	11	275	8	0	3	265	18	0	29	11	4	0	9	4	2	0	639
6:30 PM	17	256	3	0	1	236	15	0	35	12	8	0	9	5	0	0	597
6:45 PM	14	295	2	0	2	254	16	0	21	4	6	0	2	8	1	0	625
7:00 PM	24	249	3	0	1	219	16	0	23	7	9	0	2	3	1	0	557
7:15 PM	13	207	6	0	4	170	16	0	29	2	4	0	5	4	2	0	462
<b>TOTAL VOLUMES :</b>	185	3230	56	1	39	2843	217	0	348	128	81	0	74	92	18	0	7312
<b>APPROACH %'s :</b>	5.33%	93.03%	1.61%	0.03%	1.26%	91.74%	7.00%	0.00%	62.48%	22.98%	14.54%	0.00%	40.22%	50.00%	9.78%	0.00%	
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	60	1184	20	1	15	1031	86	0	132	66	26	0	23	33	3	0	2680
<b>PEAK HR FACTOR :</b>	0.789	0.961	0.833	0.250	0.750	0.948	0.741	0.000	0.943	0.550	0.722	0.000	0.639	0.550	0.750	0.000	0.959
			0.973			0.925				0.767				0.738			

National Data & Surveying Services

# Intersection Turning Movement Count

Location: N Glenoaks Blvd & Amherst Dr  
 City: Burbank  
 Control: Signalized

Project ID: 17-05689-001  
 Date: 10/18/2017

**Total**

NS/EW Streets:	N Glenoaks Blvd				N Glenoaks Blvd				Amherst Dr				Amherst Dr				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	22	89	1	0	3	231	19	0	8	7	4	0	2	10	2	0	398
7:15 AM	20	87	1	0	11	346	16	0	6	13	8	0	6	14	2	0	530
7:30 AM	19	130	3	0	8	370	28	0	15	17	3	0	13	26	4	0	636
7:45 AM	25	200	3	0	4	351	47	0	24	18	6	0	28	43	3	0	752
8:00 AM	17	173	5	0	0	330	35	0	20	8	6	0	9	22	4	0	629
8:15 AM	17	140	5	0	2	344	25	0	14	4	3	0	10	12	0	0	576
8:30 AM	17	110	3	0	6	347	31	0	17	3	6	0	5	12	2	0	559
8:45 AM	11	91	2	0	5	341	23	0	11	6	1	0	11	18	1	0	521
9:00 AM	13	109	8	0	2	304	26	0	15	8	2	0	8	11	4	0	510
9:15 AM	10	128	8	0	4	266	21	0	12	7	6	0	7	14	3	0	486
9:30 AM	13	114	3	0	7	183	18	0	12	8	5	0	5	10	2	0	380
9:45 AM	13	134	9	0	0	178	15	0	11	4	6	0	6	10	1	0	387
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	11.24%	85.85%	2.91%	0.00%	1.32%	90.98%	7.70%	0.00%	50.93%	31.79%	17.28%	0.00%	32.35%	59.41%	8.24%	0.00%	6364
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																TOTAL
<b>PEAK HR VOL :</b>	78	643	16	0	14	1395	135	0	73	47	18	0	60	103	11	0	2593
<b>PEAK HR FACTOR :</b>	0.780	0.804	0.800	0.000	0.438	0.943	0.718	0.000	0.760	0.653	0.750	0.000	0.536	0.599	0.688	0.000	0.862
		0.808				0.951				0.719				0.588			
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
4:30 PM	13	241	8	0	3	223	16	0	38	11	11	0	3	9	5	0	581
4:45 PM	15	249	7	0	4	230	14	0	27	18	7	0	11	13	3	0	598
5:00 PM	12	291	8	0	6	279	16	0	37	18	6	0	3	7	2	0	685
5:15 PM	22	271	7	0	2	300	24	0	20	15	7	0	1	14	1	0	684
5:30 PM	14	305	4	0	4	276	23	0	43	17	10	0	12	15	5	0	728
5:45 PM	24	293	2	0	0	358	15	0	34	13	5	0	6	7	3	0	760
6:00 PM	13	279	2	0	2	321	25	0	32	17	6	0	6	6	1	0	710
6:15 PM	14	276	4	0	5	280	22	0	25	9	5	0	3	4	2	0	649
6:30 PM	14	251	4	0	1	237	14	0	36	10	12	0	2	4	0	0	585
6:45 PM	15	274	2	0	1	260	13	0	21	10	7	0	4	14	5	0	626
7:00 PM	17	226	4	0	2	216	14	0	30	10	8	0	4	8	4	0	543
7:15 PM	16	201	5	0	3	160	20	0	17	4	3	0	0	6	0	0	435
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	5.55%	92.77%	1.67%	0.00%	0.97%	92.65%	6.37%	0.00%	60.10%	25.38%	14.52%	0.00%	28.50%	55.44%	16.06%	0.00%	7584
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																TOTAL
<b>PEAK HR VOL :</b>	73	1148	15	0	8	1255	87	0	129	62	28	0	25	42	10	0	2882
<b>PEAK HR FACTOR :</b>	0.760	0.941	0.536	0.000	0.500	0.876	0.870	0.000	0.750	0.912	0.700	0.000	0.521	0.700	0.500	0.000	0.948
		0.957				0.905				0.782				0.602			

National Data & Surveying Services

# Intersection Turning Movement Count

Location: N San Fernando Blvd & Scott Rd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-001  
 Date: 4/24/2018

**Total**

NS/EW Streets:	N San Fernando Blvd				N San Fernando Blvd				Scott Rd				Scott Rd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	58	17	0	0	53	0	0	0	0	0	0	47	0	0	0	175
7:15 AM	0	71	12	0	0	64	0	0	0	0	0	0	66	0	0	0	213
7:30 AM	0	85	21	0	0	110	0	0	0	0	0	0	84	0	0	0	300
7:45 AM	0	123	26	0	1	79	0	0	0	0	0	0	79	0	2	0	310
8:00 AM	0	92	29	0	0	68	0	0	0	0	0	0	74	0	0	0	263
8:15 AM	0	84	20	0	0	64	0	0	0	0	0	0	90	0	0	0	258
8:30 AM	0	76	32	0	0	58	0	1	0	0	0	0	70	0	1	0	238
8:45 AM	0	67	18	0	1	56	0	0	0	0	0	0	83	0	5	0	230
9:00 AM	0	67	16	0	0	46	0	0	0	0	0	0	73	0	0	0	202
9:15 AM	0	78	23	0	0	54	0	0	0	0	0	0	73	0	2	0	230
9:30 AM	0	72	24	0	0	34	0	0	0	0	0	0	63	0	1	0	194
9:45 AM	0	70	28	0	2	51	0	0	0	0	0	0	47	0	4	0	202
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	943	266	0	0	737	0	1	0	0	0	0	849	0	15	0	2815
	0.00%	78.00%	22.00%	0.00%	0.54%	99.33%	0.00%	0.13%	0.00%	0.00%	0.00%	0.00%	98.26%	0.00%	1.74%	0.00%	
<b>PEAK HR :</b>	<b>07:30 AM - 08:30 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	384	96	0	1	321	0	0	0	0	0	0	327	0	2	0	1131
<b>PEAK HR FACTOR :</b>	0.000	0.780	0.828	0.000	0.250	0.730	0.000	0.000	0.000	0.000	0.000	0.000	0.908	0.000	0.250	0.000	0.912
	0.805																0.732
	0.914																
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:30 PM	0	158	52	0	2	42	0	0	0	0	0	0	38	0	2	0	294
4:45 PM	0	174	71	0	0	38	0	0	0	0	0	0	42	0	1	0	326
5:00 PM	0	196	71	0	0	48	0	0	0	0	0	0	41	0	0	0	356
5:15 PM	0	184	68	0	2	42	0	0	0	0	0	0	46	0	0	0	342
5:30 PM	0	183	50	0	0	40	0	0	0	0	0	0	40	0	0	0	313
5:45 PM	0	184	73	0	0	45	0	0	0	0	0	0	48	0	3	0	353
6:00 PM	0	202	65	0	0	43	0	0	0	0	0	0	39	0	0	0	349
6:15 PM	0	164	61	0	1	35	0	0	0	0	0	0	40	0	1	0	302
6:30 PM	0	162	65	0	2	59	0	0	0	0	0	0	38	0	3	0	329
6:45 PM	0	145	77	0	0	36	0	0	0	0	0	0	43	0	2	0	303
7:00 PM	0	168	79	0	1	44	0	0	0	0	0	0	56	0	4	0	352
7:15 PM	0	156	63	0	0	35	0	0	0	0	0	0	50	0	1	0	305
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	2076	795	0	8	507	0	0	0	0	0	0	521	0	17	0	3924
	0.00%	72.31%	27.69%	0.00%	1.55%	98.45%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	96.84%	0.00%	3.16%	0.00%	
<b>PEAK HR :</b>	<b>05:00 PM - 06:00 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	747	262	0	2	175	0	0	0	0	0	0	175	0	3	0	1364
<b>PEAK HR FACTOR :</b>	0.000	0.953	0.897	0.000	0.250	0.911	0.000	0.000	0.000	0.000	0.000	0.000	0.911	0.000	0.250	0.000	0.958
	0.945																0.922
	0.873																

National Data & Surveying Services

# Intersection Turning Movement Count

Location: N San Fernando Blvd & Scott Rd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-001  
 Date: 4/25/2018

**Total**

NS/EW Streets:	N San Fernando Blvd				N San Fernando Blvd				Scott Rd				Scott Rd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	67	13	0	0	64	0	0	0	0	0	0	65	0	1	0	210
7:15 AM	0	77	19	0	0	67	0	0	0	0	0	0	75	0	1	0	239
7:30 AM	0	98	29	0	0	122	0	0	0	0	0	0	80	0	0	0	329
7:45 AM	0	146	42	0	0	108	0	0	0	0	0	0	85	0	0	0	381
8:00 AM	0	104	33	0	0	79	0	0	0	0	0	0	84	0	1	0	301
8:15 AM	0	79	20	0	0	83	0	0	0	0	0	0	88	0	1	0	271
8:30 AM	0	91	24	0	0	61	0	0	0	0	0	0	83	0	2	0	261
8:45 AM	0	64	16	0	0	68	0	0	0	0	0	0	61	0	3	0	212
9:00 AM	0	81	30	0	0	60	0	0	0	0	0	0	71	0	2	0	244
9:15 AM	0	80	20	0	0	39	0	0	0	0	0	0	67	0	0	0	206
9:30 AM	0	80	27	0	0	55	0	0	0	0	0	0	58	0	6	0	226
9:45 AM	0	70	23	0	0	51	0	0	0	0	0	0	46	0	2	0	192
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	1037	296	0	0	857	0	0	0	0	0	0	863	0	19	0	3072
	0.00%	77.79%	22.21%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	97.85%	0.00%	2.15%	0.00%	
<b>PEAK HR :</b>	<b>07:30 AM - 08:30 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	427	124	0	0	392	0	0	0	0	0	0	337	0	2	0	1282
<b>PEAK HR FACTOR :</b>	0.000	0.731	0.738	0.000	0.000	0.803	0.000	0.000	0.000	0.000	0.000	0.000	0.957	0.000	0.500	0.000	0.841
		0.733				0.803								0.952			
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:30 PM	0	174	59	0	2	46	0	0	0	0	0	0	42	0	3	0	326
4:45 PM	0	176	46	0	1	29	0	0	0	0	0	0	50	0	4	0	306
5:00 PM	0	188	75	0	0	52	0	0	0	0	0	0	43	0	2	0	360
5:15 PM	0	197	81	0	2	45	0	0	0	0	0	0	48	0	1	0	374
5:30 PM	0	201	75	0	1	52	0	0	0	0	0	0	41	0	1	0	371
5:45 PM	0	167	64	0	1	34	0	0	0	0	0	0	42	0	2	0	310
6:00 PM	0	181	91	0	1	50	0	0	0	0	0	0	41	0	2	0	366
6:15 PM	0	199	66	0	1	54	0	0	0	0	0	0	61	0	4	0	385
6:30 PM	0	171	59	0	1	24	0	0	0	0	0	0	41	0	4	0	300
6:45 PM	0	158	81	0	0	46	0	0	0	0	0	0	51	0	2	0	338
7:00 PM	0	162	75	0	1	33	0	0	0	0	0	0	30	0	1	0	302
7:15 PM	0	191	61	0	1	32	0	0	0	0	0	0	36	0	3	0	324
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	2165	833	0	12	497	0	0	0	0	0	0	526	0	29	0	4062
	0.00%	72.21%	27.79%	0.00%	2.36%	97.64%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	94.77%	0.00%	5.23%	0.00%	
<b>PEAK HR :</b>	<b>05:30 PM - 06:30 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	748	296	0	4	190	0	0	0	0	0	0	185	0	9	0	1432
<b>PEAK HR FACTOR :</b>	0.000	0.930	0.813	0.000	1.000	0.880	0.000	0.000	0.000	0.000	0.000	0.000	0.758	0.000	0.563	0.000	0.930
		0.946				0.882								0.746			

National Data & Surveying Services

# Intersection Turning Movement Count

Location: N San Fernando Blvd & Scott Rd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-001  
 Date: 4/26/2018

**Total**

NS/EW Streets:	N San Fernando Blvd				N San Fernando Blvd				Scott Rd				Scott Rd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	86	14	0	0	74	0	0	0	0	0	0	64	0	1	0	239
7:15 AM	0	74	22	0	0	63	0	0	0	0	0	0	72	0	1	0	232
7:30 AM	0	106	26	0	0	111	0	0	0	0	0	0	88	0	0	0	331
7:45 AM	0	155	34	0	0	116	0	0	0	0	0	0	74	0	2	0	381
8:00 AM	0	109	45	1	1	66	0	0	0	0	0	0	84	0	4	0	310
8:15 AM	0	94	22	0	1	67	0	0	0	0	0	0	79	0	3	0	266
8:30 AM	0	85	21	0	0	63	0	0	0	0	0	0	85	0	0	0	254
8:45 AM	0	63	22	0	0	60	0	1	0	0	0	0	85	0	1	0	232
9:00 AM	0	78	31	0	0	47	0	0	0	0	0	0	64	0	1	0	221
9:15 AM	0	84	23	0	1	48	0	0	0	0	0	0	76	0	2	0	234
9:30 AM	0	61	24	0	0	48	0	0	0	0	0	0	63	0	5	0	201
9:45 AM	0	62	21	0	1	47	0	0	0	0	0	0	43	0	6	0	180
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	1057	305	1	4	810	0	1	0	0	0	0	877	0	26	0	3081
	0.00%	77.55%	22.38%	0.07%	0.49%	99.39%	0.00%	0.12%	0.00%	0.00%	0.00%	0.00%	97.12%	0.00%	2.88%	0.00%	
<b>PEAK HR :</b>	<b>07:30 AM - 08:30 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	464	127	1	2	360	0	0	0	0	0	0	325	0	9	0	1288
<b>PEAK HR FACTOR :</b>	0.000	0.748	0.706	0.250	0.500	0.776	0.000	0.000	0.000	0.000	0.000	0.000	0.923	0.000	0.563	0.000	0.845
	0.783																0.780
	0.949																
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:30 PM	0	162	52	0	0	33	0	0	0	0	0	0	37	0	0	0	284
4:45 PM	0	157	60	0	1	48	0	0	0	0	0	0	33	0	2	0	301
5:00 PM	0	182	74	0	0	46	0	0	0	0	0	0	50	0	2	0	354
5:15 PM	0	203	54	0	2	45	0	0	0	0	0	0	44	0	1	0	349
5:30 PM	0	204	77	0	0	52	0	0	0	0	0	0	51	0	1	0	385
5:45 PM	0	169	74	0	0	48	0	0	0	0	0	0	43	0	1	0	335
6:00 PM	0	192	72	0	1	38	0	0	0	0	0	0	47	0	2	0	352
6:15 PM	0	164	76	0	1	45	0	0	0	0	0	0	52	0	3	0	341
6:30 PM	0	172	79	0	1	35	0	0	0	0	0	0	50	0	2	0	339
6:45 PM	0	160	71	0	2	43	0	0	0	0	0	0	45	0	1	0	322
7:00 PM	0	160	58	0	0	46	0	0	0	0	0	0	47	0	1	0	312
7:15 PM	0	193	78	0	0	34	0	0	0	0	0	0	34	0	0	0	339
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	2118	825	0	8	513	0	0	0	0	0	0	533	0	16	0	4013
	0.00%	71.97%	28.03%	0.00%	1.54%	98.46%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	97.09%	0.00%	2.91%	0.00%	
<b>PEAK HR :</b>	<b>05:00 PM - 06:00 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	758	279	0	2	191	0	0	0	0	0	0	188	0	5	0	1423
<b>PEAK HR FACTOR :</b>	0.000	0.929	0.906	0.000	0.250	0.918	0.000	0.000	0.000	0.000	0.000	0.000	0.922	0.000	0.625	0.000	0.924
	0.923																0.928
	0.928																



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: N San Fernando Blvd/ Scott Rd & Amherst Dr  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-101  
 Date: 4/25/2018

NS/EW Streets:		Total																				NORTHBOUND2						TOTAL
		N San Fernando Blvd/ Scott Rd					N San Fernando Blvd/ Scott Rd					Amherst Dr					Amherst Dr											
AM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND											TOTAL	
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2		
7:00 AM	6	57	5	0	0	5	118	3	0	0	0	2	4	0	0	10	1	30	0	0	0	0	0	2	1	2	246	
7:15 AM	8	66	6	0	0	8	139	1	0	0	4	3	3	0	1	10	2	29	0	0	0	0	0	2	0	0	282	
7:30 AM	7	75	13	0	0	8	178	3	0	3	2	6	5	0	2	24	2	38	0	4	0	0	0	5	1	0	376	
7:45 AM	7	141	25	1	1	3	191	2	0	3	3	1	8	0	2	15	1	54	0	0	0	0	1	1	1	3	464	
8:00 AM	6	88	7	0	1	7	154	1	0	1	1	3	6	0	2	17	3	28	0	0	0	0	0	6	1	3	335	
8:15 AM	5	69	11	1	1	3	160	3	0	3	1	1	2	0	4	18	0	24	0	0	0	0	0	6	0	1	313	
8:30 AM	9	87	7	2	0	1	138	2	0	2	0	0	3	0	3	19	0	24	0	0	0	0	0	6	1	3	307	
8:45 AM	3	62	13	0	1	3	124	0	0	0	1	0	5	0	1	22	0	9	0	0	0	0	0	4	0	2	250	
9:00 AM	3	76	7	0	2	2	128	3	0	2	0	0	3	0	2	20	2	23	0	0	0	0	1	4	2	2	282	
9:15 AM	3	82	14	1	0	2	101	1	0	1	1	2	4	0	1	24	1	15	0	1	0	0	0	2	2	3	261	
9:30 AM	3	90	4	0	2	0	113	2	0	5	0	0	3	0	1	15	0	22	0	1	0	0	0	4	3	3	271	
9:45 AM	6	88	6	0	1	1	97	0	0	2	0	0	2	1	0	13	0	16	0	0	0	0	0	2	1	2	231	
TOTAL VOLUMES:	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL	
APPROACH %'s:	66	973	118	5	9	43	1641	21	0	22	13	20	47	0	20	207	12	312	0	6	0	0	2	44	13	24	3618	
PEAK HR:	07:30 AM - 08:30 AM																										TOTAL	
PEAK HR VOL:	25	373	56	2	3	21	683	9	0	10	7	11	21	0	10	74	6	144	0	4	0	0	1	18	3	7	1488	
PEAK HR FACTOR:	0.893	0.661	0.560	0.500	0.750	0.656	0.894	0.750	0.000	0.833	0.583	0.458	0.656	0.000	0.625	0.771	0.500	0.667	0.000	0.250	0.000	0.000	0.250	0.750	0.750	0.583	0.802	

PM		NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					NORTHBOUND2						TOTAL
		NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	
4:30 PM	7	190	14	0	0	0	79	4	0	2	4	0	8	0	0	21	0	32	0	1	0	0	1	8	3	4	378	
4:45 PM	7	203	19	0	0	6	74	1	0	1	4	2	11	0	2	9	2	24	0	1	0	0	0	10	4	3	383	
5:00 PM	5	209	10	1	1	3	93	0	0	1	1	2	8	0	3	11	4	38	0	0	0	0	0	13	1	7	411	
5:15 PM	5	234	14	0	1	1	79	0	0	1	1	3	2	0	1	11	0	35	0	0	0	0	0	10	2	2	402	
5:30 PM	3	217	21	0	1	1	89	1	0	2	1	1	4	0	3	22	3	34	0	1	0	0	0	7	0	0	411	
5:45 PM	9	207	20	0	1	5	72	2	0	1	1	1	3	0	1	17	2	30	0	1	0	0	0	7	1	4	385	
6:00 PM	4	203	19	0	0	3	89	1	0	1	5	0	3	0	2	21	4	36	0	1	0	0	2	9	0	2	405	
6:15 PM	7	222	13	0	0	3	104	0	0	0	1	1	1	1	0	12	0	29	0	0	0	0	0	11	2	3	410	
6:30 PM	9	211	18	0	0	3	65	1	0	0	0	2	1	0	2	13	0	32	0	0	0	0	0	6	2	4	369	
6:45 PM	8	204	13	0	0	1	90	1	0	0	0	1	0	0	2	10	0	34	0	0	0	0	0	13	3	5	385	
7:00 PM	7	184	15	0	1	2	64	0	0	0	0	0	7	0	0	20	2	26	0	0	0	0	0	6	1	1	336	
7:15 PM	5	204	13	0	1	3	62	2	0	0	2	0	3	0	0	13	1	31	0	0	0	0	1	7	0	3	351	
TOTAL VOLUMES:	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL	
APPROACH %'s:	76	2488	189	1	6	31	960	13	0	9	20	13	51	1	16	180	18	381	0	5	0	0	4	107	19	38	4626	
PEAK HR:	05:30 PM - 06:30 PM																										TOTAL	
PEAK HR VOL:	23	849	73	0	2	12	354	4	0	4	8	3	11	1	6	72	9	129	0	3	0	0	2	34	3	9	1611	
PEAK HR FACTOR:	0.639	0.956	0.869	0.000	0.500	0.600	0.851	0.500	0.000	0.500	0.400	0.750	0.688	0.250	0.500	0.818	0.563	0.896	0.000	0.750	0.000	0.000	0.250	0.773	0.375	0.563	0.980	



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: N San Fernando Blvd / Scott Rd & Amherst Dr  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-101  
 Date: 4/26/2018

NS/EW Streets:	Total																														
	N San Fernando Blvd / Scott Rd					N San Fernando Blvd / Scott Rd					Amherst Dr				Amherst Dr				NORTHBOUND2					TOTAL							
	NORTHBOUND		SOUTHBOUND			EASTBOUND		WESTBOUND		NORTHBOUND		WESTBOUND		NORTHBOUND		WESTBOUND		NORTHBOUND		WESTBOUND											
0	1	0	0	0	1	1	0	0	0	1	1.5	0.5	0	0	1	2.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>AM</b>	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL				
7:00 AM	6	72	4	0	0	3	135	2	0	0	1	1	5	0	0	8	0	29	0	0	0	0	2	1	1	1	270				
7:15 AM	6	59	6	0	0	3	129	2	0	0	3	2	3	0	1	8	0	34	0	0	0	0	2	0	0	0	258				
7:30 AM	5	85	14	0	0	11	180	2	0	2	5	6	4	0	2	20	6	42	0	4	0	0	1	1	0	0	390				
7:45 AM	12	130	14	0	1	7	181	0	0	1	3	2	4	0	2	21	3	59	0	0	0	1	1	1	1	4	447				
8:00 AM	14	119	8	0	1	2	150	1	0	1	4	4	2	0	2	10	2	34	0	0	0	0	3	1	2	2	360				
8:15 AM	5	64	9	0	1	3	141	4	0	3	5	2	3	0	4	14	2	34	0	0	0	0	2	0	1	1	297				
8:30 AM	10	72	5	0	0	2	147	1	0	2	5	0	4	0	3	16	2	29	0	0	0	0	2	1	1	1	302				
8:45 AM	7	70	12	0	1	4	139	4	0	0	4	2	5	0	1	13	2	11	0	0	0	0	1	0	4	4	280				
9:00 AM	8	89	6	0	2	0	107	0	0	2	6	1	5	0	2	20	2	14	0	0	0	1	1	2	2	2	270				
9:15 AM	3	89	12	0	0	2	122	3	0	1	1	0	7	0	1	18	0	18	0	1	0	0	2	2	5	5	287				
9:30 AM	3	64	8	0	1	2	109	2	0	1	4	3	3	0	1	20	1	15	0	1	0	0	4	3	4	4	249				
9:45 AM	9	64	14	0	1	2	85	1	0	2	5	1	1	0	1	16	0	14	0	0	0	0	2	1	1	1	220				
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL				
<b>APPROACH %'s:</b>	88	977	112	0	8	41	1625	22	0	15	46	24	46	0	20	194	20	333	0	6	0	0	2	23	13	25	3630				
<b>PEAK HR:</b>	07:30 AM - 08:30 AM																														
<b>PEAK HR VOL:</b>	36	398	45	0	3	23	652	7	0	7	17	14	13	0	10	65	13	169	0	4	0	0	1	7	3	7	1494				
<b>PEAK HR FACTOR:</b>	0.643	0.765	0.804	0.000	0.750	0.523	0.901	0.438	0.000	0.583	0.850	0.583	0.813	0.000	0.625	0.774	0.542	0.716	0.000	0.250	0.000	0.000	0.250	0.583	0.750	0.438	0.836				

NS/EW Streets:	Total																														
	NORTHBOUND					SOUTHBOUND					EASTBOUND				WESTBOUND				NORTHBOUND2					TOTAL							
	0	1	0	0	0	1	1	0	0	0	1	1.5	0.5	0	0	1	2.5	0.5	0	0	0	0	0		0	0	0	0	0	0	0
<b>PM</b>	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL				
4:30 PM	7	146	21	0	0	1	58	6	0	3	15	1	3	0	3	25	4	33	0	1	0	0	3	1	3	3	334				
4:45 PM	6	187	15	0	1	6	79	1	0	1	5	1	6	0	1	12	0	25	0	1	0	0	6	3	3	3	362				
5:00 PM	8	214	11	0	1	1	84	2	0	2	16	10	5	0	3	16	5	31	0	1	0	1	10	4	3	3	428				
5:15 PM	5	187	19	0	1	6	87	1	0	2	11	1	2	0	1	16	2	51	0	1	0	0	14	2	5	5	414				
5:30 PM	9	232	23	0	0	1	106	1	0	1	5	2	3	0	1	9	0	43	0	1	0	0	11	1	1	1	450				
5:45 PM	2	201	13	0	0	2	94	1	0	1	10	2	8	0	2	9	0	31	0	0	0	0	6	0	1	1	383				
6:00 PM	8	214	13	0	1	4	79	0	0	1	8	1	6	0	3	20	2	42	0	1	0	2	7	1	4	4	417				
6:15 PM	5	179	15	0	0	3	85	0	0	1	12	5	1	0	2	17	1	27	0	1	0	1	5	2	3	3	365				
6:30 PM	5	203	6	0	2	3	82	1	0	0	7	2	1	0	4	14	0	42	0	0	0	2	8	0	0	0	382				
6:45 PM	7	185	15	0	0	2	86	1	0	0	8	1	2	0	3	10	3	24	0	0	0	2	4	0	2	2	355				
7:00 PM	8	180	13	0	0	2	89	0	0	0	6	2	5	0	2	11	2	30	0	0	0	0	2	2	2	2	354				
7:15 PM	7	229	16	0	0	2	68	1	0	2	8	5	2	0	1	12	1	38	0	1	1	1	1	1	1	2	399				
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL				
<b>APPROACH %'s:</b>	77	2357	180	0	6	33	997	15	0	14	111	33	44	0	26	171	20	417	0	8	0	1	12	77	17	27	4643				
<b>PEAK HR:</b>	05:00 PM - 06:00 PM																														
<b>PEAK HR VOL:</b>	24	834	66	0	2	10	371	5	0	6	42	15	18	0	7	50	7	156	0	3	0	0	1	41	7	10	1675				
<b>PEAK HR FACTOR:</b>	0.667	0.899	0.717	0.000	0.500	0.417	0.875	0.625	0.000	0.750	0.656	0.375	0.560	0.000	0.583	0.781	0.350	0.765	0.000	0.750	0.000	0.000	0.250	0.732	0.438	0.500	0.931				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: Glenoaks Blvd & Delaware Rd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-003  
 Date: 4/24/2018

**Total**

NS/EW Streets:	Glenoaks Blvd				Glenoaks Blvd				Delaware Rd				Delaware Rd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	30	76	0	0	0	183	25	0	7	10	32	0	2	8	0	0	373
7:15 AM	10	106	1	0	0	246	25	0	7	4	14	0	5	16	0	0	434
7:30 AM	18	117	2	0	2	283	18	0	13	16	34	0	9	24	0	0	536
7:45 AM	25	162	1	0	0	245	20	0	27	13	25	0	4	27	2	0	551
8:00 AM	18	112	1	0	0	227	23	0	10	12	14	0	2	10	1	0	430
8:15 AM	22	129	0	0	1	302	17	0	9	3	19	0	1	13	1	0	517
8:30 AM	25	99	1	0	1	290	29	0	15	7	17	0	1	7	1	0	493
8:45 AM	24	123	2	0	0	275	23	0	8	4	15	0	1	5	2	0	482
9:00 AM	29	105	1	0	1	209	33	0	10	5	13	0	4	10	0	0	420
9:15 AM	24	108	2	0	0	225	22	0	13	10	16	0	1	12	1	0	434
9:30 AM	37	118	1	0	0	157	17	0	10	9	17	0	0	9	0	0	375
9:45 AM	27	104	0	0	0	196	26	0	11	7	20	0	0	8	0	0	399
<b>TOTAL VOLUMES :</b>	NL 289	NT 1359	NR 12	NU 0	SL 5	ST 2838	SR 278	SU 0	EL 140	ET 100	ER 236	EU 0	WL 30	WT 149	WR 8	WU 0	<b>TOTAL</b> 5444
<b>APPROACH %'s :</b>	17.41%	81.87%	0.72%	0.00%	0.16%	90.93%	8.91%	0.00%	29.41%	21.01%	49.58%	0.00%	16.04%	79.68%	4.28%	0.00%	
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	83	520	4	0	3	1057	78	0	59	44	92	0	16	74	4	0	<b>TOTAL</b> 2034
<b>PEAK HR FACTOR :</b>	0.830	0.802	0.500	0.000	0.375	0.875	0.848	0.000	0.546	0.688	0.676	0.000	0.444	0.685	0.500	0.000	0.923
	0.807				0.889				0.750				0.712				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
4:30 PM	35	199	1	0	0	209	22	0	37	10	36	0	2	5	1	0	557
4:45 PM	36	224	1	0	0	194	27	0	38	29	24	0	2	8	1	0	584
5:00 PM	46	231	1	0	2	212	35	0	37	16	27	0	4	11	0	0	622
5:15 PM	48	241	2	0	1	226	25	0	32	20	31	1	1	8	0	0	636
5:30 PM	48	250	2	0	3	214	40	0	34	14	28	0	2	11	0	0	646
5:45 PM	29	224	1	0	3	226	31	0	35	19	41	0	1	5	1	0	616
6:00 PM	41	240	1	0	1	228	24	0	37	20	37	0	2	11	1	0	643
6:15 PM	28	211	1	0	2	193	31	0	31	19	36	0	4	11	0	0	567
6:30 PM	44	197	1	0	0	177	24	0	28	21	35	0	3	10	1	0	541
6:45 PM	43	176	2	0	1	198	29	0	21	12	41	0	1	6	0	0	530
7:00 PM	32	190	3	0	0	175	26	0	39	24	29	0	0	11	0	0	529
7:15 PM	35	155	1	0	1	144	24	0	39	12	28	0	4	7	2	0	452
<b>TOTAL VOLUMES :</b>	NL 465	NT 2538	NR 17	NU 0	SL 14	ST 2396	SR 338	SU 0	EL 408	ET 216	ER 393	EU 1	WL 26	WT 104	WR 7	WU 0	<b>TOTAL</b> 6923
<b>APPROACH %'s :</b>	15.40%	84.04%	0.56%	0.00%	0.51%	87.19%	12.30%	0.00%	40.08%	21.22%	38.61%	0.10%	18.98%	75.91%	5.11%	0.00%	
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	166	955	6	0	8	894	120	0	138	73	137	1	6	35	2	0	<b>TOTAL</b> 2541
<b>PEAK HR FACTOR :</b>	0.865	0.955	0.750	0.000	0.667	0.980	0.750	0.000	0.932	0.913	0.835	0.250	0.750	0.795	0.500	0.000	0.983
	0.939				0.983				0.918				0.768				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: Glenoaks Blvd & Delaware Rd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-003  
 Date: 4/25/2018

**Total**

NS/EW Streets:	Glenoaks Blvd				Glenoaks Blvd				Delaware Rd				Delaware Rd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	20	100	0	0	2	222	28	0	10	6	23	0	3	11	1	0	426
7:15 AM	17	101	0	0	0	301	22	0	12	6	22	0	2	14	1	0	498
7:30 AM	28	158	4	0	3	328	28	0	15	28	32	0	9	29	1	0	663
7:45 AM	34	218	3	0	2	366	29	0	23	21	44	0	10	40	1	0	791
8:00 AM	23	149	1	0	1	297	20	0	15	9	20	0	0	9	0	0	544
8:15 AM	25	152	0	0	1	345	23	0	10	5	14	0	5	13	2	0	595
8:30 AM	23	139	1	0	1	334	29	1	10	8	10	0	7	12	0	0	575
8:45 AM	26	119	2	0	3	350	34	0	10	7	15	0	1	14	0	0	581
9:00 AM	39	110	2	0	0	293	30	0	14	6	17	0	5	11	0	0	527
9:15 AM	27	109	1	0	0	302	29	0	10	4	12	0	2	11	2	0	509
9:30 AM	29	111	0	0	0	241	17	0	16	7	14	0	4	11	1	0	451
9:45 AM	21	114	3	0	0	243	20	0	10	3	13	0	2	16	0	0	445
<b>TOTAL VOLUMES :</b>	NL 312	NT 1580	NR 17	NU 0	SL 13	ST 3622	SR 309	SU 1	EL 155	ET 110	ER 236	EU 0	WL 50	WT 191	WR 9	WU 0	<b>TOTAL</b> 6605
<b>APPROACH %'s :</b>	16.34%	82.77%	0.89%	0.00%	0.33%	91.81%	7.83%	0.03%	30.94%	21.96%	47.11%	0.00%	20.00%	76.40%	3.60%	0.00%	
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	110	677	8	0	7	1336	100	0	63	63	110	0	24	91	4	0	<b>TOTAL</b> 2593
<b>PEAK HR FACTOR :</b>	0.809	0.776	0.500	0.000	0.583	0.913	0.862	0.000	0.685	0.563	0.625	0.000	0.600	0.569	0.500	0.000	0.820
	0.779				0.909				0.670				0.583				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
4:30 PM	37	230	1	0	2	191	30	0	31	10	33	0	1	11	3	0	580
4:45 PM	30	260	3	0	2	243	25	0	30	20	25	0	5	12	0	0	655
5:00 PM	32	254	0	0	2	235	27	0	40	17	49	0	0	7	0	0	663
5:15 PM	45	257	2	0	2	258	26	0	28	14	42	0	3	11	1	0	689
5:30 PM	24	261	0	0	2	235	36	0	67	15	53	0	5	7	0	0	705
5:45 PM	32	256	3	0	3	222	24	0	48	15	39	0	1	12	2	0	657
6:00 PM	39	278	6	0	1	246	36	0	38	19	34	0	6	9	0	0	712
6:15 PM	41	221	1	0	3	198	34	0	31	25	39	0	2	7	0	0	602
6:30 PM	35	258	1	0	0	206	22	0	42	18	42	0	1	9	2	0	636
6:45 PM	28	206	4	0	2	202	23	0	36	13	38	0	2	6	0	0	560
7:00 PM	41	203	1	1	1	166	33	0	46	16	24	0	0	7	0	0	539
7:15 PM	32	167	1	0	2	167	27	1	41	11	15	0	5	7	0	0	476
<b>TOTAL VOLUMES :</b>	NL 416	NT 2851	NR 23	NU 1	SL 22	ST 2569	SR 343	SU 1	EL 478	ET 193	ER 433	EU 0	WL 31	WT 105	WR 8	WU 0	<b>TOTAL</b> 7474
<b>APPROACH %'s :</b>	12.64%	86.63%	0.70%	0.03%	0.75%	87.53%	11.69%	0.03%	43.30%	17.48%	39.22%	0.00%	21.53%	72.92%	5.56%	0.00%	
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	140	1052	11	0	8	961	122	0	181	63	168	0	15	39	3	0	<b>TOTAL</b> 2763
<b>PEAK HR FACTOR :</b>	0.778	0.946	0.458	0.000	0.667	0.931	0.847	0.000	0.675	0.829	0.792	0.000	0.625	0.813	0.375	0.000	0.970
	0.931				0.954				0.763				0.950				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: Glenoaks Blvd & Delaware Rd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-003  
 Date: 4/26/2018

**Total**

NS/EW Streets:	Glenoaks Blvd				Glenoaks Blvd				Delaware Rd				Delaware Rd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	20	76	0	0	1	229	31	0	24	12	29	0	3	9	0	0	434
7:15 AM	11	120	0	0	1	287	27	0	16	8	24	0	1	13	0	0	508
7:30 AM	25	158	1	0	6	362	36	0	24	33	42	0	6	26	2	0	721
7:45 AM	24	228	5	0	4	341	33	0	38	25	52	0	13	33	4	0	800
8:00 AM	26	134	3	0	1	346	35	0	25	13	11	0	2	10	1	0	607
8:15 AM	35	155	0	0	1	343	37	0	18	8	17	0	5	8	1	0	628
8:30 AM	23	127	0	0	0	374	48	0	20	8	14	0	3	5	0	0	622
8:45 AM	32	110	2	0	0	325	33	0	13	5	27	0	3	11	0	0	561
9:00 AM	34	126	6	0	2	238	39	0	23	9	13	0	3	9	0	0	502
9:15 AM	24	127	0	0	0	241	40	0	24	7	11	0	2	11	1	0	488
9:30 AM	19	121	1	0	0	226	35	0	14	4	15	0	2	11	0	0	448
9:45 AM	36	110	0	0	1	253	48	0	28	5	26	0	3	13	0	0	523
<b>TOTAL VOLUMES :</b>	NL 309	NT 1592	NR 18	NU 0	SL 17	ST 3565	SR 442	SU 0	EL 267	ET 137	ER 281	EU 0	WL 46	WT 159	WR 9	WU 0	<b>TOTAL</b> 6842
<b>APPROACH %'s :</b>	16.10%	82.96%	0.94%	0.00%	0.42%	88.59%	10.98%	0.00%	38.98%	20.00%	41.02%	0.00%	21.50%	74.30%	4.21%	0.00%	
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	110	675	9	0	12	1392	141	0	105	79	122	0	26	77	8	0	<b>TOTAL</b> 2756
<b>PEAK HR FACTOR :</b>	0.786	0.740	0.450	0.000	0.500	0.961	0.953	0.000	0.691	0.598	0.587	0.000	0.500	0.583	0.500	0.000	<b>TOTAL</b> 0.861
	0.772				0.956				0.665				0.555				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
4:30 PM	35	255	3	0	3	204	17	0	42	11	30	0	0	11	4	0	615
4:45 PM	32	250	0	0	1	199	34	0	44	22	31	0	4	11	0	0	628
5:00 PM	35	258	3	0	3	247	24	0	45	13	33	0	0	9	0	0	670
5:15 PM	34	289	1	1	3	252	32	0	35	15	37	0	3	10	0	0	712
5:30 PM	39	307	4	0	1	249	36	0	52	15	35	0	2	10	0	0	750
5:45 PM	43	277	1	0	1	251	22	0	50	20	42	0	2	8	1	0	718
6:00 PM	34	257	4	0	1	252	39	0	50	18	49	0	2	18	1	0	725
6:15 PM	39	259	2	0	2	266	24	0	40	12	31	0	5	13	1	0	694
6:30 PM	28	229	4	0	0	216	43	0	39	19	31	0	2	10	0	0	621
6:45 PM	39	216	5	0	0	185	24	0	32	14	26	0	4	4	0	0	549
7:00 PM	30	211	5	0	1	169	21	0	40	13	29	0	2	9	2	0	532
7:15 PM	31	218	2	0	2	170	34	0	50	16	28	0	1	10	0	0	562
<b>TOTAL VOLUMES :</b>	NL 419	NT 3026	NR 34	NU 1	SL 18	ST 2660	SR 350	SU 0	EL 519	ET 188	ER 402	EU 0	WL 27	WT 123	WR 350	WU 0	<b>TOTAL</b> 7776
<b>APPROACH %'s :</b>	12.04%	86.95%	0.98%	0.03%	0.59%	87.85%	11.56%	0.00%	46.80%	16.95%	36.25%	0.00%	16.98%	77.36%	5.66%	0.00%	
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	150	1130	10	1	6	1004	129	0	187	68	163	0	9	46	2	0	<b>TOTAL</b> 2905
<b>PEAK HR FACTOR :</b>	0.872	0.920	0.625	0.250	0.500	0.996	0.827	0.000	0.899	0.850	0.832	0.000	0.750	0.639	0.500	0.000	<b>TOTAL</b> 0.968
	0.922				0.975				0.893				0.679				

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** N 3rd St & Delaware Rd  
**City:** Burbank  
**Control:** 4-Way Stop

**Project ID:** 17-05689-004  
**Date:** 10/17/2017

### Total

NS/EW Streets:	N 3rd St				N 3rd St				Delaware Rd				Delaware Rd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	1	1	0	1	1	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	24	26	16	0	2	14	3	0	0	12	8	0	25	18	0	0	148
7:15 AM	12	10	15	0	2	29	2	0	0	22	4	0	23	28	1	0	148
7:30 AM	29	38	35	0	1	33	12	0	1	39	15	0	16	40	1	0	260
7:45 AM	45	51	64	0	1	61	5	0	2	37	18	0	20	46	2	0	352
8:00 AM	20	23	23	1	2	35	5	0	2	22	6	0	28	45	3	0	215
8:15 AM	9	11	8	0	5	29	2	0	0	19	7	0	36	44	1	0	171
8:30 AM	6	9	11	0	3	26	9	0	0	16	5	0	31	31	2	0	149
8:45 AM	4	11	5	0	0	29	1	0	1	17	4	0	22	43	4	0	141
9:00 AM	10	9	17	0	2	33	3	0	3	15	4	0	27	36	2	0	161
9:15 AM	14	17	12	0	0	18	4	0	0	28	10	0	28	27	0	0	158
9:30 AM	9	14	9	0	2	25	2	0	0	22	9	0	21	40	0	0	153
9:45 AM	8	14	10	0	1	20	5	0	1	17	7	0	24	39	1	0	147
<b>TOTAL VOLUMES :</b>	NL 190	NT 233	NR 225	NU 1	SL 21	ST 352	SR 53	SU 0	EL 10	ET 266	ER 97	EU 0	WL 301	WT 437	WR 17	WU 0	<b>TOTAL 2203</b>
<b>APPROACH %'s :</b>	29.28%	35.90%	34.67%	0.15%	4.93%	82.63%	12.44%	0.00%	2.68%	71.31%	26.01%	0.00%	39.87%	57.88%	2.25%	0.00%	
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																<b>TOTAL 998</b>
<b>PEAK HR VOL :</b>	103	123	130	1	9	158	24	0	5	117	46	0	100	175	7	0	
<b>PEAK HR FACTOR :</b>	0.572	0.603	0.508	0.250	0.450	0.648	0.500	0.000	0.625	0.750	0.639	0.000	0.694	0.951	0.583	0.000	<b>0.709</b>
			0.558			0.713				0.737				0.870			
PM	1	1	1	0	1	1	0	0	0	1	0	0	0	1	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:30 PM	33	45	55	0	5	29	9	0	4	44	9	0	23	47	2	0	305
4:45 PM	21	47	45	0	7	24	3	0	7	42	12	0	18	48	1	0	275
5:00 PM	28	49	46	0	3	25	7	0	3	43	21	0	16	54	2	0	297
5:15 PM	36	58	41	0	5	26	5	0	4	44	16	0	16	36	1	0	288
5:30 PM	41	46	43	0	3	36	12	0	1	42	13	0	19	42	6	0	304
5:45 PM	29	47	41	0	4	23	3	0	1	47	10	0	15	42	0	0	262
6:00 PM	37	65	63	0	5	41	6	0	6	42	18	0	30	48	1	0	362
6:15 PM	39	55	50	1	4	19	4	0	2	53	15	0	22	56	3	0	323
6:30 PM	38	42	50	0	7	23	4	0	2	48	18	0	19	46	3	0	304
6:45 PM	40	46	40	0	4	19	4	0	2	56	16	0	30	41	1	0	299
7:00 PM	34	46	37	0	8	27	3	0	7	44	9	0	27	47	2	0	291
7:15 PM	18	37	31	0	2	19	3	0	3	39	17	0	21	38	0	0	228
<b>TOTAL VOLUMES :</b>	NL 394	NT 583	NR 542	NU 1	SL 57	ST 311	SR 63	SU 0	EL 42	ET 544	ER 174	EU 0	WL 256	WT 545	WR 26	WU 0	<b>TOTAL 3538</b>
<b>APPROACH %'s :</b>	25.92%	38.36%	35.66%	0.07%	13.23%	72.16%	14.62%	0.00%	5.53%	71.58%	22.89%	0.00%	30.96%	65.90%	3.14%	0.00%	
<b>PEAK HR :</b>	06:00 PM - 07:00 PM																<b>TOTAL 1288</b>
<b>PEAK HR VOL :</b>	154	208	203	1	20	102	18	0	12	199	67	0	101	191	12	0	
<b>PEAK HR FACTOR :</b>	0.963	0.800	0.806	0.250	0.714	0.622	0.750	0.000	0.500	0.888	0.931	0.000	0.842	0.853	0.429	0.000	<b>0.890</b>
			0.858			0.673				0.939				0.938			

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** N 3rd St & Delaware Rd  
**City:** Burbank  
**Control:** 4-Way Stop

**Project ID:** 17-05689-004  
**Date:** 10/18/2017

### Total

NS/EW Streets:	N 3rd St				N 3rd St				Delaware Rd				Delaware Rd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	18	17	22	0	1	18	2	0	0	16	9	0	31	18	0	0	152
7:15 AM	9	10	18	0	0	15	8	0	0	20	7	0	28	26	0	0	141
7:30 AM	32	33	50	0	5	30	7	0	3	41	12	0	19	33	2	0	267
7:45 AM	46	50	73	0	6	60	15	0	4	36	35	0	31	47	3	0	406
8:00 AM	21	21	24	1	1	31	7	0	2	20	10	0	33	43	0	0	214
8:15 AM	17	7	6	0	2	17	1	0	1	15	8	0	24	43	0	0	141
8:30 AM	12	13	9	0	3	22	4	0	1	13	5	0	26	40	2	0	150
8:45 AM	10	8	11	0	0	30	6	0	0	20	6	0	18	23	3	0	135
9:00 AM	6	15	8	0	3	29	2	0	1	19	4	0	33	36	1	0	157
9:15 AM	9	18	9	0	2	26	4	0	0	19	6	0	26	43	0	0	162
9:30 AM	9	13	14	0	0	29	6	0	0	19	10	0	19	45	1	0	165
9:45 AM	19	7	17	0	2	21	4	0	0	17	9	0	21	34	0	0	151
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	30.50%	31.09%	38.27%	0.15%	5.97%	78.28%	15.75%	0.00%	3.09%	65.72%	31.19%	0.00%	41.09%	57.31%	1.60%	0.00%	2241
<b>PEAK HR :</b>	<b>07:15 AM - 08:15 AM</b>																TOTAL
<b>PEAK HR VOL :</b>	108	114	165	1	12	136	37	0	9	117	64	0	111	149	5	0	1028
<b>PEAK HR FACTOR :</b>	0.587	0.570	0.565	0.250	0.500	0.567	0.617	0.000	0.563	0.713	0.457	0.000	0.841	0.793	0.417	0.000	0.633
	0.574				0.571				0.633				0.818				
PM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
4:30 PM	40	46	49	0	7	32	3	0	3	49	9	0	25	42	2	0	307
4:45 PM	28	40	53	0	8	28	4	0	11	47	11	0	22	40	0	0	292
5:00 PM	39	48	40	1	9	17	7	0	11	53	16	0	21	45	3	0	310
5:15 PM	40	59	44	0	15	22	9	0	3	54	7	0	22	34	3	0	312
5:30 PM	30	46	39	1	4	20	9	0	5	49	14	0	16	41	2	0	276
5:45 PM	31	53	41	0	3	23	1	0	6	48	11	0	20	56	4	0	297
6:00 PM	45	42	54	0	2	25	6	1	6	43	18	0	23	54	2	0	321
6:15 PM	30	50	42	0	7	23	10	0	2	45	12	0	22	54	2	0	299
6:30 PM	33	46	35	0	4	27	5	0	4	53	11	0	27	43	1	0	289
6:45 PM	23	50	45	0	3	17	7	0	2	32	12	0	20	46	3	0	260
7:00 PM	31	31	22	0	4	23	8	0	8	43	12	0	13	57	4	0	256
7:15 PM	32	35	40	1	8	16	5	0	7	38	10	0	17	53	2	0	264
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	27.63%	37.53%	34.64%	0.21%	17.54%	64.69%	17.54%	0.24%	8.89%	72.42%	18.69%	0.00%	29.49%	67.18%	3.33%	0.00%	3483
<b>PEAK HR :</b>	<b>04:30 PM - 05:30 PM</b>																TOTAL
<b>PEAK HR VOL :</b>	147	193	186	1	39	99	23	0	28	203	43	0	90	161	8	0	1221
<b>PEAK HR FACTOR :</b>	0.919	0.818	0.877	0.250	0.650	0.773	0.639	0.000	0.636	0.940	0.672	0.000	0.900	0.894	0.667	0.000	0.978
	0.921				0.875				0.856				0.938				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: N San Fernando Blvd & Delaware Rd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-002  
 Date: 4/24/2018

**Total**

NS/EW Streets:	N San Fernando Blvd				N San Fernando Blvd				Delaware Rd				Delaware Rd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	3	58	27	0	7	162	3	0	2	3	4	0	14	1	7	0	291
7:15 AM	7	84	41	0	13	197	3	0	7	6	6	0	34	4	23	0	425
7:30 AM	4	121	29	0	11	173	5	0	1	0	2	0	37	10	16	0	409
7:45 AM	2	91	15	0	8	162	8	0	6	5	6	0	17	7	8	0	335
8:00 AM	1	101	18	0	8	153	7	1	4	5	3	0	22	7	14	0	344
8:15 AM	2	95	21	0	6	138	3	0	6	9	5	0	24	9	11	0	329
8:30 AM	3	94	15	0	8	156	8	0	3	7	5	0	17	7	12	0	335
8:45 AM	6	97	14	0	7	135	6	0	5	9	7	0	24	17	5	0	332
9:00 AM	3	123	17	0	6	142	7	0	7	12	3	0	21	10	7	0	358
9:15 AM	5	93	14	0	5	100	8	0	4	12	7	0	20	15	12	0	295
9:30 AM	7	123	20	2	4	115	4	0	6	14	8	0	30	10	14	0	357
9:45 AM	8	119	29	0	7	125	6	0	6	14	9	0	20	13	15	0	371
<b>TOTAL VOLUMES :</b>	51	1199	260	2	90	1758	68	1	57	96	65	0	280	110	144	0	4181
<b>APPROACH %'s :</b>	3.37%	79.30%	17.20%	0.13%	4.69%	91.71%	3.55%	0.05%	26.15%	44.04%	29.82%	0.00%	52.43%	20.60%	26.97%	0.00%	
<b>PEAK HR :</b>	<b>07:15 AM - 08:15 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	14	397	103	0	40	685	23	1	18	16	17	0	110	28	61	0	1513
<b>PEAK HR FACTOR :</b>	0.500	0.820	0.628	0.000	0.769	0.869	0.719	0.250	0.643	0.667	0.708	0.000	0.743	0.700	0.663	0.000	0.890
	0.834				0.879				0.671				0.790				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
4:30 PM	6	234	30	0	12	111	7	0	21	16	7	0	22	16	29	0	511
4:45 PM	11	228	37	0	9	92	10	0	20	13	4	0	37	17	32	0	510
5:00 PM	10	227	38	1	10	108	10	0	14	12	9	0	19	28	23	0	509
5:15 PM	17	212	23	0	12	80	12	1	20	14	6	0	38	17	33	0	485
5:30 PM	8	222	46	0	10	108	4	0	17	18	1	0	22	15	24	0	495
5:45 PM	10	244	37	0	10	97	5	0	19	16	5	0	27	19	25	0	514
6:00 PM	12	214	40	0	18	75	11	0	11	16	4	0	22	15	16	0	454
6:15 PM	11	191	25	0	7	93	8	0	16	15	1	0	21	27	24	0	439
6:30 PM	12	226	20	2	9	88	10	0	18	22	9	0	22	18	12	0	468
6:45 PM	14	185	30	0	10	93	12	0	20	14	6	0	19	9	23	0	435
7:00 PM	10	221	39	0	3	93	9	0	13	18	8	0	22	13	19	0	468
7:15 PM	11	186	27	1	3	71	15	0	17	11	6	0	28	20	21	0	417
<b>TOTAL VOLUMES :</b>	132	2590	392	4	113	1109	113	1	206	185	66	0	299	214	281	0	5705
<b>APPROACH %'s :</b>	4.23%	83.07%	12.57%	0.13%	8.46%	83.01%	8.46%	0.07%	45.08%	40.48%	14.44%	0.00%	37.66%	26.95%	35.39%	0.00%	
<b>PEAK HR :</b>	<b>04:30 PM - 05:30 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	44	901	128	1	43	391	39	1	75	55	26	0	116	78	117	0	2015
<b>PEAK HR FACTOR :</b>	0.647	0.963	0.842	0.250	0.896	0.881	0.813	0.250	0.893	0.859	0.722	0.000	0.763	0.696	0.886	0.000	0.986
	0.973				0.912				0.886				0.884				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: N San Fernando Blvd & Delaware Rd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-002  
 Date: 4/25/2018

**Total**

NS/EW Streets:	N San Fernando Blvd				N San Fernando Blvd				Delaware Rd				Delaware Rd				TOTAL	
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL	
7:00 AM	2	87	25	0	3	150	5	0	3	3	1	0	30	1	10	0	320	
7:15 AM	2	101	51	0	14	222	8	0	6	1	3	0	54	6	24	0	492	
7:30 AM	5	156	24	0	11	202	6	0	6	1	5	0	54	12	21	0	503	
7:45 AM	4	87	15	0	9	186	3	0	6	3	3	0	26	8	16	0	366	
8:00 AM	5	103	15	0	7	185	5	0	8	0	7	0	16	9	14	0	374	
8:15 AM	3	108	20	0	3	151	9	0	4	5	4	0	26	14	9	0	356	
8:30 AM	7	95	16	0	7	152	7	0	4	6	7	0	25	7	8	0	341	
8:45 AM	5	105	11	0	1	126	5	0	6	10	6	0	31	23	12	0	341	
9:00 AM	8	106	20	0	8	143	6	0	7	5	8	0	24	9	11	0	355	
9:15 AM	4	84	19	0	7	112	7	0	6	10	10	0	28	10	11	0	308	
9:30 AM	10	115	18	1	4	109	8	0	6	11	6	0	13	16	10	0	327	
9:45 AM	6	109	12	0	3	122	8	0	8	15	5	0	19	20	9	0	336	
<b>TOTAL VOLUMES :</b>	61	1256	246	1	77	1860	77	0	70	70	65	0	346	135	155	0	4419	
<b>APPROACH %'s :</b>	3.90%	80.31%	15.73%	0.06%	3.82%	92.35%	3.82%	0.00%	34.15%	34.15%	31.71%	0.00%	54.40%	21.23%	24.37%	0.00%		
<b>PEAK HR :</b>	07:15 AM - 08:15 AM																	<b>TOTAL</b>
<b>PEAK HR VOL :</b>	16	447	105	0	41	795	22	0	26	5	18	0	150	35	75	0	1735	
<b>PEAK HR FACTOR :</b>	0.800	0.716	0.515	0.000	0.732	0.895	0.688	0.000	0.813	0.417	0.643	0.000	0.694	0.729	0.781	0.000	0.862	
		0.768				0.879				0.817				0.747				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL	
4:30 PM	13	222	27	0	7	106	10	0	13	23	7	0	30	20	20	0	498	
4:45 PM	12	202	42	0	8	111	9	0	25	22	9	0	34	14	25	0	513	
5:00 PM	20	258	32	0	10	99	8	0	9	17	6	0	20	20	28	0	527	
5:15 PM	17	221	36	0	11	104	11	0	11	25	10	0	30	25	15	0	516	
5:30 PM	19	236	42	1	6	99	9	0	23	19	6	0	31	25	23	0	539	
5:45 PM	11	234	23	2	14	110	11	0	9	24	7	0	36	23	18	0	522	
6:00 PM	26	238	34	0	11	109	14	0	24	19	6	0	27	17	22	0	547	
6:15 PM	10	212	28	0	11	71	7	0	21	24	10	0	21	24	16	0	455	
6:30 PM	16	224	30	0	12	100	11	0	22	20	9	0	18	12	18	0	492	
6:45 PM	15	200	41	2	9	73	11	0	20	20	5	0	23	17	22	0	458	
7:00 PM	7	175	29	0	8	83	7	0	25	13	7	0	26	18	25	0	423	
7:15 PM	11	197	27	0	6	95	6	0	14	19	5	0	26	15	20	0	441	
<b>TOTAL VOLUMES :</b>	177	2619	391	5	113	1160	114	0	216	245	87	0	322	230	252	0	5931	
<b>APPROACH %'s :</b>	5.55%	82.05%	12.25%	0.16%	8.15%	83.63%	8.22%	0.00%	39.42%	44.71%	15.88%	0.00%	40.05%	28.61%	31.34%	0.00%		
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																	<b>TOTAL</b>
<b>PEAK HR VOL :</b>	73	929	135	3	42	422	45	0	67	87	29	0	124	90	78	0	2124	
<b>PEAK HR FACTOR :</b>	0.702	0.976	0.804	0.375	0.750	0.959	0.804	0.000	0.698	0.870	0.725	0.000	0.861	0.900	0.848	0.000	0.971	
		0.956				0.943				0.934				0.924				



National Data & Surveying Services

# Intersection Turning Movement Count

Location: N San Fernando Blvd & Delaware Rd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-002  
 Date: 4/26/2018

**Total**

NS/EW Streets:	N San Fernando Blvd				N San Fernando Blvd				Delaware Rd				Delaware Rd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	3	87	29	0	6	150	2	0	1	6	4	0	22	3	11	0	324
7:15 AM	4	120	46	0	12	203	4	0	2	6	3	0	38	2	20	0	460
7:30 AM	11	131	33	0	13	173	4	0	6	15	14	0	45	14	22	0	481
7:45 AM	10	114	20	0	4	180	8	0	7	4	10	0	32	9	12	0	410
8:00 AM	6	121	19	0	7	160	8	0	3	7	0	0	24	7	6	0	368
8:15 AM	6	111	8	1	7	172	6	0	11	5	5	0	22	14	6	0	374
8:30 AM	2	95	19	0	7	141	4	0	1	12	2	0	22	7	12	0	324
8:45 AM	10	118	23	0	7	126	14	0	7	5	4	0	27	3	8	0	352
9:00 AM	5	98	17	0	6	140	3	0	3	6	4	0	19	8	4	0	313
9:15 AM	5	103	16	0	9	117	11	0	6	8	4	0	12	13	6	0	310
9:30 AM	4	85	24	0	6	107	8	0	10	4	4	0	24	9	9	0	294
9:45 AM	5	101	13	0	4	99	13	0	8	12	8	0	24	20	18	0	325
<b>TOTAL VOLUMES :</b>	71	1284	267	1	88	1768	85	0	65	90	62	0	311	109	134	0	4335
<b>APPROACH %'s :</b>	4.37%	79.11%	16.45%	0.06%	4.53%	91.09%	4.38%	0.00%	29.95%	41.47%	28.57%	0.00%	56.14%	19.68%	24.19%	0.00%	
<b>PEAK HR :</b>	07:15 AM - 08:15 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	31	486	118	0	36	716	24	0	18	32	27	0	139	32	60	0	1719
<b>PEAK HR FACTOR :</b>	0.705	0.927	0.641	0.000	0.692	0.882	0.750	0.000	0.643	0.533	0.482	0.000	0.772	0.571	0.682	0.000	0.893
	0.907				0.886				0.550				0.713				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
4:30 PM	14	210	32	0	17	107	5	0	12	11	7	0	23	11	22	0	471
4:45 PM	9	230	45	0	14	98	11	0	15	14	4	0	27	22	34	0	523
5:00 PM	11	235	30	0	11	93	6	0	11	17	9	0	17	9	21	0	470
5:15 PM	14	238	41	0	15	105	13	0	19	10	7	0	26	24	17	0	529
5:30 PM	7	257	38	0	11	81	11	0	19	19	2	0	21	20	21	0	507
5:45 PM	10	238	46	1	8	102	6	0	23	18	9	0	36	18	23	1	539
6:00 PM	20	190	26	0	11	94	9	0	15	16	8	0	22	15	29	0	455
6:15 PM	9	244	41	0	17	91	10	0	16	18	4	0	45	13	23	0	531
6:30 PM	14	198	31	2	9	93	9	0	20	17	7	0	38	19	26	0	483
6:45 PM	8	194	35	1	9	105	19	0	23	13	4	0	23	14	22	0	470
7:00 PM	7	208	37	2	13	79	4	0	19	26	4	0	27	14	26	0	466
7:15 PM	6	192	24	0	11	96	10	0	10	6	10	0	33	14	23	0	435
<b>TOTAL VOLUMES :</b>	129	2634	426	6	146	1144	113	0	202	185	75	0	338	193	287	1	5879
<b>APPROACH %'s :</b>	4.04%	82.44%	13.33%	0.19%	10.41%	81.54%	8.05%	0.00%	43.72%	40.04%	16.23%	0.00%	41.27%	23.57%	35.04%	0.12%	
<b>PEAK HR :</b>	05:00 PM - 06:00 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	42	968	155	1	45	381	36	0	72	64	27	0	100	71	82	1	2045
<b>PEAK HR FACTOR :</b>	0.750	0.942	0.842	0.250	0.750	0.907	0.692	0.000	0.783	0.842	0.750	0.000	0.694	0.740	0.891	0.250	0.949
	0.965				0.868				0.815				0.814				





# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: 17-5030-029

Day: Thursday

City: Burbank

Date: 1/26/2017

		AM												
NS/EW Streets:		San Fernando Blvd			San Fernando Blvd			Burbank Blvd			Burbank Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		2	2	1	1	2	1	1	1	1	1	2	1	
7:00 AM		17	7	0	5	18	162	101	71	46	2	100	15	544
7:15 AM		10	4	2	4	28	141	104	71	40	5	66	11	486
7:30 AM		13	18	1	17	46	172	138	132	35	4	89	27	692
7:45 AM		21	42	2	29	65	196	157	169	68	21	152	38	960
8:00 AM		17	31	1	5	64	178	140	95	56	7	103	23	720
8:15 AM		12	32	3	20	50	166	120	108	53	7	74	9	654
8:30 AM		8	26	3	10	56	157	133	75	72	0	78	17	635
8:45 AM		16	27	2	10	52	152	134	84	68	5	62	10	622
9:00 AM		14	24	1	13	32	141	117	91	71	4	70	12	590
9:15 AM		22	32	2	10	31	128	101	72	70	4	78	14	564
9:30 AM		15	26	9	19	28	137	120	89	69	3	76	22	613
9:45 AM		21	25	4	15	31	147	140	97	86	3	84	12	665
<b>TOTAL VOLUMES :</b>		186	294	30	157	501	1877	1505	1154	734	65	1032	210	7745
<b>APPROACH %'s :</b>		36.47%	57.65%	5.88%	6.19%	19.76%	74.04%	44.36%	34.01%	21.63%	4.97%	78.96%	16.07%	
<b>PEAK HR START TIME :</b>		730 AM											<b>TOTAL</b>	
<b>PEAK HR VOL :</b>		63	123	7	71	225	712	555	504	212	39	418	97	3026
<b>PEAK HR FACTOR :</b>		0.742			0.869			0.806			0.656			0.788

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5030-029

Day: Thursday

City: Burbank

Date: 1/26/2017

		PM												
NS/EW Streets:		San Fernando Blvd			San Fernando Blvd			Burbank Blvd			Burbank Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		2	2	1	1	2	1	1	1	1	1	2	1	
4:30 PM		63	102	5	23	32	110	171	146	116	5	104	23	900
4:45 PM		52	91	4	19	44	115	167	112	123	5	96	20	848
5:00 PM		68	107	10	11	30	128	188	148	133	2	104	27	956
5:15 PM		62	75	6	24	43	109	188	150	137	4	98	22	918
5:30 PM		48	92	11	15	45	128	225	136	124	4	90	29	947
5:45 PM		84	99	5	25	30	114	172	164	137	4	100	12	946
6:00 PM		54	89	4	20	39	121	222	154	139	5	91	26	964
6:15 PM		69	89	4	20	32	112	196	120	151	4	106	40	943
6:30 PM		74	105	5	13	37	114	200	137	151	4	84	15	939
6:45 PM		67	109	3	13	37	127	196	132	160	2	97	17	960
7:00 PM		52	82	8	21	32	128	216	153	161	4	74	24	955
7:15 PM		55	85	5	17	35	92	136	101	134	3	85	18	766
<b>TOTAL VOLUMES :</b>		748	1125	70	221	436	1398	2277	1653	1666	46	1129	273	11042
<b>APPROACH %'s :</b>		38.50%	57.90%	3.60%	10.75%	21.22%	68.03%	40.69%	29.54%	29.77%	3.18%	77.97%	18.85%	
<b>PEAK HR START TIME :</b>		600 PM												
<b>PEAK HR VOL :</b>		264	392	16	66	145	474	814	543	601	15	378	98	3806
<b>PEAK HR FACTOR :</b>		0.913		0.951			0.950			0.818			0.987	

CONTROL : Signalized

National Data & Surveying Services

# Intersection Turning Movement Count

Location: I-5 Freeway NB Off Ramp & Burbank Blvd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-005  
 Date: 4/24/2018

**Total**

NS/EW Streets:	I-5 Freeway NB Off Ramp				I-5 Freeway NB Off Ramp				Burbank Blvd				Burbank Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	54	0	0	0	156	0	0	134	0	0	0	230	0	0	574
7:15 AM	0	0	53	0	0	0	158	0	0	154	0	0	0	241	0	0	606
7:30 AM	0	0	73	0	0	0	177	0	0	220	0	0	0	257	0	0	727
7:45 AM	0	0	90	0	0	0	216	0	0	263	0	0	0	283	0	0	852
8:00 AM	0	0	75	0	0	0	219	0	0	198	0	0	0	247	0	0	739
8:15 AM	0	0	70	0	0	0	237	0	0	222	0	0	0	237	0	0	766
8:30 AM	0	0	80	0	0	0	258	0	0	227	0	0	0	229	0	0	794
8:45 AM	0	0	77	0	0	0	259	0	0	235	0	0	0	222	0	0	793
9:00 AM	0	0	82	0	0	0	233	0	0	200	0	0	0	249	0	0	764
9:15 AM	0	0	92	0	0	0	222	0	0	201	0	0	0	244	0	0	759
9:30 AM	0	0	74	0	0	0	201	0	0	238	0	0	0	223	0	0	736
9:45 AM	0	0	101	0	0	0	214	0	0	248	0	0	0	216	0	0	779
<b>TOTAL VOLUMES :</b>	0	0	921	0	0	0	2550	0	0	2540	0	0	0	2878	0	0	8889
<b>APPROACH %'s :</b>	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
<b>PEAK HR :</b>	07:45 AM - 08:45 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	0	315	0	0	0	930	0	0	910	0	0	0	996	0	0	3151
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.875	0.000	0.000	0.000	0.901	0.000	0.000	0.865	0.000	0.000	0.000	0.880	0.000	0.000	0.925
<b>PM</b>	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				<b>TOTAL</b>
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:30 PM	0	0	113	0	0	0	164	0	0	333	0	0	0	256	0	0	866
4:45 PM	0	0	125	0	0	0	197	0	0	357	0	0	0	266	0	0	945
5:00 PM	0	0	129	0	0	0	169	0	0	378	0	0	0	306	0	0	982
5:15 PM	0	0	124	0	0	0	192	0	0	383	0	0	0	280	0	0	979
5:30 PM	0	0	142	0	0	0	186	0	0	365	0	0	0	301	0	0	994
5:45 PM	0	0	127	0	0	0	186	0	0	367	0	0	0	259	0	0	939
6:00 PM	0	0	148	0	0	0	189	0	0	369	0	0	0	288	0	0	994
6:15 PM	0	0	139	0	0	0	195	0	0	395	0	0	0	275	0	0	1004
6:30 PM	0	0	124	0	0	0	202	0	0	321	0	0	0	271	0	0	918
6:45 PM	0	0	149	0	0	0	153	0	0	376	0	0	0	274	0	0	952
7:00 PM	0	0	138	0	0	0	177	0	0	345	0	0	0	266	0	0	926
7:15 PM	0	0	124	0	0	0	143	0	0	328	0	0	0	293	0	0	888
<b>TOTAL VOLUMES :</b>	0	0	1582	0	0	0	2153	0	0	4317	0	0	0	3335	0	0	11387
<b>APPROACH %'s :</b>	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
<b>PEAK HR :</b>	05:30 PM - 06:30 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	0	556	0	0	0	756	0	0	1496	0	0	0	1123	0	0	3931
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.939	0.000	0.000	0.000	0.969	0.000	0.000	0.947	0.000	0.000	0.000	0.933	0.000	0.000	0.979

National Data & Surveying Services

# Intersection Turning Movement Count

Location: I-5 Freeway NB Off Ramp & Burbank Blvd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-005  
 Date: 4/25/2018

**Total**

NS/EW Streets:	I-5 Freeway NB Off Ramp				I-5 Freeway NB Off Ramp				Burbank Blvd				Burbank Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	48	0	0	0	156	0	0	147	0	0	0	241	0	0	592
7:15 AM	0	0	64	0	0	0	174	0	0	191	0	0	0	243	0	0	672
7:30 AM	0	0	79	0	0	0	213	0	0	274	0	0	0	293	0	0	859
7:45 AM	0	0	97	0	0	0	243	0	0	342	0	0	0	369	0	0	1051
8:00 AM	0	0	72	0	0	0	266	0	0	240	0	0	0	300	0	0	878
8:15 AM	0	0	70	0	0	0	236	0	0	230	0	0	0	266	0	0	802
8:30 AM	0	0	92	0	0	0	250	0	0	244	0	0	0	268	0	0	854
8:45 AM	0	0	98	0	0	0	260	0	0	258	0	0	0	257	0	0	873
9:00 AM	0	0	73	0	0	0	256	0	0	210	0	0	0	251	0	0	790
9:15 AM	0	0	81	0	0	0	241	0	0	202	0	0	0	261	0	0	785
9:30 AM	0	0	81	0	0	0	216	0	0	219	0	0	0	257	0	0	773
9:45 AM	0	0	87	0	0	0	212	0	0	263	0	0	0	226	0	0	788
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	9717
<b>PEAK HR :</b>	07:30 AM - 08:30 AM				0				0				0				TOTAL
<b>PEAK HR VOL :</b>	0	0	318	0	0	0	958	0	0	1086	0	0	0	1228	0	0	3590
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.820	0.000	0.000	0.000	0.900	0.000	0.000	0.794	0.000	0.000	0.000	0.832	0.000	0.000	0.854
<b>PM</b>	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:30 PM	0	0	124	0	0	0	177	0	0	321	0	0	0	286	0	0	908
4:45 PM	0	0	123	0	0	0	177	0	0	373	0	0	0	271	0	0	944
5:00 PM	0	0	142	0	0	0	160	0	0	382	0	0	0	331	0	0	1015
5:15 PM	0	0	126	0	0	0	185	0	0	386	0	0	0	298	0	0	995
5:30 PM	0	0	126	0	0	0	163	0	0	425	0	0	0	294	0	0	1008
5:45 PM	0	0	156	0	0	0	180	0	0	424	0	0	0	273	0	0	1033
6:00 PM	0	0	140	0	0	0	175	0	0	395	0	0	0	289	0	0	999
6:15 PM	0	0	143	0	0	0	168	0	0	378	0	0	0	286	0	0	975
6:30 PM	0	0	134	0	0	0	200	0	0	408	0	0	0	249	0	0	991
6:45 PM	0	0	122	0	0	0	177	0	0	388	0	0	0	244	0	0	931
7:00 PM	0	0	146	0	0	0	180	0	0	324	0	0	0	309	0	0	959
7:15 PM	0	0	142	0	0	0	152	0	0	311	0	0	0	266	0	0	871
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	11629
<b>PEAK HR :</b>	05:00 PM - 06:00 PM				0				0				0				TOTAL
<b>PEAK HR VOL :</b>	0	0	550	0	0	0	688	0	0	1617	0	0	0	1196	0	0	4051
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.881	0.000	0.000	0.000	0.930	0.000	0.000	0.951	0.000	0.000	0.000	0.903	0.000	0.000	0.980

National Data & Surveying Services

# Intersection Turning Movement Count

Location: I 5 Freeway NB Off Ramp & Burbank Blvd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-005  
 Date: 4/26/2018

**Total**

NS/EW Streets:	I 5 Freeway NB Off Ramp				I 5 Freeway NB Off Ramp				Burbank Blvd				Burbank Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	54	0	0	0	165	0	0	129	0	0	0	265	0	0	613
7:15 AM	0	0	71	0	0	0	178	0	0	173	0	0	0	229	0	0	651
7:30 AM	0	0	97	0	0	0	204	0	0	281	0	0	0	305	0	0	887
7:45 AM	0	0	103	0	0	0	256	0	0	307	0	0	0	297	0	0	963
8:00 AM	0	0	93	0	0	0	254	0	0	219	0	0	0	263	0	0	829
8:15 AM	0	0	81	0	0	0	248	0	0	239	0	0	0	286	0	0	854
8:30 AM	0	0	70	0	0	0	231	0	0	250	0	0	0	270	0	0	821
8:45 AM	0	0	98	0	0	0	285	0	0	205	0	0	0	249	0	0	837
9:00 AM	0	0	93	0	0	0	253	0	0	193	0	0	0	239	0	0	778
9:15 AM	0	0	84	0	0	0	231	0	0	227	0	0	0	249	0	0	791
9:30 AM	0	0	88	0	0	0	239	0	0	241	0	0	0	252	0	0	820
9:45 AM	0	0	101	0	0	0	242	0	0	233	0	0	0	222	0	0	798
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	9642
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																TOTAL
<b>PEAK HR VOL :</b>	0	0	374	0	0	0	962	0	0	1046	0	0	0	1151	0	0	3533
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.908	0.000	0.000	0.000	0.939	0.000	0.000	0.852	0.000	0.000	0.000	0.943	0.000	0.000	0.917
	0.908				0.939				0.852				0.943				
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:30 PM	0	0	99	0	0	0	180	0	0	363	0	0	0	276	0	0	918
4:45 PM	0	0	117	0	0	0	161	0	0	392	0	0	0	247	0	0	917
5:00 PM	0	0	131	0	0	0	188	0	0	400	0	0	0	307	0	0	1026
5:15 PM	0	0	114	0	0	0	167	0	0	407	0	0	0	277	0	0	965
5:30 PM	0	0	141	0	0	0	193	0	0	449	0	0	0	284	0	0	1067
5:45 PM	0	0	124	0	0	0	182	0	0	457	0	0	0	255	0	0	1018
6:00 PM	0	0	156	0	0	0	183	0	0	453	0	0	0	274	0	0	1066
6:15 PM	0	0	132	0	0	0	196	0	0	447	0	0	0	282	0	0	1057
6:30 PM	0	0	116	0	0	0	188	0	0	458	0	0	0	310	0	0	1072
6:45 PM	0	0	150	0	0	0	190	0	0	384	0	0	0	283	0	0	1007
7:00 PM	0	0	150	0	0	0	186	0	0	374	0	0	0	263	0	0	973
7:15 PM	0	0	129	0	0	0	191	0	0	403	0	0	0	243	0	0	966
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	12052
<b>PEAK HR :</b>	05:45 PM - 06:45 PM																TOTAL
<b>PEAK HR VOL :</b>	0	0	528	0	0	0	749	0	0	1815	0	0	0	1121	0	0	4213
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.846	0.000	0.000	0.000	0.955	0.000	0.000	0.991	0.000	0.000	0.000	0.904	0.000	0.000	0.983
	0.846				0.955				0.991				0.904				



# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: 17-5030-068

Day: Thursday

City: Burbank

Date: 1/26/2017

		AM												
NS/EW Streets:	SB I-5 Ramps / Front St			SB I-5 Ramps / Front St			Burbank Blvd			Burbank Blvd				
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
	1	0	1	1.5	0.5	1	0	2	1	1	3	1		
7:00 AM	29	0	3	38	7	74	0	240	57	9	254	0	711	
7:15 AM	47	0	2	39	24	66	0	236	87	15	275	0	791	
7:30 AM	42	0	7	59	35	72	0	328	96	23	330	0	992	
7:45 AM	52	0	3	67	29	86	0	381	133	13	423	0	1187	
8:00 AM	45	0	4	57	33	63	0	330	122	12	419	0	1085	
8:15 AM	62	0	2	37	19	55	0	327	148	28	396	0	1074	
8:30 AM	57	0	1	42	14	61	0	362	181	7	354	0	1079	
8:45 AM	48	0	3	52	29	53	0	335	125	15	357	0	1017	
9:00 AM	30	0	3	52	12	73	0	312	119	16	418	0	1035	
9:15 AM	38	0	2	41	4	58	0	312	75	8	363	0	901	
9:30 AM	25	0	2	47	7	69	0	311	78	8	347	0	894	
9:45 AM	55	0	3	65	16	68	0	286	67	6	299	0	865	
<b>TOTAL VOLUMES :</b>	530	0	35	596	229	798	0	3760	1288	160	4235	0	11631	
<b>APPROACH %'s :</b>	93.81%	0.00%	6.19%	36.72%	14.11%	49.17%	0.00%	74.48%	25.52%	3.64%	96.36%	0.00%		
<b>PEAK HR START TIME :</b>	745 AM												<b>TOTAL</b>	
<b>PEAK HR VOL :</b>	216	0	10	203	95	265	0	1400	584	60	1592	0	4425	
<b>PEAK HR FACTOR :</b>	0.883			0.773			0.913			0.947			0.932	

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5030-068

Day: Thursday

City: Burbank

Date: 1/26/2017

		PM												
NS/EW Streets:		SB I-5 Ramps / Front St			SB I-5 Ramps / Front St			Burbank Blvd			Burbank Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		1	0	1	1.5	0.5	1	0	2	1	1	3	1	
4:30 PM		58	0	14	108	4	75	0	421	55	4	307	0	1046
4:45 PM		52	0	17	115	11	85	0	420	63	4	354	0	1121
5:00 PM		60	0	8	122	6	79	0	474	67	3	366	0	1185
5:15 PM		64	0	4	100	7	75	0	465	108	4	397	0	1224
5:30 PM		69	0	14	118	11	93	1	461	89	7	379	0	1242
5:45 PM		69	0	12	111	12	61	0	406	88	4	362	0	1125
6:00 PM		64	0	11	112	8	76	0	446	75	8	341	0	1141
6:15 PM		47	0	13	90	11	81	0	450	79	4	373	0	1148
6:30 PM		40	0	3	93	18	74	0	412	123	3	335	0	1101
6:45 PM		57	0	6	110	2	69	0	398	70	3	317	0	1032
7:00 PM		38	0	15	82	2	53	0	416	56	3	361	0	1026
7:15 PM		34	0	5	97	5	55	0	426	70	1	309	0	1002
<b>TOTAL VOLUMES :</b>		652	0	122	1258	97	876	1	5195	943	48	4201	0	13393
<b>APPROACH %'s :</b>		84.24%	0.00%	15.76%	56.39%	4.35%	39.26%	0.02%	84.62%	15.36%	1.13%	98.87%	0.00%	
<b>PEAK HR START TIME :</b>		500 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>		262	0	38	451	36	308	1	1806	352	18	1504	0	4776
<b>PEAK HR FACTOR :</b>		0.904			0.895			0.942			0.949			0.961

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: 17-5030-025

Day: Thursday

City: Burbank

Date: 1/26/2017

		AM												
NS/EW Streets:		Victory Blvd / Victory Pl			Victory Blvd / Victory Pl			Burbank Blvd			Burbank Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		2	2	1	2	2	1	2	3	1	2	3	1	
7:00 AM		41	37	21	66	81	9	5	170	49	84	199	98	860
7:15 AM		41	36	22	82	79	11	5	202	56	70	188	104	896
7:30 AM		53	29	23	103	124	11	2	268	92	86	264	83	1138
7:45 AM		47	59	31	161	139	11	2	338	83	105	311	112	1399
8:00 AM		57	57	18	110	102	13	13	308	104	88	277	120	1267
8:15 AM		53	36	32	125	102	13	13	330	96	90	272	136	1298
8:30 AM		61	60	35	130	140	15	13	304	101	95	252	157	1363
8:45 AM		45	57	28	167	106	12	14	287	98	98	237	146	1295
9:00 AM		34	41	24	112	90	12	21	320	110	97	304	141	1306
9:15 AM		52	48	31	100	91	21	23	285	78	100	247	127	1203
9:30 AM		77	70	32	116	94	20	11	248	71	82	185	118	1124
9:45 AM		67	69	46	86	66	15	30	268	57	95	260	120	1179
<b>TOTAL VOLUMES :</b>		628	599	343	1358	1214	163	152	3328	995	1090	2996	1462	14328
<b>APPROACH %'s :</b>		40.00%	38.15%	21.85%	49.65%	44.39%	5.96%	3.40%	74.37%	22.23%	19.65%	54.00%	26.35%	
<b>PEAK HR START TIME :</b>		745 AM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>		218	212	116	526	483	52	41	1280	384	378	1112	525	5327
<b>PEAK HR FACTOR :</b>		0.875			0.853			0.971			0.954			0.952

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: 17-5030-025

Day: Thursday

City: Burbank

Date: 1/26/2017

PM

NS/EW Streets:	Victory Blvd / Victory Pl			Victory Blvd / Victory Pl			Burbank Blvd			Burbank Blvd			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	2	2	1	2	2	1	2	3	1	2	3	1	
4:30 PM	97	118	47	156	112	35	34	284	78	51	242	111	1365
4:45 PM	112	122	54	142	129	29	28	270	64	82	267	123	1422
5:00 PM	113	113	69	160	116	26	32	297	56	68	284	128	1462
5:15 PM	126	128	63	178	122	28	31	294	65	82	311	113	1541
5:30 PM	123	107	69	188	110	31	30	307	80	65	336	98	1544
5:45 PM	115	139	58	152	104	29	30	320	68	77	323	128	1543
6:00 PM	126	119	67	176	113	37	28	305	70	70	278	123	1512
6:15 PM	113	122	52	180	103	35	23	333	76	68	334	130	1569
6:30 PM	113	134	59	170	100	41	26	321	64	74	290	109	1501
6:45 PM	102	95	44	167	110	38	24	272	48	68	320	138	1426
7:00 PM	109	137	39	182	87	33	22	241	56	48	296	118	1368
7:15 PM	68	73	35	173	105	33	32	240	57	47	241	119	1223
<b>TOTAL VOLUMES :</b>	1317	1407	656	2024	1311	395	340	3484	782	800	3522	1438	17476
<b>APPROACH %'s :</b>	38.96%	41.63%	19.41%	54.26%	35.15%	10.59%	7.38%	75.64%	16.98%	13.89%	61.15%	24.97%	
<b>PEAK HR START TIME :</b>	530 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	477	487	246	696	430	132	111	1265	294	280	1271	479	6168
<b>PEAK HR FACTOR :</b>	0.970			0.956			0.966			0.954			0.983

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: 17-5030-065

Day: Thursday

City: Burbank

Date: 1/26/2017

		AM												
NS/EW Streets:		Victory Blvd			Victory Blvd			Burbank Blvd			Burbank Blvd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		0	1	0	2.5	0	0.5	0	3	0	0	2	2	
7:00 AM		0	0	0	145	0	1	0	93	1	0	100	128	468
7:15 AM		0	0	0	161	0	2	0	97	0	0	101	128	489
7:30 AM		0	0	0	213	0	0	0	164	1	0	135	177	690
7:45 AM		0	0	1	251	0	4	0	194	0	0	142	189	781
8:00 AM		0	0	5	276	0	1	0	161	4	0	151	183	781
8:15 AM		0	0	1	243	0	5	0	200	2	0	156	153	760
8:30 AM		0	0	0	241	0	2	0	178	1	0	155	161	738
8:45 AM		0	0	0	241	1	3	0	149	0	0	123	147	664
9:00 AM		0	0	2	275	0	1	0	182	1	0	161	148	770
9:15 AM		0	0	1	253	1	2	0	134	0	1	151	130	673
9:30 AM		0	0	0	182	0	1	0	148	1	1	156	124	613
9:45 AM		0	0	2	200	0	3	0	170	2	0	160	141	678
<b>TOTAL VOLUMES :</b>		0	0	12	2681	2	25	0	1870	13	2	1691	1809	8105
<b>APPROACH %'s :</b>		0.00%	0.00%	100.00%	99.00%	0.07%	0.92%	0.00%	99.31%	0.69%	0.06%	48.29%	51.66%	
<b>PEAK HR START TIME :</b>		745 AM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>		0	0	7	1011	0	12	0	733	7	0	604	686	3060
<b>PEAK HR FACTOR :</b>		0.350			0.923			0.916			0.966			0.980

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: 17-5030-065

Day: Thursday

City: Burbank

Date: 1/26/2017

PM

NS/EW Streets:	Victory Blvd			Victory Blvd			Burbank Blvd			Burbank Blvd			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	2.5	0	0.5	0	3	0	0	2	2	
4:30 PM	0	0	0	201	0	1	0	191	0	1	142	180	716
4:45 PM	0	0	0	202	0	4	0	180	0	0	168	209	763
5:00 PM	0	0	1	210	0	2	0	169	1	1	173	223	780
5:15 PM	0	0	1	216	0	2	0	200	3	0	196	244	862
5:30 PM	0	0	0	220	0	2	0	205	0	0	187	258	872
5:45 PM	0	0	1	230	0	2	0	205	0	0	157	264	859
6:00 PM	0	0	0	200	0	1	0	201	0	1	166	244	813
6:15 PM	0	0	1	211	0	0	0	213	0	0	190	258	873
6:30 PM	0	0	1	217	0	2	0	204	1	0	159	248	832
6:45 PM	0	0	0	171	0	6	0	197	0	0	216	237	827
7:00 PM	0	0	0	183	0	2	0	133	0	0	139	247	704
7:15 PM	0	0	0	162	0	5	0	152	0	1	115	184	619
<b>TOTAL VOLUMES :</b>	0	0	5	2423	0	29	0	2250	5	4	2008	2796	9520
<b>APPROACH %'s :</b>	0.00%	0.00%	100.00%	98.82%	0.00%	1.18%	0.00%	99.78%	0.22%	0.08%	41.76%	58.15%	
<b>PEAK HR START TIME :</b>	530 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	0	2	861	0	5	0	824	0	1	700	1024	3417
<b>PEAK HR FACTOR :</b>	0.500			0.933			0.967			0.963			0.979

CONTROL : Signalized

National Data & Surveying Services

# Intersection Turning Movement Count

Location: N Glenoaks Blvd & E Magnolia Blvd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-026  
 Date: 4/24/2018

**Total**

NS/EW Streets:	N Glenoaks Blvd				N Glenoaks Blvd				E Magnolia Blvd				E Magnolia Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
7:00 AM	18	75	3	0	10	160	34	0	10	10	5	0	11	32	12	0	380
7:15 AM	17	75	3	0	4	198	35	0	13	10	22	0	14	54	13	0	458
7:30 AM	29	110	4	0	15	222	49	0	22	25	22	0	14	62	19	0	593
7:45 AM	38	158	2	0	12	230	56	0	14	38	26	0	12	84	9	0	679
8:00 AM	32	111	2	0	11	239	46	0	9	18	25	0	11	58	11	0	573
8:15 AM	27	135	6	0	10	244	65	0	18	34	28	0	16	70	8	0	661
8:30 AM	39	101	5	0	11	273	42	0	23	23	29	0	8	78	14	0	646
8:45 AM	35	155	9	0	4	271	50	0	23	22	26	0	11	67	8	0	681
9:00 AM	36	100	4	0	7	202	62	0	20	21	24	0	13	36	4	0	529
9:15 AM	20	135	5	0	6	221	42	0	15	22	26	0	9	49	7	0	557
9:30 AM	40	129	4	0	4	184	39	0	23	22	35	1	9	46	9	0	545
9:45 AM	41	137	9	0	3	182	33	0	13	23	33	0	7	59	15	0	555
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	20.12%	76.85%	3.03%	0.00%	2.96%	80.16%	16.88%	0.00%	26.26%	34.67%	38.94%	0.13%	14.08%	72.47%	13.45%	0.00%	6857
<b>PEAK HR :</b>	08:00 AM - 09:00 AM																TOTAL
<b>PEAK HR VOL :</b>	133	502	22	0	36	1027	203	0	73	97	108	0	46	273	41	0	2561
<b>PEAK HR FACTOR :</b>	0.853	0.810	0.611	0.000	0.818	0.940	0.781	0.000	0.793	0.713	0.931	0.000	0.719	0.875	0.732	0.000	0.940
	0.825				0.971				0.869				0.900				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
4:30 PM	28	225	7	0	20	179	41	0	40	56	75	0	4	48	10	0	733
4:45 PM	28	232	8	0	19	205	35	0	51	69	51	0	3	41	11	0	753
5:00 PM	41	265	11	0	18	226	34	0	24	65	52	0	11	36	10	0	793
5:15 PM	45	263	10	0	20	233	40	0	50	56	49	0	2	42	12	0	822
5:30 PM	42	299	8	0	20	227	35	0	37	60	55	0	8	61	11	0	863
5:45 PM	43	245	16	0	22	237	35	0	51	67	56	0	8	35	19	0	834
6:00 PM	34	277	18	0	19	227	44	0	47	65	75	0	6	38	19	0	869
6:15 PM	27	231	16	0	22	201	36	0	50	61	56	0	7	43	9	0	759
6:30 PM	32	254	8	0	23	193	32	0	46	59	47	0	7	35	20	0	756
6:45 PM	43	226	16	0	18	207	33	0	31	52	51	0	8	35	8	0	728
7:00 PM	33	213	11	0	7	166	27	0	31	52	45	1	4	34	13	0	637
7:15 PM	33	195	13	0	14	187	31	0	31	49	48	0	4	49	7	0	661
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	12.27%	83.67%	4.06%	0.00%	7.09%	79.41%	13.50%	0.00%	26.28%	38.21%	35.46%	0.05%	10.03%	69.22%	20.75%	0.00%	9208
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																TOTAL
<b>PEAK HR VOL :</b>	164	1084	52	0	81	924	154	0	185	248	235	0	24	176	61	0	3388
<b>PEAK HR FACTOR :</b>	0.911	0.906	0.722	0.000	0.920	0.975	0.875	0.000	0.907	0.925	0.783	0.000	0.750	0.721	0.803	0.000	0.975
	0.931				0.986				0.893				0.816				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: N Glenoaks Blvd & E Magnolia Blvd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-026  
 Date: 4/25/2018

**Total**

NS/EW Streets:	N Glenoaks Blvd				N Glenoaks Blvd				E Magnolia Blvd				E Magnolia Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
7:00 AM	20	99	3	0	10	208	35	0	10	15	11	0	9	44	13	0	477
7:15 AM	32	110	1	0	4	250	42	0	5	20	23	0	9	57	11	0	564
7:30 AM	38	174	3	0	9	262	47	0	24	28	27	0	17	70	14	0	713
7:45 AM	42	246	2	0	14	308	51	0	22	41	34	0	29	107	7	0	903
8:00 AM	23	142	4	0	9	365	62	0	17	39	38	0	11	96	12	0	818
8:15 AM	35	166	9	0	10	243	49	0	18	33	34	0	18	72	10	0	697
8:30 AM	29	145	4	0	14	300	49	0	16	18	25	0	16	75	9	0	700
8:45 AM	41	143	5	0	7	304	53	0	28	34	30	0	13	71	10	0	739
9:00 AM	32	140	8	0	7	315	67	0	23	25	38	0	8	54	8	0	725
9:15 AM	41	139	2	0	7	262	44	0	20	23	32	0	19	56	10	0	655
9:30 AM	30	112	8	0	7	267	44	0	22	29	37	0	11	48	17	0	632
9:45 AM	39	142	5	0	16	230	47	0	23	28	33	0	15	40	16	0	634
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	18.16%	79.40%	2.44%	0.00%	2.84%	82.48%	14.68%	0.00%	24.70%	36.08%	39.22%	0.00%	15.88%	71.69%	12.43%	0.00%	8257
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																TOTAL
<b>PEAK HR VOL :</b>	138	728	18	0	42	1178	209	0	81	141	133	0	75	345	43	0	3131
<b>PEAK HR FACTOR :</b>	0.821	0.740	0.500	0.000	0.750	0.807	0.843	0.000	0.844	0.860	0.875	0.000	0.647	0.806	0.768	0.000	0.867
	0.762				0.819				0.915				0.809				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
4:30 PM	43	232	9	0	19	223	29	0	30	64	53	0	6	48	10	0	766
4:45 PM	29	258	11	0	18	215	25	0	58	69	62	0	6	34	12	0	797
5:00 PM	45	280	16	0	20	225	26	0	42	56	59	0	9	42	15	0	835
5:15 PM	30	288	9	0	19	290	41	0	55	67	51	0	6	46	14	0	916
5:30 PM	30	294	14	0	14	275	35	0	47	59	42	0	7	39	15	0	871
5:45 PM	35	248	9	0	21	238	46	0	58	84	63	1	5	46	13	0	867
6:00 PM	29	314	18	0	16	261	37	0	50	66	50	0	4	38	16	0	899
6:15 PM	33	265	10	0	19	226	46	0	58	76	62	0	3	54	19	0	871
6:30 PM	38	261	16	0	24	211	32	0	40	57	65	0	9	46	5	0	804
6:45 PM	29	239	11	0	20	212	31	0	44	60	34	0	10	41	11	0	742
7:00 PM	26	235	11	0	27	189	23	0	38	43	44	0	6	39	10	0	691
7:15 PM	28	209	11	0	22	178	32	0	40	56	52	0	8	31	15	0	682
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	10.78%	85.26%	3.96%	0.00%	7.06%	81.03%	11.91%	0.00%	28.64%	38.72%	32.58%	0.05%	10.70%	68.29%	21.00%	0.00%	9741
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																TOTAL
<b>PEAK HR VOL :</b>	124	1144	50	0	70	1064	159	0	210	276	206	1	22	169	58	0	3553
<b>PEAK HR FACTOR :</b>	0.886	0.911	0.694	0.000	0.833	0.917	0.864	0.000	0.905	0.821	0.817	0.250	0.786	0.918	0.906	0.000	0.970
	0.913				0.924				0.841				0.943				



National Data & Surveying Services

# Intersection Turning Movement Count

Location: N Glenoaks Blvd & E Magnolia Blvd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-026  
 Date: 4/26/2018

**Total**

NS/EW Streets:	N Glenoaks Blvd				N Glenoaks Blvd				E Magnolia Blvd				E Magnolia Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
7:00 AM	22	103	4	1	6	212	29	0	14	16	16	0	9	34	5	0	471
7:15 AM	9	89	2	0	7	252	34	0	13	16	18	0	12	45	14	0	511
7:30 AM	40	170	3	0	12	270	44	0	19	34	31	0	18	66	12	0	719
7:45 AM	29	226	2	0	14	291	37	0	25	30	18	0	27	96	24	0	819
8:00 AM	38	144	3	0	6	373	55	0	14	37	38	0	23	76	13	0	820
8:15 AM	31	182	6	0	5	272	48	0	19	38	28	0	18	85	17	0	749
8:30 AM	36	146	6	0	12	342	55	0	22	26	30	0	18	68	9	0	770
8:45 AM	39	144	2	0	10	293	48	0	29	43	37	0	14	71	8	0	738
9:00 AM	50	128	5	0	7	295	69	0	17	20	27	0	5	49	11	0	683
9:15 AM	36	134	5	0	10	255	44	0	19	22	30	0	10	60	8	0	633
9:30 AM	33	131	6	0	8	234	42	0	15	31	37	0	12	57	9	0	615
9:45 AM	27	129	6	0	8	226	40	0	22	25	29	0	10	41	8	0	571
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	18.00%	79.65%	2.31%	0.05%	2.65%	83.61%	13.75%	0.00%	25.19%	37.35%	37.46%	0.00%	16.57%	70.43%	12.99%	0.00%	8099
<b>PEAK HR :</b>	07:45 AM - 08:45 AM																TOTAL
<b>PEAK HR VOL :</b>	134	698	17	0	37	1278	195	0	80	131	114	0	86	325	63	0	3158
<b>PEAK HR FACTOR :</b>	0.882	0.772	0.708	0.000	0.661	0.857	0.886	0.000	0.800	0.862	0.750	0.000	0.796	0.846	0.656	0.000	0.963
	0.826				0.870				0.913				0.806				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
4:30 PM	44	272	11	1	15	205	33	0	44	58	74	0	8	33	10	0	808
4:45 PM	36	273	14	0	15	245	29	0	46	58	70	0	7	45	18	0	856
5:00 PM	35	320	15	0	15	253	37	0	36	64	58	0	7	34	13	0	887
5:15 PM	41	327	7	0	25	257	36	0	49	65	67	0	7	57	15	0	953
5:30 PM	33	311	11	0	29	277	48	0	32	41	52	1	8	52	14	0	909
5:45 PM	49	299	13	1	24	218	34	0	55	75	57	0	6	44	20	0	895
6:00 PM	43	330	12	1	22	284	35	0	44	49	62	0	13	50	14	0	959
6:15 PM	38	256	16	1	21	238	32	1	49	57	59	0	12	64	10	0	854
6:30 PM	32	274	19	1	13	255	32	0	26	50	59	0	10	37	13	0	821
6:45 PM	39	242	12	0	15	185	35	0	48	70	59	1	8	42	13	0	769
7:00 PM	29	237	11	0	25	192	33	0	30	61	49	0	11	40	11	0	729
7:15 PM	28	201	12	0	15	192	40	1	33	44	41	0	10	42	16	0	675
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	11.33%	84.67%	3.88%	0.13%	6.76%	80.93%	12.25%	0.06%	25.99%	36.56%	37.35%	0.11%	13.14%	66.34%	20.52%	0.00%	10115
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																TOTAL
<b>PEAK HR VOL :</b>	166	1267	43	2	100	1036	153	0	180	230	238	1	34	203	63	0	3716
<b>PEAK HR FACTOR :</b>	0.847	0.960	0.827	0.500	0.862	0.912	0.797	0.000	0.818	0.767	0.888	0.250	0.654	0.890	0.788	0.000	0.969
	0.957				0.910				0.868				0.949				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: N 1st St/ N Bonnywood Pl & E Magnolia Blvd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-011  
 Date: 4/24/2018

NS/EW Streets:		Total																								NORTHBOUND2						TOTAL
		N 1st St/ N Bonnywood Pl					N 1st St/ N Bonnywood Pl					E Magnolia Blvd				E Magnolia Blvd				NORTHBOUND		NORTHBOUND										
		1	2	0	0	0	1	2	0	0	0	1	2	0	0	1	2	0	0	1	2	0	0	0	0							
<b>AM</b>		NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL				
	7:00 AM	26	16	6	0	0	1	21	19	0	0	7	38	24	0	0	7	91	3	0	0	0	0	0	0	0	0	259				
	7:15 AM	34	12	10	0	0	4	36	29	0	0	10	64	33	0	0	9	112	2	1	0	0	0	0	0	0	0	357				
	7:30 AM	37	23	13	0	0	4	52	40	0	0	19	99	43	0	0	5	142	6	0	0	0	0	0	0	0	0	483				
	7:45 AM	41	18	9	0	0	8	65	60	0	0	20	86	42	0	0	10	150	5	0	0	0	0	0	0	0	0	515				
	8:00 AM	41	26	9	0	0	7	44	48	0	0	16	84	28	0	0	13	141	5	0	0	0	0	0	0	0	0	463				
	8:15 AM	42	20	10	0	0	5	46	34	0	0	23	102	48	0	0	13	152	7	0	0	0	0	0	0	0	0	502				
	8:30 AM	54	19	9	0	0	11	49	46	0	0	11	107	38	0	0	9	134	4	1	0	0	0	0	0	0	0	492				
	8:45 AM	45	19	11	0	0	5	49	41	0	0	23	109	40	0	0	9	153	5	0	0	0	0	0	0	0	0	510				
	9:00 AM	48	24	13	0	0	10	45	33	0	0	16	76	42	0	0	9	106	5	1	0	0	0	0	0	0	0	428				
9:15 AM	38	23	14	0	0	11	38	28	0	0	14	85	28	0	0	3	109	7	1	0	0	0	0	0	0	0	399					
9:30 AM	44	40	16	0	0	12	38	21	0	0	22	87	39	0	0	8	109	13	0	0	0	0	0	0	0	0	449					
9:45 AM	52	35	20	0	0	13	30	28	0	0	23	100	40	0	0	14	128	20	2	0	0	0	0	0	0	0	505					
<b>TOTAL VOLUMES:</b>		NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL				
<b>APPROACH %'s:</b>		54.74%	29.99%	15.27%	0.00%	0.00%	8.83%	49.76%	41.42%	0.00%	0.00%	12.10%	61.51%	26.39%	0.00%	0.00%	6.32%	88.57%	4.76%	0.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	5362				
<b>PEAK HR:</b>		07:45 AM - 08:45 AM																														
<b>PEAK HR VOL:</b>		178	83	37	0	0	31	204	188	0	0	70	379	156	0	0	45	577	21	1	0	0	0	0	0	0	2	1972				
<b>PEAK HR FACTOR:</b>		0.824	0.798	0.925	0.000	0.000	0.705	0.785	0.783	0.000	0.000	0.761	0.886	0.813	0.000	0.000	0.865	0.949	0.750	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.957				
<b>PM</b>		NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL				
	4:30 PM	62	86	23	0	0	33	85	38	0	0	50	135	67	0	0	9	98	23	3	0	0	0	0	0	0	1	713				
	4:45 PM	46	91	27	0	0	22	77	39	0	0	50	163	84	0	0	13	104	19	5	0	0	0	0	0	0	2	742				
	5:00 PM	71	87	22	0	0	29	78	55	0	0	54	167	75	0	0	16	122	26	5	0	0	0	0	0	0	2	809				
	5:15 PM	59	89	32	0	0	29	98	54	0	0	58	188	86	0	0	18	129	20	3	0	0	0	0	0	0	1	864				
	5:30 PM	47	91	22	0	0	28	85	50	0	0	73	189	88	0	0	16	149	23	8	0	0	0	0	0	0	0	869				
	5:45 PM	62	86	45	0	0	28	75	51	0	0	68	187	64	0	0	13	89	32	3	0	0	0	0	0	0	0	803				
	6:00 PM	54	88	49	0	0	30	87	47	0	0	71	183	86	0	0	22	126	31	7	0	0	0	0	0	0	1	882				
	6:15 PM	57	103	38	0	0	40	87	50	0	0	66	196	56	0	0	15	96	28	11	0	0	0	0	0	0	0	843				
	6:30 PM	41	96	29	0	0	30	82	52	0	0	55	167	76	0	0	14	121	36	5	0	0	0	0	0	0	3	807				
6:45 PM	38	80	44	0	0	41	100	63	0	0	54	154	56	0	0	14	109	27	3	0	0	0	0	0	0	5	788					
7:00 PM	48	69	27	0	0	35	88	57	0	0	54	120	60	0	0	18	94	25	9	0	0	0	0	0	0	2	706					
7:15 PM	33	75	28	0	0	36	79	49	0	0	41	146	50	0	0	9	93	21	8	0	0	0	0	0	0	0	668					
<b>TOTAL VOLUMES:</b>		NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL				
<b>APPROACH %'s:</b>		30.32%	50.90%	18.88%	0.00%	0.00%	18.28%	50.87%	30.14%	0.00%	0.00%	19.62%	56.40%	23.98%	0.00%	0.00%	9.38%	79.44%	16.47%	3.71%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	9494				
<b>PEAK HR:</b>		05:15 PM - 06:15 PM																														
<b>PEAK HR VOL:</b>		222	354	148	0	0	115	345	202	0	0	270	747	324	0	0	69	493	106	21	0	0	0	0	0	0	2	3418				
<b>PEAK HR FACTOR:</b>		0.895	0.973	0.755	0.000	0.000	0.958	0.880	0.935	0.000	0.000	0.925	0.988	0.920	0.000	0.000	0.784	0.827	0.826	0.656	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.969				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: N 1st St/ N Bonnywood Pl & E Magnolia Blvd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-011  
 Date: 4/25/2018

NS/EW Streets:		Total																								NORTHBOUND2						TOTAL		
		N 1st St/ N Bonnywood Pl					N 1st St/ N Bonnywood Pl					E Magnolia Blvd				E Magnolia Blvd																		
		NORTHBOUND		SOUTHBOUND			EASTBOUND		WESTBOUND		NORTHBOUND		WESTBOUND		NORTHBOUND		WESTBOUND																	
1	2	1	0	0	1	2	SR	SU	ST2	1	2	ER	EU	ER2	1	2	WR	WU	WL2	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL		
<b>AM</b>	7:00 AM	21	19	6	0	0	5	24	30	0	0	8	54	24	0	0	9	91	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	298
	7:15 AM	38	17	4	0	0	6	35	28	0	0	7	70	34	0	0	12	125	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	383
	7:30 AM	40	22	10	0	0	6	47	38	0	0	12	117	42	0	0	10	157	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	502
	7:45 AM	49	32	15	0	0	10	79	64	0	0	21	115	41	0	0	17	160	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	608
	8:00 AM	36	25	11	0	0	13	55	53	0	0	16	94	38	0	0	12	171	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	528
	8:15 AM	32	18	7	0	0	8	73	38	0	0	15	96	48	0	0	10	151	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	500
	8:30 AM	34	27	12	0	0	9	54	37	0	0	30	94	40	0	0	12	130	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	483
	8:45 AM	64	26	10	0	0	6	52	41	0	0	14	112	45	0	0	14	153	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	552
	9:00 AM	47	19	9	0	0	5	46	31	0	0	16	103	27	0	0	8	129	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	445
	9:15 AM	46	21	9	0	0	9	46	28	0	0	29	113	44	0	0	12	119	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	482
9:30 AM	56	42	16	0	0	16	43	37	0	0	21	95	23	0	0	13	109	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	486	
9:45 AM	47	32	17	0	0	11	46	40	0	0	31	96	33	0	0	14	120	12	2	0	0	0	0	0	0	0	0	0	0	0	0	0	501	
<b>TOTAL VOLUMES:</b>		NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL						
<b>APPROACH %'s:</b>		54.49%	32.05%	13.46%	0.00%	0.00%	8.82%	51.74%	39.44%	0.00%	0.00%	12.10%	63.75%	24.15%	0.00%	0.00%	7.82%	88.35%	3.23%	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	5768						
<b>PEAK HR:</b>		07:30 AM - 08:30 AM																				TOTAL												
<b>PEAK HR VOL:</b>		157	97	43	0	0	37	254	193	0	0	64	422	169	0	0	49	639	8	4	0	0	0	0	0	0	0	2						
<b>PEAK HR FACTOR:</b>		0.801	0.758	0.717	0.000	0.000	0.712	0.804	0.754	0.000	0.000	0.762	0.902	0.880	0.000	0.000	0.721	0.934	0.667	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.879						

NS/EW Streets:		Total																								NORTHBOUND2						TOTAL
		NORTHBOUND					SOUTHBOUND					EASTBOUND				WESTBOUND																
		1	2	1	0	0	1	2	SR	SU	ST2	1	2	ER	EU	ER2	1	2	WR	WU	WL2	0	0	0	0							
<b>PM</b>	4:30 PM	69	77	29	0	0	23	66	34	0	0	46	141	71	0	0	9	117	25	5	0	0	0	0	0	0	0	4				
	4:45 PM	54	90	29	0	0	27	59	45	0	0	49	194	75	0	0	10	94	23	2	0	0	0	0	0	0	0	3				
	5:00 PM	57	92	23	0	0	24	78	31	0	0	74	182	98	0	0	24	132	26	5	0	0	0	0	0	0	0	848				
	5:15 PM	57	98	27	0	0	30	87	46	0	0	51	182	67	0	0	12	120	23	3	0	0	0	0	0	0	0	803				
	5:30 PM	52	91	29	0	0	25	80	53	0	0	65	193	86	0	0	13	136	30	5	0	0	0	0	0	0	0	858				
	5:45 PM	49	110	22	0	0	26	98	57	0	0	65	187	71	0	0	13	121	21	6	0	0	0	0	0	0	0	847				
	6:00 PM	58	67	27	0	0	26	74	37	0	0	77	202	92	0	0	14	135	29	4	0	0	0	0	0	0	0	842				
	6:15 PM	58	79	32	0	0	32	98	52	0	0	74	158	69	0	0	16	111	32	5	0	0	0	0	0	0	0	819				
	6:30 PM	48	88	41	0	0	27	85	58	0	0	57	170	91	0	0	14	131	29	7	0	0	0	0	0	0	0	847				
	6:45 PM	42	76	30	0	0	28	117	42	0	0	63	148	62	0	0	22	99	20	3	0	0	0	0	0	0	0	753				
7:00 PM	52	76	26	0	0	35	89	49	0	0	55	126	62	0	0	10	81	20	4	0	0	0	0	0	0	0	687					
7:15 PM	36	57	25	0	0	26	78	48	0	0	38	155	66	0	0	16	77	24	5	0	0	0	0	0	0	0	652					
<b>TOTAL VOLUMES:</b>		NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL				
<b>APPROACH %'s:</b>		63.2	1001	340	0	0	329	1009	552	0	0	705	2038	910	0	0	173	1354	302	54	0	0	0	0	0	0	0	3366				
<b>PEAK HR:</b>		05:30 PM - 06:30 PM																				TOTAL										
<b>PEAK HR VOL:</b>		217	347	110	0	0	109	350	199	0	0	281	740	318	0	0	56	503	112	20	0	0	0	0	0	0	4	3366				
<b>PEAK HR FACTOR:</b>		0.935	0.789	0.859	0.000	0.000	0.852	0.893	0.873	0.000	0.000	0.912	0.916	0.864	0.000	0.000	0.875	0.925	0.875	0.833	0.000	0.000	0.000	0.000	0.333	0.000	0.333	0.981				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: N 1st St & E Magnolia Blvd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-011  
 Date: 4/26/2018

NS/EW Streets:		Total																								NORTHBOUND2						TOTAL
		N 1st St						E Magnolia Blvd						E Magnolia Blvd																		
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			NORTHBOUND			WESTBOUND															
AM	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0	TOTAL			
7:00 AM	21	14	4	0	0	6	25	18	0	0	7	53	24	0	0	5	88	2	0	0	0	0	0	0	0	0	0	0	0	267		
7:15 AM	33	15	7	0	0	7	34	20	0	0	5	65	32	0	0	5	103	5	1	0	0	0	0	0	0	0	0	0	0	333		
7:30 AM	38	19	10	0	0	5	47	43	0	0	12	114	43	0	0	8	143	4	1	0	0	0	0	0	0	0	0	0	0	487		
7:45 AM	39	29	15	0	0	5	71	67	0	0	17	111	38	0	0	18	150	2	1	0	0	0	0	0	0	0	0	0	0	564		
8:00 AM	47	27	10	0	0	8	62	50	0	0	18	97	38	0	0	5	163	3	0	0	0	0	0	0	0	0	0	0	0	529		
8:15 AM	38	25	10	0	0	6	54	39	0	0	14	111	60	0	0	8	168	9	0	0	0	0	0	0	0	0	0	0	0	543		
8:30 AM	55	22	17	0	0	10	64	49	0	0	15	108	41	0	0	11	134	12	2	0	0	0	0	0	0	0	0	0	0	540		
8:45 AM	58	20	11	0	0	5	48	42	0	0	17	114	52	0	0	12	165	5	0	0	0	0	0	0	0	0	0	0	0	549		
9:00 AM	47	25	12	0	0	10	40	32	0	0	11	98	38	0	0	10	155	10	1	0	0	0	0	0	0	0	0	0	0	489		
9:15 AM	41	22	8	0	0	13	48	27	0	0	28	93	35	0	0	11	118	12	2	0	0	0	0	0	0	0	0	0	0	458		
9:30 AM	45	31	17	0	0	6	43	32	0	0	19	82	22	0	0	6	125	15	2	0	0	0	0	0	0	0	0	0	0	445		
9:45 AM	46	34	11	0	0	11	42	19	0	0	24	93	30	0	0	5	103	14	2	0	0	0	0	0	0	0	0	0	0	435		
TOTAL VOLUMES:	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL					
APPROACH %'s:	55.04%	30.66%	14.30%	0.00%	0.00%	8.30%	52.17%	39.53%	0.00%	0.00%	10.51%	64.02%	25.46%	0.00%	0.00%	5.70%	88.54%	5.10%	0.66%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	5639					
PEAK HR:	07:45 AM - 08:45 AM																									TOTAL						
PEAK HR VOL:	179	103	52	0	0	29	251	205	0	0	64	427	177	0	0	42	615	26	3	0	0	0	0	0	0	0	3	2176				
PEAK HR FACTOR:	0.814	0.888	0.765	0.000	0.000	0.725	0.884	0.765	0.000	0.000	0.889	0.962	0.738	0.000	0.000	0.583	0.915	0.542	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.965				

NS/EW Streets:		Total																								NORTHBOUND2						TOTAL
		N 1st St						E Magnolia Blvd						E Magnolia Blvd																		
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			NORTHBOUND			WESTBOUND															
PM	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0	TOTAL			
4:30 PM	58	84	31	0	0	27	84	41	0	0	48	146	67	0	0	24	113	32	6	0	0	0	0	0	0	0	0	0	0	761		
4:45 PM	52	83	32	0	0	20	78	47	0	0	49	183	95	0	0	18	112	31	4	0	0	0	0	0	0	0	0	0	0	887		
5:00 PM	65	84	31	0	0	30	90	59	0	0	61	191	91	0	0	14	149	30	2	0	0	0	0	0	0	0	0	0	0	900		
5:15 PM	56	90	45	0	0	33	104	45	0	0	54	170	88	0	0	19	125	20	3	0	0	0	0	0	0	0	0	0	0	854		
5:30 PM	55	89	29	0	0	38	81	59	0	0	83	209	116	0	0	18	154	37	5	0	0	0	0	0	0	0	0	0	0	974		
5:45 PM	57	91	34	0	0	35	103	54	0	0	74	181	81	0	0	19	107	34	7	0	0	0	0	0	0	0	0	0	0	877		
6:00 PM	49	110	41	0	0	33	104	45	0	0	78	181	96	0	0	18	138	26	14	0	0	0	0	0	0	0	0	0	0	934		
6:15 PM	59	97	41	0	0	49	112	61	0	0	75	182	89	0	0	13	126	25	7	0	0	0	0	0	0	0	0	0	0	937		
6:30 PM	54	104	34	0	0	44	106	49	0	0	73	167	95	0	0	23	105	29	3	0	0	0	0	0	0	0	0	0	0	886		
6:45 PM	49	119	53	0	0	42	107	46	0	0	63	172	82	0	0	16	104	23	8	0	0	0	0	0	0	0	0	0	0	887		
7:00 PM	40	135	67	0	0	50	95	48	0	0	65	141	72	0	0	27	108	19	9	0	0	0	0	0	0	0	0	0	0	878		
7:15 PM	52	127	69	0	0	38	78	58	0	0	66	165	60	0	0	29	123	33	4	0	0	0	0	0	0	0	0	0	0	906		
TOTAL VOLUMES:	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL					
APPROACH %'s:	27.30%	51.27%	21.43%	0.00%	0.00%	20.02%	52.07%	27.91%	0.00%	0.00%	20.18%	53.42%	26.40%	0.00%	0.00%	11.25%	69.25%	16.04%	3.41%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	10601					
PEAK HR:	05:30 PM - 06:30 PM																									TOTAL						
PEAK HR VOL:	220	387	145	0	0	155	400	219	0	0	310	753	382	0	0	68	525	122	33	0	0	0	0	0	0	0	3	3722				
PEAK HR FACTOR:	0.932	0.880	0.884	0.000	0.000	0.791	0.893	0.898	0.000	0.000	0.934	0.901	0.823	0.000	0.000	0.895	0.852	0.824	0.589	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.955				

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** N Victory Blvd & Magnolia Blvd  
**City:** Burbank  
**Control:** Signalized

**Project ID:** 18-05253-009  
**Date:** 4/24/2018

### Total

NS/EW Streets:	N Victory Blvd				N Victory Blvd				Magnolia Blvd				Magnolia Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	2	1	0	1	2	1	0	1	2	0	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	18	81	8	0	31	153	18	0	19	61	28	0	31	66	24	0	538
7:15 AM	36	67	13	0	34	197	25	0	18	78	35	0	25	87	25	0	640
7:30 AM	20	86	15	0	35	235	34	0	16	96	51	0	46	103	22	0	759
7:45 AM	42	114	16	0	52	208	32	0	25	143	61	0	44	156	30	0	923
8:00 AM	34	123	14	0	34	224	24	0	31	98	50	0	48	114	26	0	820
8:15 AM	37	96	17	0	56	219	36	0	30	121	54	0	76	135	28	0	905
8:30 AM	29	124	21	0	54	251	30	0	32	128	52	0	47	129	27	0	924
8:45 AM	34	104	13	0	49	210	37	0	21	143	39	0	45	152	34	0	881
9:00 AM	47	125	19	0	47	225	28	0	25	119	57	0	44	111	38	0	885
9:15 AM	26	109	23	0	40	171	34	0	31	80	44	0	45	80	34	0	717
9:30 AM	27	112	15	0	36	150	24	0	27	125	37	0	40	111	49	0	753
9:45 AM	40	135	22	0	47	150	31	0	40	101	51	0	39	112	44	0	812
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	20.95%	68.53%	10.53%	0.00%	15.79%	73.38%	10.82%	0.00%	14.54%	59.67%	25.80%	0.00%	23.38%	59.81%	16.81%	0.00%	9557
<b>PEAK HR :</b>	08:15 AM - 09:15 AM																TOTAL
<b>PEAK HR VOL :</b>	147	449	70	0	206	905	131	0	108	511	202	0	212	527	127	0	3595
<b>PEAK HR FACTOR :</b>	0.782	0.898	0.833	0.000	0.920	0.901	0.885	0.000	0.844	0.893	0.886	0.000	0.697	0.867	0.836	0.000	0.973
	0.872				0.927				0.968				0.906				
PM	1	2	1	0	1	2	1	0	1	2	0	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:30 PM	31	165	21	0	43	138	29	0	36	178	39	0	34	124	52	0	890
4:45 PM	53	195	43	0	57	182	28	0	47	177	46	0	30	135	45	0	1038
5:00 PM	39	183	27	0	46	201	34	0	41	194	45	0	48	144	51	0	1053
5:15 PM	52	183	27	0	60	204	35	0	39	219	46	0	34	163	60	0	1122
5:30 PM	59	201	24	0	51	234	45	0	40	223	28	0	28	153	66	0	1152
5:45 PM	50	184	29	0	67	178	30	0	43	242	44	0	36	151	39	0	1093
6:00 PM	65	228	40	1	46	173	36	0	36	217	31	0	21	161	65	0	1120
6:15 PM	52	158	36	0	69	196	33	0	40	243	48	0	20	161	47	0	1103
6:30 PM	41	194	30	0	61	201	38	0	25	166	42	0	26	139	63	0	1026
6:45 PM	42	149	34	0	57	168	41	0	29	172	55	0	37	140	61	0	985
7:00 PM	34	144	32	0	46	162	43	0	44	155	27	0	29	130	46	0	892
7:15 PM	40	126	22	0	68	187	44	0	29	146	27	0	26	129	38	0	882
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	18.39%	69.55%	12.03%	0.03%	20.14%	66.77%	13.09%	0.00%	13.78%	71.56%	14.67%	0.00%	13.51%	63.32%	23.17%	0.00%	12356
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																TOTAL
<b>PEAK HR VOL :</b>	226	796	120	1	224	789	146	0	158	901	149	0	119	628	230	0	4487
<b>PEAK HR FACTOR :</b>	0.869	0.873	0.750	0.250	0.836	0.843	0.811	0.000	0.919	0.931	0.810	0.000	0.826	0.963	0.871	0.000	0.974
	0.856				0.878				0.918				0.950				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: N Victory Blvd & Magnolia Blvd  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-009  
 Date: 4/25/2018

**Total**

NS/EW Streets:	N Victory Blvd				N Victory Blvd				Magnolia Blvd				Magnolia Blvd				TOTAL	
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
AM	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU		
7:00 AM	30	74	14	0	22	182	23	0	16	59	31	0	35	84	22	0	592	
7:15 AM	20	59	19	0	36	193	22	0	26	64	24	0	21	100	17	0	601	
7:30 AM	29	98	14	0	44	226	28	0	17	103	51	0	38	121	20	0	789	
7:45 AM	45	127	21	0	38	226	46	0	15	166	72	0	54	149	23	0	982	
8:00 AM	38	138	19	0	49	259	30	0	31	108	52	0	60	142	18	0	944	
8:15 AM	33	103	20	0	48	241	26	0	32	130	48	0	51	155	36	0	923	
8:30 AM	35	130	20	0	51	262	27	0	23	137	46	0	38	115	33	0	917	
8:45 AM	23	101	17	0	48	224	39	0	32	132	50	0	38	148	29	0	881	
9:00 AM	29	99	19	0	57	226	30	0	36	127	59	0	33	123	37	0	875	
9:15 AM	42	104	25	0	47	206	37	0	23	118	61	0	41	116	41	0	861	
9:30 AM	31	104	26	0	37	179	28	0	24	119	50	0	38	112	35	0	783	
9:45 AM	43	116	14	0	52	182	33	0	22	122	57	0	35	124	43	0	843	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
<b>APPROACH %'s :</b>	21.18%	66.68%	12.13%	0.00%	15.10%	74.37%	10.53%	0.00%	13.01%	60.67%	26.33%	0.00%	20.73%	64.04%	15.23%	0.00%	9991	
<b>PEAK HR :</b>	07:45 AM - 08:45 AM																	TOTAL
<b>PEAK HR VOL :</b>	151	498	80	0	186	988	129	0	101	541	218	0	203	561	110	0	3766	
<b>PEAK HR FACTOR :</b>	0.839	0.902	0.952	0.000	0.912	0.943	0.701	0.000	0.789	0.815	0.757	0.000	0.846	0.905	0.764	0.000	0.959	
			0.935			0.958				0.850				0.903				
PM	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL	
4:30 PM	48	176	21	0	50	171	42	0	43	184	41	0	32	147	49	0	1004	
4:45 PM	42	199	31	0	67	218	40	0	30	191	53	0	23	130	47	0	1071	
5:00 PM	58	194	46	0	58	209	40	0	27	202	60	0	32	154	40	0	1120	
5:15 PM	61	202	30	0	53	209	39	0	41	203	40	0	38	153	56	0	1125	
5:30 PM	62	226	27	0	51	223	44	0	46	208	43	0	40	140	46	0	1156	
5:45 PM	56	165	39	0	66	201	48	0	40	225	45	0	43	179	41	0	1148	
6:00 PM	53	240	41	0	60	247	43	0	35	216	43	0	25	125	49	0	1177	
6:15 PM	58	150	39	0	61	218	50	0	45	231	56	0	22	186	54	0	1170	
6:30 PM	51	171	29	0	68	194	55	0	31	180	52	0	34	142	63	0	1070	
6:45 PM	37	145	23	0	45	190	31	0	42	185	45	0	28	139	37	0	947	
7:00 PM	38	119	18	0	46	178	27	0	29	180	50	0	17	119	41	0	862	
7:15 PM	27	130	26	0	50	149	37	0	40	165	42	0	31	116	37	0	850	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
<b>APPROACH %'s :</b>	19.20%	68.78%	12.02%	0.00%	18.87%	67.27%	13.86%	0.00%	13.25%	69.93%	16.82%	0.00%	13.75%	65.16%	21.09%	0.00%	12700	
<b>PEAK HR :</b>	05:30 PM - 06:30 PM																	TOTAL
<b>PEAK HR VOL :</b>	229	781	146	0	238	889	185	0	166	880	187	0	130	630	190	0	4651	
<b>PEAK HR FACTOR :</b>	0.923	0.814	0.890	0.000	0.902	0.900	0.925	0.000	0.902	0.952	0.835	0.000	0.756	0.847	0.880	0.000	0.988	
			0.865			0.937				0.928				0.903				

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** N Victory Blvd & Magnolia Blvd  
**City:** Burbank  
**Control:** Signalized

**Project ID:** 18-05253-009  
**Date:** 4/26/2018

### Total

NS/EW Streets:	N Victory Blvd				N Victory Blvd				Magnolia Blvd				Magnolia Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
7:00 AM	22	65	13	0	26	158	17	0	19	60	22	0	31	61	19	0	513
7:15 AM	19	71	15	0	36	186	13	0	19	69	36	0	30	79	14	0	587
7:30 AM	20	116	12	0	43	241	31	0	12	116	46	0	35	109	32	0	813
7:45 AM	46	127	15	0	50	230	34	0	28	140	62	0	46	137	36	0	951
8:00 AM	42	142	23	0	43	247	21	0	37	117	63	0	57	123	27	0	942
8:15 AM	39	95	19	0	39	218	28	0	20	147	61	0	68	151	41	0	926
8:30 AM	28	110	16	0	64	239	27	0	30	122	59	0	44	118	30	0	887
8:45 AM	35	122	22	1	49	252	30	0	31	140	42	0	53	153	33	0	963
9:00 AM	29	119	13	0	48	242	25	0	21	114	46	0	36	121	36	0	850
9:15 AM	35	117	20	0	44	184	32	0	37	103	52	0	39	122	40	0	825
9:30 AM	32	114	18	0	35	155	37	0	31	121	64	0	47	120	35	0	809
9:45 AM	35	154	21	0	45	167	35	0	34	92	63	0	34	108	38	0	826
<b>TOTAL VOLUMES :</b>	NL 382	NT 1352	NR 207	NU 1	SL 522	ST 2519	SR 330	SU 0	EL 319	ET 1341	ER 616	EU 0	WL 520	WT 1402	WR 381	WU 0	TOTAL 9892
<b>APPROACH %'s :</b>	19.67%	69.62%	10.66%	0.05%	15.49%	74.73%	9.79%	0.00%	14.02%	58.92%	27.07%	0.00%	22.58%	60.88%	16.54%	0.00%	
<b>PEAK HR :</b>	08:00 AM - 09:00 AM																TOTAL
<b>PEAK HR VOL :</b>	144	469	80	1	195	956	106	0	118	526	225	0	222	545	131	0	3718
<b>PEAK HR FACTOR :</b>	0.857	0.826	0.870	0.250	0.762	0.948	0.883	0.000	0.797	0.895	0.893	0.000	0.816	0.891	0.799	0.000	0.965
	0.838				0.949				0.953				0.863				
PM	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
4:30 PM	45	191	23	0	59	189	54	0	31	182	51	0	31	147	56	0	1059
4:45 PM	39	173	25	0	83	214	33	0	39	177	52	0	39	122	48	0	1044
5:00 PM	64	176	36	0	72	214	35	0	36	201	56	0	30	169	59	0	1148
5:15 PM	54	221	38	0	64	224	42	0	38	214	43	0	37	154	56	0	1185
5:30 PM	51	219	40	0	79	225	42	0	33	202	46	0	40	164	56	0	1197
5:45 PM	52	190	36	0	65	195	35	0	42	258	52	0	23	179	53	0	1180
6:00 PM	53	228	37	0	75	235	45	0	44	210	29	0	35	163	46	0	1200
6:15 PM	59	193	31	0	63	197	35	0	42	234	50	0	34	184	52	0	1174
6:30 PM	47	167	31	0	81	245	43	0	44	214	44	0	39	141	52	0	1148
6:45 PM	44	174	26	0	60	184	34	0	27	228	43	0	36	159	48	0	1063
7:00 PM	49	136	22	0	52	158	32	0	37	177	33	0	22	121	43	0	882
7:15 PM	36	143	33	0	72	176	44	0	35	175	30	0	33	144	56	0	977
<b>TOTAL VOLUMES :</b>	NL 593	NT 2211	NR 378	NU 0	SL 825	ST 2456	SR 474	SU 0	EL 448	ET 2472	ER 529	EU 0	WL 399	WT 1847	WR 625	WU 0	TOTAL 13257
<b>APPROACH %'s :</b>	18.64%	69.48%	11.88%	0.00%	21.97%	65.41%	12.62%	0.00%	12.99%	71.67%	15.34%	0.00%	13.90%	64.33%	21.77%	0.00%	
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																TOTAL
<b>PEAK HR VOL :</b>	210	858	151	0	283	879	164	0	157	884	170	0	135	660	211	0	4762
<b>PEAK HR FACTOR :</b>	0.972	0.941	0.944	0.000	0.896	0.935	0.911	0.000	0.892	0.857	0.817	0.000	0.844	0.922	0.942	0.000	0.992
	0.958				0.934				0.860				0.967				







# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S Victory Blvd & W Verdugo Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-023  
 Date: 4/26/2018

NS/EW Streets:		Total																												
		S Victory Blvd				S Victory Blvd				W Verdugo Ave				W Verdugo Ave				NORTHBOUND2				TOTAL								
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				NORTHBOUND2													
	1	2	0	0	1	2	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	N2L	N2U	N2L2	N2T2	N2R2	N2U2
7:00 AM	6	68	2	0	4	102	7	0	43	7	13	23	0	5	0	12	10	0	4	4	0	0	0	0	0	0	0	0	0	0
7:15 AM	11	59	0	0	7	110	13	0	48	13	16	15	0	1	2	20	4	0	1	1	0	0	0	0	0	0	0	0	0	0
7:30 AM	18	96	0	0	3	150	29	0	63	25	21	33	0	2	8	39	9	0	4	4	0	0	0	0	0	0	0	0	0	0
7:45 AM	22	106	9	0	1	6	174	29	0	111	44	36	36	0	14	4	38	21	0	6	0	0	0	0	0	0	0	0	0	0
8:00 AM	19	130	3	1	0	7	172	8	0	74	22	28	40	0	13	5	19	16	0	5	0	0	0	0	0	0	0	0	0	0
8:15 AM	11	104	5	0	0	13	188	12	0	83	10	19	30	0	7	6	14	13	0	5	0	0	0	0	0	0	0	0	0	0
8:30 AM	27	113	3	0	0	16	161	15	0	64	14	21	22	0	3	2	19	10	0	6	0	0	0	0	0	0	0	0	0	0
8:45 AM	15	117	4	0	0	7	156	11	0	93	13	32	35	0	7	5	24	10	0	4	0	0	0	0	0	0	0	0	0	0
9:00 AM	23	117	3	0	0	4	166	8	0	68	14	20	25	0	3	3	22	16	0	1	0	0	0	0	0	0	0	0	0	0
9:15 AM	20	121	5	0	0	8	110	12	0	49	10	14	25	0	6	2	26	11	0	3	0	0	0	0	0	0	0	0	0	0
9:30 AM	19	123	2	0	1	11	135	9	0	44	8	21	24	0	4	3	18	12	0	3	0	0	0	0	0	0	0	0	0	0
9:45 AM	10	107	6	0	0	5	129	7	0	48	15	20	28	0	2	4	20	14	0	3	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL			
<b>APPROACH %'s:</b>	201	1261	42	1	2	91	1753	160	0	788	195	261	336	0	67	44	271	146	0	43	0	0	0	0	0	0	5662			
	13.34%	83.68%	2.79%	0.07%	0.13%	3.26%	62.79%	5.73%	0.00%	28.22%	22.70%	30.38%	39.12%	0.00%	7.80%	8.73%	53.77%	28.97%	0.00%	8.53%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.852			
<b>PEAK HR:</b>	07:30 AM - 08:30 AM																													
<b>PEAK HR VOL:</b>	70	436	17	1	1	29	684	78	0	331	101	104	139	0	36	23	110	59	0	20	0	0	0	0	0	0	2239			
<b>PEAK HR FACTOR:</b>	0.795	0.838	0.472	0.250	0.250	0.558	0.910	0.672	0.000	0.745	0.574	0.722	0.869	0.000	0.643	0.719	0.705	0.702	0.000	0.833	0.000	0.000	0.000	0.000	0.000	0.000	0.852			

NS/EW Streets:		Total																												
		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				NORTHBOUND2				TOTAL								
PM	1	2	0	0	1	2	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0		0	0	0	N2L	N2U	N2L2	N2T2	N2R2
	4:30 PM	31	164	1	0	1	18	143	15	0	44	21	18	38	0	8	2	13	13	0	1	0	0	0	0	0	0	0	0	0
4:45 PM	20	181	8	0	0	8	162	16	0	34	14	25	41	0	6	3	15	10	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	37	226	4	1	0	9	178	21	0	49	17	28	41	0	3	1	27	11	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	25	198	4	0	0	14	193	7	0	47	30	29	43	0	5	3	21	15	0	6	0	0	0	0	0	0	0	0	0	0
5:30 PM	25	208	3	0	0	9	178	21	0	47	25	24	41	0	5	3	25	10	0	4	0	0	0	0	0	0	0	0	0	0
5:45 PM	23	207	7	0	0	16	170	10	0	57	13	29	56	0	7	1	35	10	0	4	0	0	0	0	0	0	0	0	0	0
6:00 PM	25	191	6	0	0	11	168	15	2	41	23	45	46	0	9	2	37	17	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	27	168	5	0	0	11	188	18	0	45	16	24	42	0	5	1	19	11	0	1	0	0	0	0	0	0	0	0	0	0
6:30 PM	26	146	2	0	0	10	195	11	0	41	16	23	43	0	4	5	30	10	0	1	0	0	0	0	0	0	0	0	0	0
6:45 PM	19	153	5	0	0	9	171	11	0	47	12	20	31	0	5	2	10	14	0	2	0	0	0	0	0	0	0	0	0	0
7:00 PM	20	153	6	0	0	3	117	8	0	30	20	21	39	0	10	3	15	10	0	1	0	0	0	0	0	0	0	0	0	0
7:15 PM	16	147	4	0	0	4	131	12	0	28	11	19	20	0	4	0	8	11	0	2	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES:</b>	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	N2L	N2U	N2L2	N2T2	N2R2	N2U2	TOTAL			
<b>APPROACH %'s:</b>	294	2142	55	1	1	122	1994	165	2	510	218	305	481	0	71	26	255	142	0	22	0	0	0	0	0	0	6806			
	11.79%	85.02%	2.21%	0.04%	0.04%	4.37%	71.39%	5.91%	0.07%	18.36%	20.28%	28.37%	44.74%	0.00%	6.60%	5.84%	57.30%	31.91%	0.00%	4.54%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.982			
<b>PEAK HR:</b>	05:00 PM - 06:00 PM																													
<b>PEAK HR VOL:</b>	110	839	18	1	0	48	719	59	0	200	85	110	181	0	20	8	108	46	0	14	0	0	0	0	0	0	0	0	0	0
<b>PEAK HR FACTOR:</b>	0.743	0.928	0.643	0.250	0.000	0.750	0.931	0.702	0.000	0.877	0.708	0.948	0.808	0.000	0.714	0.667	0.771	0.767	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.982

National Data & Surveying Services

# Intersection Turning Movement Count

Location: N Glenoaks Blvd & E Olive Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-027  
 Date: 4/24/2018

**Total**

NS/EW Streets:	N Glenoaks Blvd				N Glenoaks Blvd				E Olive Ave				E Olive Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
7:00 AM	23	65	10	0	9	135	32	0	10	22	13	0	18	46	14	0	397
7:15 AM	26	66	1	0	7	166	47	0	6	13	9	0	28	92	9	0	470
7:30 AM	36	114	6	0	9	174	35	0	21	27	12	0	25	86	6	0	551
7:45 AM	27	157	5	0	18	171	50	0	28	37	19	0	46	109	12	0	679
8:00 AM	30	106	4	0	11	237	38	0	24	30	21	0	28	103	9	0	641
8:15 AM	28	128	14	0	11	204	42	0	24	31	17	0	22	100	11	0	632
8:30 AM	47	121	8	0	12	235	49	0	17	24	25	0	27	118	6	0	689
8:45 AM	41	145	4	0	12	208	49	0	28	40	19	0	25	104	8	0	683
9:00 AM	38	122	10	0	13	187	54	0	18	29	19	0	21	91	10	0	612
9:15 AM	32	143	7	0	15	193	42	0	24	27	20	0	15	99	10	0	627
9:30 AM	33	131	19	0	19	185	54	0	24	36	22	0	10	81	14	0	628
9:45 AM	44	164	17	0	10	146	43	0	20	34	23	0	19	76	14	0	610
<b>TOTAL VOLUMES :</b>	NL 405	NT 1462	NR 105	NU 0	SL 146	ST 2241	SR 535	SU 0	EL 244	ET 350	ER 219	EU 0	WL 284	WT 1105	WR 123	WU 0	TOTAL 7219
<b>APPROACH %'s :</b>	20.54%	74.14%	5.32%	0.00%	5.00%	76.69%	18.31%	0.00%	30.01%	43.05%	26.94%	0.00%	18.78%	73.08%	8.13%	0.00%	
<b>PEAK HR :</b>	08:00 AM - 09:00 AM																TOTAL
<b>PEAK HR VOL :</b>	146	500	30	0	46	884	178	0	93	125	82	0	102	425	34	0	TOTAL
<b>PEAK HR FACTOR :</b>	0.777	0.862	0.536	0.000	0.958	0.932	0.908	0.000	0.830	0.781	0.820	0.000	0.911	0.900	0.773	0.000	0.960
	0.889				0.936				0.862				0.929				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
4:30 PM	32	225	18	0	17	204	37	0	38	56	28	0	15	56	10	0	736
4:45 PM	32	227	17	0	17	214	20	0	42	64	27	0	17	50	8	0	735
5:00 PM	35	251	27	0	15	257	43	0	51	71	37	0	12	58	19	1	877
5:15 PM	27	263	19	0	18	213	24	0	50	94	46	0	21	63	10	0	848
5:30 PM	21	249	15	0	31	244	14	0	46	87	41	0	21	54	22	0	845
5:45 PM	33	249	18	1	17	247	34	0	47	96	38	0	9	47	14	0	850
6:00 PM	32	280	24	0	19	274	25	0	43	71	37	0	14	46	18	0	883
6:15 PM	20	218	21	0	24	248	29	0	56	83	42	0	12	38	11	0	802
6:30 PM	16	239	17	0	21	202	22	0	51	73	27	0	15	41	9	0	733
6:45 PM	22	225	17	0	18	208	17	0	39	67	31	0	11	39	23	0	717
7:00 PM	24	217	12	0	15	209	24	0	40	66	32	0	13	38	15	0	705
7:15 PM	27	194	16	0	19	187	19	0	47	60	34	0	13	46	12	0	674
<b>TOTAL VOLUMES :</b>	NL 321	NT 2837	NR 221	NU 1	SL 231	ST 2707	SR 308	SU 0	EL 550	ET 888	ER 420	EU 0	WL 173	WT 576	WR 171	WU 1	TOTAL 9405
<b>APPROACH %'s :</b>	9.50%	83.93%	6.54%	0.03%	7.12%	83.39%	9.49%	0.00%	29.60%	47.79%	22.60%	0.00%	18.78%	62.54%	18.57%	0.11%	
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																TOTAL
<b>PEAK HR VOL :</b>	113	1041	76	1	85	978	97	0	186	348	162	0	65	210	64	0	TOTAL
<b>PEAK HR FACTOR :</b>	0.856	0.929	0.792	0.250	0.685	0.892	0.713	0.000	0.930	0.906	0.880	0.000	0.774	0.833	0.727	0.000	0.970
	0.916				0.912				0.916				0.874				

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** N Glenoaks Blvd & E Olive Ave  
**City:** Burbank  
**Control:** Signalized

**Project ID:** 18-05253-027  
**Date:** 4/25/2018

### Total

NS/EW Streets:	N Glenoaks Blvd				N Glenoaks Blvd				E Olive Ave				E Olive Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
7:00 AM	24	94	9	0	10	164	37	0	19	28	11	0	27	68	6	0	497
7:15 AM	28	112	6	0	9	229	27	0	13	28	9	0	22	85	7	0	575
7:30 AM	37	158	6	0	13	233	33	0	25	26	13	0	26	89	13	0	672
7:45 AM	47	239	10	0	17	294	50	0	35	38	17	0	35	140	16	1	939
8:00 AM	37	133	8	0	13	331	44	0	23	21	23	0	36	109	12	0	790
8:15 AM	39	194	5	0	11	282	56	0	27	28	27	0	39	113	8	0	829
8:30 AM	35	129	14	0	11	260	34	0	19	37	28	0	24	107	16	0	714
8:45 AM	50	168	14	0	16	298	59	0	23	44	18	0	29	93	4	0	816
9:00 AM	46	154	14	0	7	269	59	0	22	35	20	0	22	136	8	0	792
9:15 AM	28	154	6	0	11	255	64	0	20	37	24	0	21	90	13	0	723
9:30 AM	34	140	12	0	13	242	57	0	20	31	27	0	31	90	6	0	703
9:45 AM	31	173	11	0	16	219	45	0	27	33	29	0	26	105	14	0	729
<b>TOTAL VOLUMES :</b>	436	1848	115	0	147	3076	565	0	273	386	246	0	338	1225	123	1	8779
<b>APPROACH %'s :</b>	18.17%	77.03%	4.79%	0.00%	3.88%	81.20%	14.92%	0.00%	30.17%	42.65%	27.18%	0.00%	20.04%	72.61%	7.29%	0.06%	
<b>PEAK HR :</b>	07:45 AM - 08:45 AM																TOTAL
<b>PEAK HR VOL :</b>	158	695	37	0	52	1167	184	0	104	124	95	0	134	469	52	1	3272
<b>PEAK HR FACTOR :</b>	0.840	0.727	0.661	0.000	0.765	0.881	0.821	0.000	0.743	0.816	0.848	0.000	0.859	0.838	0.813	0.250	0.871
	0.752				0.904				0.897				0.854				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL
4:30 PM	30	218	19	0	12	218	37	0	37	68	30	0	16	62	15	0	762
4:45 PM	28	260	27	0	17	258	28	0	41	56	36	1	21	56	12	0	841
5:00 PM	45	254	12	0	12	247	31	0	55	78	32	0	9	61	21	0	857
5:15 PM	37	252	16	0	24	290	31	0	61	82	40	0	13	54	15	0	915
5:30 PM	46	242	20	0	26	246	32	0	52	86	51	0	13	50	18	0	882
5:45 PM	27	265	12	0	20	284	33	0	62	92	48	0	15	48	8	0	914
6:00 PM	31	265	18	0	25	220	32	1	55	103	39	0	18	62	15	0	884
6:15 PM	28	276	26	0	16	285	35	0	41	67	41	0	16	65	17	0	913
6:30 PM	24	240	13	0	15	226	23	0	53	94	45	0	19	61	15	0	828
6:45 PM	18	216	22	0	15	224	23	0	48	87	40	0	20	45	13	0	771
7:00 PM	29	216	22	0	16	200	27	0	39	67	24	0	12	56	13	0	721
7:15 PM	29	204	26	1	19	191	20	2	29	74	24	0	13	50	16	0	698
<b>TOTAL VOLUMES :</b>	372	2908	233	1	217	2889	352	3	573	954	450	1	185	670	178	0	9986
<b>APPROACH %'s :</b>	10.59%	82.75%	6.63%	0.03%	6.27%	83.47%	10.17%	0.09%	28.97%	48.23%	22.75%	0.05%	17.91%	64.86%	17.23%	0.00%	
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																TOTAL
<b>PEAK HR VOL :</b>	141	1024	66	0	95	1040	128	1	230	363	178	0	59	214	56	0	3595
<b>PEAK HR FACTOR :</b>	0.766	0.966	0.825	0.000	0.913	0.897	0.970	0.250	0.927	0.881	0.873	0.000	0.819	0.863	0.778	0.000	0.982
	0.980				0.916				0.954				0.866				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: N Glenoaks Blvd & E Olive Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-027  
 Date: 4/26/2018

**Total**

NS/EW Streets:	N Glenoaks Blvd				N Glenoaks Blvd				E Olive Ave				E Olive Ave				TOTAL	
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL	
7:00 AM	29	97	3	0	10	174	45	0	12	12	10	0	10	50	10	0	462	
7:15 AM	24	99	7	1	9	221	38	0	12	17	10	0	27	87	8	0	560	
7:30 AM	32	126	9	0	12	244	41	0	20	20	17	0	33	117	11	0	682	
7:45 AM	47	224	8	0	14	234	45	0	34	34	16	0	39	124	16	0	835	
8:00 AM	40	155	2	0	11	337	54	0	23	30	16	0	39	118	10	0	835	
8:15 AM	31	188	11	0	14	293	47	0	20	32	20	0	27	102	12	0	797	
8:30 AM	44	145	10	0	12	256	62	0	24	31	16	0	31	109	9	0	749	
8:45 AM	47	168	12	0	11	318	61	0	22	29	39	0	24	93	8	0	832	
9:00 AM	58	151	11	0	15	226	54	0	28	33	20	0	18	100	11	0	725	
9:15 AM	38	147	6	0	10	236	56	0	20	36	25	0	22	81	6	0	683	
9:30 AM	38	148	6	0	16	214	35	0	29	22	21	0	24	80	7	0	640	
9:45 AM	38	146	12	0	13	172	57	0	17	19	29	0	32	78	7	0	620	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
<b>APPROACH %'s :</b>	19.76%	76.08%	4.11%	0.04%	4.01%	79.77%	16.23%	0.00%	32.02%	38.65%	29.33%	0.00%	20.63%	72.09%	7.28%	0.00%	8420	
<b>PEAK HR :</b>	07:45 AM - 08:45 AM																	TOTAL
<b>PEAK HR VOL :</b>	162	712	31	0	51	1120	208	0	101	127	68	0	136	453	47	0	3216	
<b>PEAK HR FACTOR :</b>	0.862	0.795	0.705	0.000	0.911	0.831	0.839	0.000	0.743	0.934	0.850	0.000	0.872	0.913	0.734	0.000	0.963	
		0.811				0.858				0.881				0.888				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	TOTAL	
4:30 PM	24	247	14	0	17	258	32	0	50	69	30	0	14	40	15	0	810	
4:45 PM	39	271	19	0	14	256	33	0	54	64	33	0	16	50	11	0	860	
5:00 PM	23	304	24	0	20	242	37	0	42	70	43	0	18	57	18	0	898	
5:15 PM	29	286	12	0	29	294	38	0	62	83	43	0	15	38	15	0	944	
5:30 PM	35	262	17	0	15	270	23	0	49	68	37	0	13	55	11	0	855	
5:45 PM	31	337	17	0	29	250	28	0	59	69	29	0	17	65	17	0	948	
6:00 PM	29	278	18	0	25	265	18	0	53	88	37	0	21	71	20	0	923	
6:15 PM	28	288	17	0	26	290	26	0	46	83	34	0	11	61	14	0	924	
6:30 PM	30	278	17	0	22	248	32	0	47	77	44	0	19	49	12	0	875	
6:45 PM	24	247	14	0	18	218	27	0	43	83	36	0	14	44	16	0	784	
7:00 PM	29	229	20	0	14	202	17	0	48	53	35	0	14	54	6	0	721	
7:15 PM	31	187	14	0	14	205	30	0	47	67	36	0	17	53	17	0	718	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
<b>APPROACH %'s :</b>	9.34%	85.27%	5.39%	0.00%	6.78%	83.70%	9.52%	0.00%	31.40%	45.74%	22.87%	0.00%	18.94%	63.83%	17.23%	0.00%	10260	
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																	TOTAL
<b>PEAK HR VOL :</b>	124	1163	64	0	98	1079	107	0	223	308	146	0	66	229	63	0	3670	
<b>PEAK HR FACTOR :</b>	0.886	0.863	0.889	0.000	0.845	0.918	0.704	0.000	0.899	0.875	0.849	0.000	0.786	0.806	0.788	0.000	0.968	
		0.877				0.889				0.900				0.799				



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S First St & E Olive Ave/ N Bonnywood Pl  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-014  
 Date: 4/25/2018

NS/EW Streets:		Total																				TOTAL					
		S First St					S First St					E Olive Ave/ N Bonnywood Pl					E Olive Ave/ N Bonnywood Pl										
AM	NS/EW Streets:	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					TOTAL					
		1	2	0	0	0	1	2	1	0	0	1	2	0	0	0	1	2	1	0	0						
	7:00 AM	27	16	9	0	0	7	24	15	0	3	11	70	14	0	0	15	114	11	0	7	0	0	0	0	0	343
	7:15 AM	35	31	8	0	2	5	24	13	0	0	22	49	30	0	0	10	116	16	0	7	0	0	0	0	0	368
	7:30 AM	36	47	7	0	0	7	43	22	0	0	27	99	23	0	1	5	168	37	0	10	0	0	0	0	0	532
	7:45 AM	46	31	11	0	0	13	57	29	0	1	39	109	31	0	0	15	157	28	0	9	0	0	0	0	0	576
	8:00 AM	53	27	4	0	1	10	50	22	0	3	33	76	31	0	0	11	201	24	0	13	0	0	0	0	0	559
	8:15 AM	56	28	10	0	2	11	65	16	0	1	35	102	26	0	0	13	183	26	0	6	0	0	0	0	0	580
	8:30 AM	47	31	18	0	0	12	44	15	0	2	33	84	22	0	1	12	175	17	0	5	0	0	0	0	0	518
	8:45 AM	61	57	20	0	1	14	64	25	0	4	31	88	26	0	1	5	191	20	0	4	0	0	0	0	0	612
	9:00 AM	58	45	10	0	0	14	38	22	0	2	22	121	25	0	0	14	227	19	0	8	0	0	0	0	0	625
	9:15 AM	69	40	15	0	0	10	40	24	0	5	19	76	28	0	0	10	165	25	0	4	0	0	0	0	0	530
	9:30 AM	54	53	8	0	1	7	38	15	0	3	28	105	36	0	2	6	168	26	0	3	0	0	0	0	0	553
	9:45 AM	58	41	17	0	0	10	42	19	0	4	36	113	45	0	0	9	167	28	0	5	0	0	0	0	0	594
	TOTAL VOLUMES:	600	447	137	0	7	120	520	237	0	28	336	1102	337	0	5	125	2022	277	0	81	0	0	0	0	0	6390
	APPROACH %:	50.38%	37.53%	11.50%	0.00%	0.59%	13.13%	57.88%	25.93%	0.00%	3.06%	18.88%	61.91%	18.93%	0.00%	0.28%	4.99%	80.72%	11.06%	0.00%	3.23%	0	0	0	0	0	
	PEAK HR VOL:	222	161	58	0	3	51	211	78	0	9	121	405	99	0	2	44	766	82	0	23	0	0	0	0	0	2335
	PEAK HR FACTOR:	0.910	0.706	0.725	0.000	0.375	0.911	0.812	0.780	0.000	0.563	0.864	0.837	0.952	0.000	0.500	0.786	0.844	0.788	0.000	0.719	0.000	0.000	0.000	0.000	0.000	0.934

PM	NS/EW Streets:	Total																				TOTAL					
		NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND										
1	2	0	0	0	1	2	1	0	0	1	2	0	0	0	1	2	1	0	0								
	4:30 PM	51	91	14	0	1	15	83	32	1	3	59	153	36	0	0	13	114	32	0	2	0	0	0	0	0	700
	4:45 PM	42	84	15	0	0	11	72	32	0	2	83	199	68	0	1	15	125	41	0	9	0	0	0	0	0	799
	5:00 PM	50	79	15	0	1	23	86	37	0	0	82	178	60	0	1	20	119	36	0	6	0	0	0	0	0	793
	5:15 PM	39	85	14	0	0	13	111	38	0	2	105	200	61	0	0	15	129	22	0	8	0	0	0	0	0	842
	5:30 PM	43	61	15	0	0	15	73	35	0	3	98	218	60	0	0	18	106	29	0	6	0	0	0	0	0	780
	5:45 PM	50	88	15	0	0	15	89	33	0	1	88	175	59	0	0	15	113	26	0	6	0	0	0	0	0	773
	6:00 PM	42	76	12	0	1	12	74	21	0	0	84	213	65	0	0	12	127	29	0	6	0	0	0	0	0	774
	6:15 PM	52	80	19	0	2	17	109	36	0	0	105	196	52	0	0	16	110	23	0	7	0	0	0	0	0	824
	6:30 PM	27	79	17	0	1	11	95	30	0	2	101	231	71	0	0	10	119	34	0	7	0	0	0	0	0	835
	6:45 PM	38	71	14	0	0	17	92	28	0	1	87	175	60	0	0	13	90	28	0	4	0	0	0	0	0	718
	7:00 PM	24	57	15	0	0	11	86	30	0	0	73	157	47	0	1	17	114	19	0	5	0	0	0	0	0	656
	7:15 PM	24	55	16	0	1	14	94	32	0	2	37	155	42	0	3	12	92	26	1	6	0	0	0	0	0	612
	TOTAL VOLUMES:	482	906	181	0	7	174	1064	384	1	16	1002	2220	681	0	6	176	1358	345	1	72	0	0	0	0	0	9106
	APPROACH %:	30.58%	57.49%	11.48%	0.00%	0.44%	10.62%	64.92%	23.43%	0.06%	0.88%	17.29%	57.12%	17.29%	0.00%	0.15%	9.02%	69.57%	17.67%	0.05%	3.69%	0	0	0	0	0	
	PEAK HR VOL:	174	309	59	0	1	62	342	142	0	7	368	795	249	0	2	68	479	128	0	29	0	0	0	0	0	3214
	PEAK HR FACTOR:	0.870	0.909	0.983	0.000	0.250	0.674	0.770	0.934	0.000	0.583	0.876	0.912	0.915	0.000	0.500	0.850	0.928	0.780	0.000	0.806	0.000	0.000	0.000	0.000	0.000	0.954





# National Data & Surveying Services

## Intersection Turning Movement Count

Location: N Victory Blvd & W Olive Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-010  
 Date: 4/24/2018

### Total

NS/EW Streets:	N Victory Blvd				N Victory Blvd				W Olive Ave				W Olive Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	11	73	7	0	31	143	50	0	22	48	7	0	17	108	25	0	
7:15 AM	11	69	17	0	32	180	38	0	20	77	5	0	17	126	19	0	
7:30 AM	17	116	23	0	37	260	46	0	27	81	7	0	21	154	15	0	
7:45 AM	31	118	20	0	46	237	45	0	37	140	15	0	26	170	21	0	
8:00 AM	28	104	23	0	35	209	44	0	30	89	16	0	25	171	28	0	
8:15 AM	40	88	26	0	44	261	70	0	38	101	16	0	29	170	26	0	
8:30 AM	17	114	21	0	46	214	79	0	45	128	9	0	20	204	34	0	
8:45 AM	11	117	29	0	39	263	69	0	44	128	13	0	24	175	32	0	
9:00 AM	12	106	17	0	42	173	63	0	48	93	6	0	24	169	34	0	
9:15 AM	10	89	21	0	34	144	58	0	49	103	17	0	15	166	20	0	
9:30 AM	11	98	22	0	21	155	70	0	60	143	10	0	23	145	42	0	
9:45 AM	15	94	26	0	42	148	46	0	61	109	19	0	19	152	42	0	
<b>TOTAL VOLUMES :</b>	NL 214	NT 1186	NR 252	NU 0	SL 449	ST 2387	SR 678	SU 0	EL 481	ET 1240	ER 140	EU 0	WL 260	WT 1910	WR 338	WU 0	<b>TOTAL</b> 9535
<b>APPROACH %'s :</b>	12.95%	71.79%	15.25%	0.00%	12.78%	67.93%	19.29%	0.00%	25.85%	66.63%	7.52%	0.00%	10.37%	76.16%	13.48%	0.00%	
<b>PEAK HR :</b>	08:00 AM - 09:00 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	96	423	99	0	164	947	262	0	157	446	54	0	98	720	120	0	3586
<b>PEAK HR FACTOR :</b>	0.600	0.904	0.853	0.000	0.891	0.900	0.829	0.000	0.872	0.871	0.844	0.000	0.845	0.882	0.882	0.000	0.950
			0.984			0.915				0.888				0.909			
PM	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:30 PM	18	131	25	0	36	167	57	1	56	174	12	0	30	147	55	0	
4:45 PM	18	150	30	0	41	205	50	0	53	227	17	0	27	149	43	0	
5:00 PM	16	169	49	0	37	238	50	0	39	210	13	0	32	151	49	0	
5:15 PM	12	153	33	0	42	196	61	0	53	277	6	0	24	152	52	0	
5:30 PM	26	176	33	0	46	215	49	0	50	234	10	0	24	139	39	0	
5:45 PM	22	156	21	0	50	196	41	0	55	247	14	0	32	156	44	0	
6:00 PM	16	172	33	0	39	174	42	0	47	260	9	0	22	158	67	0	
6:15 PM	16	136	34	0	47	224	44	0	51	243	10	0	22	129	47	0	
6:30 PM	11	128	23	0	40	187	33	0	57	246	10	0	20	124	38	0	
6:45 PM	8	128	27	0	38	188	57	0	54	193	7	0	17	91	36	0	
7:00 PM	13	94	31	0	37	132	53	0	55	195	6	0	21	118	40	0	
7:15 PM	9	104	27	0	33	151	48	0	31	182	11	0	23	127	33	0	
<b>TOTAL VOLUMES :</b>	NL 185	NT 1697	NR 366	NU 0	SL 486	ST 2273	SR 585	SU 1	EL 601	ET 2688	ER 125	EU 0	WL 294	WT 1641	WR 543	WU 0	<b>TOTAL</b> 11485
<b>APPROACH %'s :</b>	8.23%	75.49%	16.28%	0.00%	14.53%	67.95%	17.49%	0.03%	17.60%	78.73%	3.66%	0.00%	11.86%	66.22%	21.91%	0.00%	
<b>PEAK HR :</b>	05:00 PM - 06:00 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	76	654	136	0	175	845	201	0	197	968	43	0	112	598	184	0	4189
<b>PEAK HR FACTOR :</b>	0.731	0.929	0.694	0.000	0.875	0.888	0.824	0.000	0.895	0.874	0.768	0.000	0.875	0.958	0.885	0.000	0.987
			0.921			0.939				0.899				0.963			

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** N Victory Blvd & W Olive Ave  
**City:** Burbank  
**Control:** Signalized

**Project ID:** 18-05253-010  
**Date:** 4/25/2018

### Total

NS/EW Streets:	N Victory Blvd				N Victory Blvd				W Olive Ave				W Olive Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
7:00 AM	6	63	11	0	40	151	49	0	19	56	7	0	18	125	20	0	565
7:15 AM	13	73	19	0	43	174	33	0	27	84	9	0	13	138	12	0	638
7:30 AM	19	114	39	0	38	278	47	0	33	104	7	0	28	164	34	0	905
7:45 AM	32	139	24	0	37	288	57	0	42	127	13	0	35	181	27	0	1002
8:00 AM	35	103	25	0	39	255	60	0	38	96	10	0	27	195	23	0	906
8:15 AM	30	123	31	0	42	255	77	0	47	105	7	0	33	188	23	0	961
8:30 AM	18	109	25	0	40	218	65	0	37	137	9	0	14	204	32	0	908
8:45 AM	15	108	21	0	45	237	72	1	31	115	5	0	34	160	46	0	890
9:00 AM	11	88	23	0	29	206	51	0	34	131	10	0	33	228	38	0	882
9:15 AM	22	102	22	0	40	200	70	0	45	88	8	0	36	135	33	0	801
9:30 AM	8	81	27	0	39	173	54	0	64	133	9	0	25	168	37	0	818
9:45 AM	16	111	30	0	40	172	63	0	46	154	12	0	28	163	33	0	868
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	12.96%	69.93%	17.11%	0.00%	12.49%	69.00%	18.48%	0.03%	24.38%	70.04%	5.58%	0.00%	11.86%	75.03%	13.11%	0.00%	10144
<b>PEAK HR :</b>	<b>07:45 AM - 08:45 AM</b>																TOTAL
<b>PEAK HR VOL :</b>	115	474	105	0	158	1016	259	0	164	465	39	0	109	768	105	0	3777
<b>PEAK HR FACTOR :</b>	0.821	0.853	0.847	0.000	0.940	0.882	0.841	0.000	0.872	0.849	0.750	0.000	0.779	0.941	0.820	0.000	0.942
		0.890				0.938				0.913				0.982			
PM	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
4:30 PM	7	162	24	0	42	180	65	0	57	207	6	0	22	136	52	0	960
4:45 PM	20	154	42	0	38	188	59	0	58	230	15	0	16	145	52	0	1017
5:00 PM	27	181	65	0	45	229	48	0	60	215	10	0	36	144	58	0	1118
5:15 PM	12	190	42	0	38	211	59	1	54	281	6	0	33	179	47	0	1153
5:30 PM	14	199	66	0	49	216	46	0	44	244	7	0	27	150	48	0	1110
5:45 PM	18	170	44	0	52	205	59	0	51	242	10	0	37	159	53	0	1100
6:00 PM	24	178	38	0	51	260	59	0	48	249	9	0	33	172	57	0	1178
6:15 PM	12	155	47	0	58	232	49	0	45	245	10	0	37	155	32	0	1077
6:30 PM	16	127	32	0	40	208	41	0	40	288	10	0	14	144	33	0	993
6:45 PM	23	130	27	0	42	186	49	0	50	229	8	0	19	126	31	0	920
7:00 PM	14	121	22	0	42	147	59	0	48	193	7	0	25	119	27	0	824
7:15 PM	9	90	25	0	39	137	44	0	49	195	10	0	21	112	31	0	762
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	7.76%	73.49%	18.76%	0.00%	15.00%	67.14%	17.83%	0.03%	17.11%	79.83%	3.06%	0.00%	12.39%	67.43%	20.18%	0.00%	12212
<b>PEAK HR :</b>	<b>05:15 PM - 06:15 PM</b>																TOTAL
<b>PEAK HR VOL :</b>	68	737	190	0	190	892	223	1	197	1016	32	0	130	660	205	0	4541
<b>PEAK HR FACTOR :</b>	0.708	0.926	0.720	0.000	0.913	0.858	0.945	0.250	0.912	0.904	0.800	0.000	0.878	0.922	0.899	0.000	0.964
		0.892				0.882				0.913				0.949			

National Data & Surveying Services

# Intersection Turning Movement Count

Location: N Victory Blvd & W Olive Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-010  
 Date: 4/26/2018

**Total**

NS/EW Streets:	N Victory Blvd				N Victory Blvd				W Olive Ave				W Olive Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
<b>AM</b>																	
7:00 AM	13	65	11	0	28	132	41	0	16	46	8	0	14	127	16	0	517
7:15 AM	8	66	24	0	49	173	37	0	32	79	4	0	15	134	18	0	639
7:30 AM	21	121	30	0	45	247	48	0	33	83	5	0	25	166	26	0	850
7:45 AM	29	129	19	0	35	272	45	0	32	126	19	0	33	196	42	0	977
8:00 AM	26	129	29	0	47	242	69	0	37	92	13	0	41	210	19	0	954
8:15 AM	30	87	19	0	34	246	66	0	43	137	16	0	33	172	27	0	910
8:30 AM	17	105	24	0	44	217	70	0	35	132	9	0	21	214	21	0	909
8:45 AM	8	121	19	0	60	260	69	0	43	106	9	0	29	154	42	0	920
9:00 AM	14	103	29	0	35	196	49	0	53	137	13	0	32	207	29	0	897
9:15 AM	15	118	26	0	30	198	62	0	37	116	6	0	18	155	31	0	812
9:30 AM	10	101	26	0	40	147	63	0	69	117	5	0	29	163	30	0	800
9:45 AM	15	117	17	0	48	167	56	0	71	120	11	0	24	161	38	0	845
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	206	1262	273	0	495	2497	675	0	501	1291	118	0	314	2059	339	0	10030
	11.83%	72.49%	15.68%	0.00%	13.50%	68.09%	18.41%	0.00%	26.23%	67.59%	6.18%	0.00%	11.58%	75.92%	12.50%	0.00%	
<b>PEAK HR :</b>	<b>07:45 AM - 08:45 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	102	450	91	0	160	977	250	0	147	487	57	0	128	792	109	0	3750
<b>PEAK HR FACTOR :</b>	0.850	0.872	0.784	0.000	0.851	0.898	0.893	0.000	0.855	0.889	0.750	0.000	0.780	0.925	0.649	0.000	0.960
	0.874				0.969				0.881				0.949				
<b>PM</b>																	
4:30 PM	17	134	36	0	37	183	54	0	51	223	8	0	20	110	52	0	925
4:45 PM	17	138	48	0	43	216	64	0	50	269	10	0	23	169	40	0	1087
5:00 PM	18	207	60	0	38	225	55	0	47	210	11	0	29	160	47	0	1107
5:15 PM	17	180	45	0	47	228	69	0	63	285	10	0	25	163	59	0	1191
5:30 PM	16	194	44	0	52	251	53	0	46	242	10	0	20	144	41	0	1113
5:45 PM	20	162	57	0	49	198	69	0	60	252	11	0	26	151	58	0	1113
6:00 PM	28	188	41	0	58	222	43	0	51	262	10	0	25	177	64	0	1169
6:15 PM	14	144	27	0	48	222	48	0	57	266	6	0	30	143	46	0	1051
6:30 PM	11	145	30	0	40	231	50	0	37	285	7	0	26	136	37	0	1035
6:45 PM	14	123	29	0	38	202	39	0	58	239	13	0	18	127	48	0	948
7:00 PM	7	151	45	0	39	142	42	0	49	250	7	0	16	114	26	0	888
7:15 PM	9	105	32	0	41	138	58	0	53	228	8	0	17	92	23	0	804
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	188	1871	494	0	530	2458	644	0	622	3011	111	0	275	1686	541	0	12431
	7.36%	73.29%	19.35%	0.00%	14.59%	67.68%	17.73%	0.00%	16.61%	80.42%	2.96%	0.00%	10.99%	67.39%	21.62%	0.00%	
<b>PEAK HR :</b>	<b>05:15 PM - 06:15 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	81	724	187	0	206	899	234	0	220	1041	41	0	96	635	222	0	4586
<b>PEAK HR FACTOR :</b>	0.723	0.933	0.820	0.000	0.888	0.895	0.848	0.000	0.873	0.913	0.932	0.000	0.923	0.897	0.867	0.000	0.963
	0.965				0.940				0.909				0.896				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: S Glenoaks Blvd & E Verdugo Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-016  
 Date: 4/24/2018

**Total**

NS/EW Streets:	S Glenoaks Blvd				S Glenoaks Blvd				E Verdugo Ave				E Verdugo Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	17	83	1	0	4	130	55	0	8	8	1	0	5	49	6	0	371
7:15 AM	21	97	6	0	4	156	55	0	10	15	9	0	4	50	11	0	438
7:30 AM	23	131	1	0	4	172	46	0	11	17	9	0	12	93	9	0	528
7:45 AM	14	128	2	0	9	192	53	0	10	23	9	0	9	62	8	0	519
8:00 AM	17	132	5	0	11	195	40	0	13	18	17	0	10	67	3	0	528
8:15 AM	32	124	3	0	6	214	46	1	16	20	11	0	13	63	13	0	562
8:30 AM	19	162	7	0	4	233	54	1	10	19	14	0	14	66	5	0	608
8:45 AM	21	154	4	0	4	191	34	0	10	14	7	0	12	58	8	0	517
9:00 AM	15	144	7	0	2	187	33	1	9	10	16	0	6	59	9	0	498
9:15 AM	11	139	5	0	3	195	36	0	11	18	13	0	7	51	6	0	495
9:30 AM	23	168	6	0	7	171	25	0	13	15	11	0	18	63	10	0	530
9:45 AM	19	169	7	0	7	165	49	0	19	21	12	0	11	46	8	0	533
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	12.10%	85.08%	2.82%	0.00%	2.32%	78.64%	18.94%	0.11%	29.98%	42.40%	27.62%	0.00%	12.82%	77.01%	10.17%	0.00%	6127
<b>PEAK HR :</b>	07:45 AM - 08:45 AM																TOTAL
<b>PEAK HR VOL :</b>	82	546	17	0	30	834	193	2	49	80	51	0	46	258	29	0	2217
<b>PEAK HR FACTOR :</b>	0.641	0.843	0.607	0.000	0.682	0.895	0.894	0.500	0.766	0.870	0.750	0.000	0.821	0.963	0.558	0.000	0.912
	0.858				0.907				0.938				0.935				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
4:30 PM	18	215	15	0	14	221	23	0	20	43	23	0	7	25	3	0	627
4:45 PM	10	268	18	0	8	219	24	0	28	46	34	0	7	29	6	0	697
5:00 PM	19	246	12	0	15	281	23	1	28	30	25	0	9	43	7	0	739
5:15 PM	20	282	13	0	13	246	27	0	22	45	27	0	11	42	7	0	755
5:30 PM	14	257	9	0	7	243	33	0	25	64	28	0	16	32	11	0	739
5:45 PM	19	253	15	0	12	250	31	0	23	53	26	0	11	22	5	0	720
6:00 PM	19	228	16	0	12	277	21	0	17	45	28	0	8	31	19	0	721
6:15 PM	17	227	9	0	13	229	28	0	29	46	26	0	12	36	10	0	682
6:30 PM	13	237	10	0	12	178	17	1	18	42	19	0	12	28	10	0	597
6:45 PM	19	206	8	1	14	230	33	0	24	50	16	0	17	30	9	0	657
7:00 PM	16	205	11	0	10	193	28	0	18	44	17	0	5	34	16	0	597
7:15 PM	17	195	15	0	13	198	23	0	25	39	22	0	6	24	7	0	584
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	6.34%	88.87%	4.76%	0.03%	4.44%	85.84%	9.66%	0.06%	24.84%	49.06%	26.10%	0.00%	19.93%	61.94%	18.12%	0.00%	8115
<b>PEAK HR :</b>	05:00 PM - 06:00 PM																TOTAL
<b>PEAK HR VOL :</b>	72	1038	49	0	47	1020	114	1	98	192	106	0	47	139	30	0	2953
<b>PEAK HR FACTOR :</b>	0.900	0.920	0.817	0.000	0.783	0.907	0.864	0.250	0.875	0.750	0.946	0.000	0.734	0.808	0.682	0.000	0.978
	0.920				0.923				0.846				0.900				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: S Glenoaks Blvd & E Verdugo Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-016  
 Date: 4/25/2018

**Total**

NS/EW Streets:	S Glenoaks Blvd				S Glenoaks Blvd				E Verdugo Ave				E Verdugo Ave				TOTAL	
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU		
7:00 AM	16	111	4	0	6	164	64	0	11	11	6	0	10	64	9	0	476	
7:15 AM	14	153	2	0	4	210	60	0	9	18	11	0	8	63	5	0	557	
7:30 AM	16	221	4	0	3	242	53	0	11	15	11	0	8	82	11	0	677	
7:45 AM	25	195	1	0	13	302	53	0	17	24	19	0	12	78	15	0	754	
8:00 AM	25	159	8	0	12	288	57	0	12	33	21	0	25	82	12	0	734	
8:15 AM	24	178	2	0	8	281	56	0	16	29	19	0	10	73	15	0	711	
8:30 AM	28	148	6	0	5	249	46	0	7	10	17	0	26	89	11	0	642	
8:45 AM	22	223	4	0	8	294	49	0	12	15	17	1	11	59	13	0	728	
9:00 AM	24	166	4	2	2	256	31	0	10	7	8	0	10	60	8	0	588	
9:15 AM	28	171	7	0	3	224	48	0	6	7	11	0	19	56	8	0	588	
9:30 AM	17	171	10	0	4	257	45	0	10	6	7	0	16	59	9	0	611	
9:45 AM	26	162	8	0	11	192	42	0	19	4	7	0	9	52	9	0	541	
<b>TOTAL VOLUMES :</b>	265	2058	60	2	79	2959	604	0	140	179	154	1	164	817	125	0	7607	
<b>APPROACH %'s :</b>	11.11%	86.29%	2.52%	0.08%	2.17%	81.25%	16.58%	0.00%	29.54%	37.76%	32.49%	0.21%	14.83%	73.87%	11.30%	0.00%		
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																	
<b>PEAK HR VOL :</b>	90	753	15	0	36	1113	219	0	56	101	70	0	55	315	53	0	2876	
<b>PEAK HR FACTOR :</b>	0.900	0.852	0.469	0.000	0.692	0.921	0.961	0.000	0.824	0.765	0.833	0.000	0.550	0.960	0.883	0.000	0.954	
			0.890			0.929				0.860				0.889				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL	
4:30 PM	23	248	6	2	12	259	33	0	28	43	21	0	4	37	13	0	729	
4:45 PM	15	243	23	0	8	247	31	0	23	58	39	0	15	33	14	0	749	
5:00 PM	22	249	10	0	11	274	22	0	44	47	32	0	8	36	9	0	764	
5:15 PM	28	264	22	0	12	290	24	0	32	50	24	0	10	27	12	0	795	
5:30 PM	26	283	10	0	12	271	27	0	34	77	35	0	11	38	17	0	841	
5:45 PM	28	250	13	0	10	278	21	0	30	55	41	0	18	25	18	0	787	
6:00 PM	25	288	22	0	9	248	26	1	30	51	29	0	13	36	13	0	791	
6:15 PM	15	248	19	0	18	258	23	1	19	49	28	0	9	33	9	0	729	
6:30 PM	24	242	10	0	20	240	30	0	39	55	29	0	8	25	15	0	737	
6:45 PM	24	216	16	0	14	221	29	0	25	49	19	0	16	39	17	0	685	
7:00 PM	16	223	12	0	6	218	27	1	27	40	24	0	7	22	13	0	636	
7:15 PM	15	222	8	0	10	180	24	0	19	41	20	0	12	34	9	0	594	
<b>TOTAL VOLUMES :</b>	261	2976	171	2	142	2984	317	3	350	615	341	0	131	385	159	0	8837	
<b>APPROACH %'s :</b>	7.65%	87.27%	5.01%	0.06%	4.12%	86.59%	9.20%	0.09%	26.80%	47.09%	26.11%	0.00%	19.41%	57.04%	23.56%	0.00%		
<b>PEAK HR :</b>	05:15 PM - 06:15 PM																	
<b>PEAK HR VOL :</b>	107	1085	67	0	43	1087	98	1	126	233	129	0	52	126	60	0	3214	
<b>PEAK HR FACTOR :</b>	0.955	0.942	0.761	0.000	0.896	0.937	0.907	0.250	0.926	0.756	0.787	0.000	0.722	0.829	0.833	0.000	0.955	
			0.940			0.942				0.836				0.902				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: S Glenoaks Blvd & E Verdugo Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-016  
 Date: 4/26/2018

**Total**

NS/EW Streets:	S Glenoaks Blvd				S Glenoaks Blvd				E Verdugo Ave				E Verdugo Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	18	88	2	0	6	177	45	0	8	12	14	0	6	62	7	0	445
7:15 AM	26	129	3	0	5	220	54	0	11	13	9	0	6	60	8	0	544
7:30 AM	22	204	6	0	6	224	53	0	21	20	11	0	9	73	16	0	665
7:45 AM	19	181	2	0	8	274	53	0	13	26	19	0	15	76	11	0	697
8:00 AM	26	182	3	0	18	297	51	0	10	27	20	0	15	82	9	0	740
8:15 AM	27	215	5	0	12	270	60	0	19	26	9	0	12	81	10	0	746
8:30 AM	25	172	4	0	2	264	43	0	9	17	18	0	18	89	7	0	668
8:45 AM	19	188	4	0	5	280	37	0	10	22	9	0	13	55	10	0	652
9:00 AM	22	172	8	0	4	217	47	0	10	17	10	1	12	64	8	0	592
9:15 AM	23	167	6	0	5	226	51	0	12	11	12	0	10	43	11	0	577
9:30 AM	28	148	7	0	3	207	36	0	16	14	20	0	9	52	12	0	552
9:45 AM	24	169	2	0	5	177	52	0	18	13	15	0	7	63	13	0	558
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	11.89%	85.19%	2.22%	0.00%	2.26%	81.08%	16.66%	0.00%	28.97%	40.22%	30.63%	0.18%	12.52%	75.90%	11.57%	0.00%	7436
<b>PEAK HR :</b>	07:45 AM - 08:45 AM																TOTAL
<b>PEAK HR VOL :</b>	97	750	14	0	40	1105	207	0	51	96	66	0	60	328	37	0	2851
<b>PEAK HR FACTOR :</b>	0.898	0.872	0.700	0.000	0.556	0.930	0.863	0.000	0.671	0.889	0.825	0.000	0.833	0.921	0.841	0.000	0.955
	0.871				0.923				0.918				0.932				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
4:30 PM	20	288	11	0	10	265	31	0	21	50	19	0	11	26	15	0	767
4:45 PM	17	285	10	0	11	249	30	0	35	52	29	0	9	37	14	0	778
5:00 PM	22	284	15	0	12	260	29	0	30	45	50	0	8	32	11	0	798
5:15 PM	25	314	22	0	18	298	18	0	23	55	30	0	10	28	14	0	855
5:30 PM	21	303	13	0	11	264	31	0	29	46	40	0	11	23	10	0	802
5:45 PM	17	315	13	0	4	269	29	1	28	43	32	0	10	40	9	0	810
6:00 PM	34	258	10	0	10	289	34	0	30	37	35	0	7	24	10	0	778
6:15 PM	30	314	15	0	9	273	24	0	25	49	35	0	11	35	14	0	834
6:30 PM	24	260	16	0	14	227	25	1	19	46	26	0	11	39	12	0	720
6:45 PM	15	236	17	0	17	220	27	0	16	44	29	0	6	34	12	0	673
7:00 PM	24	219	18	0	12	211	35	1	24	41	20	0	7	26	7	0	645
7:15 PM	17	217	15	0	12	230	29	1	25	31	16	0	15	33	15	0	656
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	7.12%	88.19%	4.69%	0.00%	3.95%	86.28%	9.66%	0.11%	25.31%	44.73%	29.96%	0.00%	18.24%	59.28%	22.48%	0.00%	9116
<b>PEAK HR :</b>	05:00 PM - 06:00 PM																TOTAL
<b>PEAK HR VOL :</b>	85	1216	63	0	45	1091	107	1	110	189	152	0	39	123	44	0	3265
<b>PEAK HR FACTOR :</b>	0.850	0.965	0.716	0.000	0.625	0.915	0.863	0.250	0.917	0.859	0.760	0.000	0.886	0.769	0.786	0.000	0.955
	0.945				0.931				0.902				0.873				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: S San Fernando Blvd & E Verdugo Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-017  
 Date: 4/24/2018

**Total**

NS/EW Streets:	S San Fernando Blvd				S San Fernando Blvd				E Verdugo Ave				E Verdugo Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	1 WR	0 WU	TOTAL
7:00 AM	10	20	9	0	1	12	7	0	3	6	20	0	17	131	1	0	237
7:15 AM	23	19	13	0	1	18	10	0	0	33	25	0	15	119	1	0	277
7:30 AM	24	28	10	0	1	23	10	0	6	33	25	0	14	163	2	0	339
7:45 AM	30	28	20	0	5	30	11	0	4	37	30	0	18	125	1	0	339
8:00 AM	27	33	13	0	1	39	8	0	2	42	39	0	15	143	2	0	364
8:15 AM	30	37	21	0	7	38	7	0	7	34	32	0	23	136	4	0	376
8:30 AM	27	29	17	0	3	39	9	0	5	34	25	0	26	133	3	0	350
8:45 AM	28	33	12	0	2	27	11	0	2	29	28	0	13	122	2	0	309
9:00 AM	18	31	11	0	2	28	6	0	2	22	22	0	19	101	4	0	266
9:15 AM	25	26	21	0	1	26	9	0	5	27	26	1	17	98	3	0	285
9:30 AM	34	31	23	0	7	34	14	0	4	28	14	0	14	118	6	0	327
9:45 AM	32	36	29	0	0	24	15	0	4	44	15	0	19	110	2	0	330
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	35.90%	40.91%	23.19%	0.00%	6.38%	69.55%	24.07%	0.00%	6.15%	51.61%	42.10%	0.14%	12.07%	86.15%	1.78%	0.00%	3799
<b>PEAK HR :</b>	07:45 AM - 08:45 AM																TOTAL
<b>PEAK HR VOL :</b>	114	127	71	0	16	146	35	0	18	147	126	0	82	537	10	0	1429
<b>PEAK HR FACTOR :</b>	0.950	0.858	0.845	0.000	0.571	0.936	0.795	0.000	0.643	0.875	0.808	0.000	0.788	0.939	0.625	0.000	0.950
			0.886			0.947				0.877				0.965			
PM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	1 WR	0 WU	TOTAL
4:30 PM	30	62	39	0	7	48	19	0	7	61	33	0	12	87	1	0	406
4:45 PM	37	56	52	0	3	54	12	0	10	88	30	0	18	73	7	1	441
5:00 PM	37	68	42	0	7	47	15	0	9	71	29	0	24	91	3	0	443
5:15 PM	36	62	47	0	2	50	12	0	7	93	32	0	15	105	5	0	466
5:30 PM	38	91	58	0	2	69	15	0	7	71	40	0	14	94	3	0	502
5:45 PM	37	71	39	0	1	51	13	0	6	79	31	0	15	79	10	0	432
6:00 PM	41	61	45	0	7	48	23	0	10	63	39	0	17	94	3	0	451
6:15 PM	32	52	49	0	6	39	6	0	8	73	30	0	21	91	3	0	410
6:30 PM	25	58	39	0	2	27	12	0	6	59	42	0	18	76	4	0	368
6:45 PM	29	59	41	0	2	42	13	0	10	67	33	0	24	74	5	0	399
7:00 PM	30	45	26	0	4	44	17	0	7	65	26	0	16	73	8	0	361
7:15 PM	29	35	39	0	5	39	12	0	9	67	34	0	18	72	12	0	371
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	24.50%	43.98%	31.52%	0.00%	6.19%	72.00%	21.81%	0.00%	7.10%	63.39%	29.51%	0.00%	16.49%	78.46%	4.98%	0.08%	5050
<b>PEAK HR :</b>	04:45 PM - 05:45 PM																TOTAL
<b>PEAK HR VOL :</b>	148	277	199	0	14	220	54	0	33	323	131	0	71	363	18	1	1852
<b>PEAK HR FACTOR :</b>	0.974	0.761	0.858	0.000	0.500	0.797	0.900	0.000	0.825	0.868	0.819	0.000	0.740	0.864	0.643	0.250	0.922
			0.834			0.837				0.922				0.906			

National Data & Surveying Services

# Intersection Turning Movement Count

Location: S San Fernando Blvd & E Verdugo Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-017  
 Date: 4/25/2018

**Total**

NS/EW Streets:	S San Fernando Blvd				S San Fernando Blvd				E Verdugo Ave				E Verdugo Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	1 WR	0 WU	TOTAL
7:00 AM	21	25	12	0	0	13	7	0	3	17	20	0	22	145	4	0	289
7:15 AM	15	29	11	0	3	22	11	0	5	26	27	0	18	125	5	0	297
7:30 AM	29	18	34	0	0	23	8	0	2	30	31	0	24	142	4	1	346
7:45 AM	24	46	39	0	4	39	13	0	1	47	42	0	24	151	5	0	435
8:00 AM	30	35	30	0	2	36	7	0	2	41	32	0	28	145	1	0	389
8:15 AM	17	39	25	0	5	38	14	0	9	39	49	0	26	142	3	0	406
8:30 AM	30	36	21	0	3	48	13	0	8	33	27	0	25	140	2	0	386
8:45 AM	33	34	21	0	2	29	8	0	6	31	27	0	25	139	3	0	358
9:00 AM	33	32	22	0	5	34	6	0	1	4	19	0	28	102	4	0	290
9:15 AM	37	41	23	0	1	31	7	0	2	13	12	1	25	129	0	0	322
9:30 AM	29	52	23	0	0	44	9	0	1	6	13	0	14	126	5	0	322
9:45 AM	27	51	34	0	2	35	13	0	1	13	18	0	22	125	2	0	343
<b>TOTAL VOLUMES :</b>	NL 325	NT 438	NR 295	NU 0	SL 27	ST 392	SR 116	SU 0	EL 41	ET 300	ER 317	EU 1	WL 281	WT 1611	WR 38	WU 1	<b>TOTAL</b> 4183
<b>APPROACH %'s :</b>	30.72%	41.40%	27.88%	0.00%	5.05%	73.27%	21.68%	0.00%	6.22%	45.52%	48.10%	0.15%	14.55%	83.43%	1.97%	0.05%	
<b>PEAK HR :</b>	07:45 AM - 08:45 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	101	156	115	0	14	161	47	0	20	160	150	0	103	578	11	0	1616
<b>PEAK HR FACTOR :</b>	0.842	0.848	0.737	0.000	0.700	0.839	0.839	0.000	0.556	0.851	0.765	0.000	0.920	0.957	0.550	0.000	0.929
	0.853				0.867				0.851				0.961				
PM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	1 WR	0 WU	TOTAL
4:30 PM	42	67	57	0	5	50	20	0	8	59	49	0	19	94	8	0	478
4:45 PM	30	72	43	0	3	51	18	0	10	105	46	1	24	75	3	0	481
5:00 PM	42	71	72	0	6	48	12	0	3	98	53	0	21	89	7	0	522
5:15 PM	48	70	48	0	6	51	7	0	9	97	40	0	23	85	8	0	492
5:30 PM	44	82	53	0	7	43	10	0	11	94	46	0	31	109	4	0	534
5:45 PM	37	89	67	0	2	53	20	0	17	89	46	0	20	77	3	0	520
6:00 PM	38	78	58	0	3	50	9	0	10	68	48	1	28	101	7	0	499
6:15 PM	36	56	45	0	7	45	11	0	9	77	42	0	18	80	8	0	434
6:30 PM	30	61	57	0	5	51	17	0	8	89	46	0	14	96	7	0	481
6:45 PM	33	60	38	0	5	40	11	0	7	61	32	0	28	97	4	0	416
7:00 PM	42	46	46	0	4	44	11	0	10	61	32	0	18	84	4	0	402
7:15 PM	22	50	36	0	2	35	14	0	4	67	38	0	19	87	4	0	378
<b>TOTAL VOLUMES :</b>	NL 444	NT 802	NR 620	NU 0	SL 55	ST 561	SR 160	SU 0	EL 106	ET 965	ER 518	EU 2	WL 263	WT 1074	WR 67	WU 0	<b>TOTAL</b> 5637
<b>APPROACH %'s :</b>	23.79%	42.98%	33.23%	0.00%	7.09%	72.29%	20.62%	0.00%	6.66%	60.65%	32.56%	0.13%	18.73%	76.50%	4.77%	0.00%	
<b>PEAK HR :</b>	05:00 PM - 06:00 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	171	312	240	0	21	195	49	0	40	378	185	0	95	360	22	0	2068
<b>PEAK HR FACTOR :</b>	0.891	0.876	0.833	0.000	0.750	0.920	0.613	0.000	0.588	0.964	0.873	0.000	0.766	0.826	0.688	0.000	0.968
	0.937				0.883				0.979				0.828				



National Data & Surveying Services

# Intersection Turning Movement Count

Location: S San Fernando Blvd & E Verdugo Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-017  
 Date: 4/26/2018

**Total**

NS/EW Streets:	S San Fernando Blvd				S San Fernando Blvd				E Verdugo Ave				E Verdugo Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	1 WR	0 WU	TOTAL
7:00 AM	15	19	13	0	1	19	11	0	4	26	15	0	23	121	2	0	269
7:15 AM	23	24	11	0	1	21	11	0	8	29	17	0	23	147	4	0	319
7:30 AM	31	33	31	0	0	38	9	0	4	34	37	0	16	139	1	0	373
7:45 AM	23	34	31	0	1	46	13	0	4	53	35	0	15	160	1	0	416
8:00 AM	30	32	22	0	4	39	3	0	3	43	34	0	29	148	5	0	392
8:15 AM	28	36	24	0	3	38	16	0	4	35	36	0	37	153	6	0	416
8:30 AM	28	35	29	0	2	60	10	0	6	33	25	0	9	152	6	1	396
8:45 AM	31	41	18	0	0	36	11	0	1	33	20	0	22	116	2	0	331
9:00 AM	27	35	23	0	3	44	13	0	3	34	25	0	23	118	8	0	356
9:15 AM	34	38	23	0	4	44	11	0	3	26	23	0	21	113	6	1	347
9:30 AM	32	44	24	0	4	34	10	0	8	36	16	0	20	112	6	0	346
9:45 AM	27	41	27	0	1	37	17	0	6	31	28	0	19	143	6	0	383
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	32.35%	40.51%	27.14%	0.00%	3.90%	74.15%	21.95%	0.00%	6.94%	53.08%	39.97%	0.00%	13.29%	83.87%	2.74%	0.10%	4344
<b>PEAK HR :</b>	<b>07:45 AM - 08:45 AM</b>																TOTAL
<b>PEAK HR VOL :</b>	109	137	106	0	10	183	42	0	17	164	130	0	90	613	18	1	1620
<b>PEAK HR FACTOR :</b>	0.908	0.951	0.855	0.000	0.625	0.763	0.656	0.000	0.708	0.774	0.903	0.000	0.608	0.958	0.750	0.250	0.974
	0.957				0.816				0.845				0.921				
PM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	1 WR	0 WU	TOTAL
4:30 PM	35	72	57	0	2	60	19	0	8	61	44	0	19	78	9	0	464
4:45 PM	29	56	53	0	10	63	27	0	5	87	66	0	32	89	7	0	524
5:00 PM	40	73	67	0	4	60	23	0	15	91	50	0	21	97	6	0	547
5:15 PM	33	74	57	0	2	53	16	0	7	94	53	0	30	76	7	0	502
5:30 PM	47	91	54	0	1	67	18	0	11	76	43	0	19	78	6	0	511
5:45 PM	34	89	54	0	2	57	13	0	13	84	49	0	24	89	0	0	508
6:00 PM	49	89	60	0	8	63	17	0	5	72	44	0	17	105	7	0	536
6:15 PM	35	93	58	0	4	48	10	0	8	82	48	0	24	97	11	0	518
6:30 PM	42	69	45	0	8	55	11	0	10	59	44	0	28	93	9	0	473
6:45 PM	18	69	39	0	2	47	12	0	7	67	45	0	23	74	7	0	410
7:00 PM	38	62	44	1	7	48	14	0	5	55	30	0	18	96	5	0	423
7:15 PM	26	60	40	0	8	41	18	0	5	49	33	0	15	84	2	0	381
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	21.82%	45.95%	32.17%	0.05%	6.32%	72.11%	21.57%	0.00%	6.49%	57.51%	36.00%	0.00%	19.26%	75.32%	5.42%	0.00%	5797
<b>PEAK HR :</b>	<b>04:45 PM - 05:45 PM</b>																TOTAL
<b>PEAK HR VOL :</b>	149	294	231	0	17	243	84	0	38	348	212	0	102	340	26	0	2084
<b>PEAK HR FACTOR :</b>	0.793	0.808	0.862	0.000	0.425	0.907	0.778	0.000	0.633	0.926	0.803	0.000	0.797	0.876	0.929	0.000	0.952
	0.878				0.860				0.946				0.914				

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** S Ikea Way & E Verdugo Ave  
**City:** Burbank  
**Control:** Signalized

**Project ID:** 18-05253-018  
**Date:** 4/24/2018

### Total

NS/EW Streets:	S Ikea Way				S Ikea Way				E Verdugo Ave				E Verdugo Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	1	5	1	0	5	9	30	0	21	25	7	0	1	119	24	0	248
7:15 AM	2	8	4	0	12	3	44	0	26	29	5	0	0	134	22	0	289
7:30 AM	3	2	2	0	16	12	30	0	21	47	5	0	1	149	20	0	308
7:45 AM	1	7	0	0	15	19	37	0	26	46	10	0	2	139	34	0	336
8:00 AM	6	8	1	0	15	10	28	0	21	59	4	0	0	146	35	0	333
8:15 AM	4	5	4	0	25	12	41	0	24	49	9	0	1	159	35	0	368
8:30 AM	2	5	1	0	22	7	30	0	22	37	8	0	1	113	35	0	283
8:45 AM	2	4	1	0	14	17	28	0	31	44	10	0	1	137	28	0	317
9:00 AM	2	10	1	0	18	13	22	0	23	34	7	0	1	102	28	0	261
9:15 AM	6	5	1	0	15	26	38	0	30	45	11	0	4	104	24	0	309
9:30 AM	7	10	2	0	11	26	37	0	27	25	11	0	1	119	38	0	314
9:45 AM	7	11	0	0	10	30	55	0	21	54	24	0	3	130	39	0	384
<b>TOTAL VOLUMES :</b>	NL 43	NT 80	NR 18	NU 0	SL 178	ST 184	SR 420	SU 0	EL 293	ET 494	ER 111	EU 0	WL 16	WT 1551	WR 362	WU 0	<b>TOTAL</b> 3750
<b>APPROACH %'s :</b>	30.50%	56.74%	12.77%	0.00%	22.76%	23.53%	53.71%	0.00%	32.63%	55.01%	12.36%	0.00%	0.83%	80.40%	18.77%	0.00%	
<b>PEAK HR :</b>	07:30 AM - 08:30 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	14	22	7	0	71	53	136	0	92	201	28	0	4	593	124	0	1345
<b>PEAK HR FACTOR :</b>	0.583	0.688	0.438	0.000	0.710	0.697	0.829	0.000	0.885	0.852	0.700	0.000	0.500	0.932	0.886	0.000	0.914
	0.717				0.833				0.955				0.924				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
4:30 PM	25	54	1	0	32	37	89	0	29	73	12	0	2	109	27	0	490
4:45 PM	27	50	2	0	29	33	77	0	49	85	16	0	3	85	28	0	484
5:00 PM	24	45	3	0	28	34	69	0	35	85	10	0	0	113	34	0	480
5:15 PM	17	31	7	0	22	34	87	0	29	92	17	0	5	115	53	0	509
5:30 PM	28	49	4	0	29	30	75	0	35	94	12	0	4	96	37	0	493
5:45 PM	17	48	3	0	20	37	58	0	28	107	24	0	2	119	28	0	491
6:00 PM	26	35	3	0	34	30	68	0	27	77	12	0	2	115	29	0	458
6:15 PM	22	35	2	0	40	34	72	0	23	65	11	0	2	101	28	0	435
6:30 PM	13	31	1	0	22	33	58	0	29	85	13	0	1	94	36	0	416
6:45 PM	18	28	3	0	29	36	58	0	21	76	17	0	6	91	23	0	406
7:00 PM	22	39	4	0	31	30	69	0	20	71	18	0	2	91	24	0	421
7:15 PM	14	22	2	0	31	32	56	0	21	76	9	0	4	81	18	0	366
<b>TOTAL VOLUMES :</b>	NL 253	NT 467	NR 35	NU 0	SL 347	ST 400	SR 836	SU 0	EL 346	ET 986	ER 171	EU 0	WL 33	WT 1210	WR 365	WU 0	<b>TOTAL</b> 5449
<b>APPROACH %'s :</b>	33.51%	61.85%	4.64%	0.00%	21.92%	25.27%	52.81%	0.00%	23.02%	65.60%	11.38%	0.00%	2.05%	75.25%	22.70%	0.00%	
<b>PEAK HR :</b>	05:00 PM - 06:00 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	86	173	17	0	99	135	289	0	127	378	63	0	11	443	152	0	1973
<b>PEAK HR FACTOR :</b>	0.768	0.883	0.607	0.000	0.853	0.912	0.830	0.000	0.907	0.883	0.656	0.000	0.550	0.931	0.717	0.000	0.969
	0.852				0.914				0.893				0.876				

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** S Ikea Way & E Verdugo Ave  
**City:** Burbank  
**Control:** Signalized

**Project ID:** 18-05253-018  
**Date:** 4/25/2018

### Total

NS/EW Streets:	S Ikea Way				S Ikea Way				E Verdugo Ave				E Verdugo Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	1	1	0	0	9	4	36	0	22	34	7	0	0	132	18	0	264
7:15 AM	3	6	2	0	10	14	35	0	16	45	2	0	1	157	19	0	310
7:30 AM	2	8	3	0	14	13	32	0	21	49	3	0	1	149	20	0	315
7:45 AM	1	5	1	0	12	16	34	0	17	67	11	0	2	159	28	0	353
8:00 AM	5	5	1	0	20	11	40	0	15	60	5	0	1	157	28	0	348
8:15 AM	7	3	2	0	32	19	41	0	13	58	11	0	0	147	31	0	364
8:30 AM	3	7	2	0	27	11	38	0	21	46	5	0	1	146	29	0	336
8:45 AM	1	5	1	0	16	14	41	0	30	51	16	0	2	146	35	0	358
9:00 AM	2	6	2	0	18	14	29	0	9	5	1	0	1	118	32	0	237
9:15 AM	5	1	2	0	17	22	36	0	5	2	0	0	3	137	27	0	257
9:30 AM	5	11	2	0	23	23	41	0	6	2	0	0	4	125	33	0	275
9:45 AM	4	11	5	0	19	30	44	0	3	1	0	0	6	126	29	0	278
<b>TOTAL VOLUMES :</b>	39	69	23	0	217	191	447	0	178	420	61	0	22	1699	329	0	3695
<b>APPROACH %'s :</b>	29.77%	52.67%	17.56%	0.00%	25.38%	22.34%	52.28%	0.00%	27.01%	63.73%	9.26%	0.00%	1.07%	82.88%	16.05%	0.00%	
<b>PEAK HR :</b>	08:00 AM - 09:00 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	16	20	6	0	95	55	160	0	79	215	37	0	4	596	123	0	1406
<b>PEAK HR FACTOR :</b>	0.571	0.714	0.750	0.000	0.742	0.724	0.976	0.000	0.658	0.896	0.578	0.000	0.500	0.949	0.879	0.000	0.966
	0.875				0.842				0.853				0.972				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
4:30 PM	27	47	5	0	36	25	71	0	20	80	12	0	5	113	32	0	473
4:45 PM	24	42	5	0	39	34	61	0	44	119	15	0	2	89	41	0	515
5:00 PM	20	49	5	0	39	31	79	0	31	96	21	0	2	114	33	0	520
5:15 PM	24	36	3	1	40	34	76	0	37	91	15	0	4	108	32	0	501
5:30 PM	29	40	3	0	27	33	75	0	27	125	14	0	3	127	31	0	534
5:45 PM	20	36	3	0	28	29	70	0	36	121	26	0	6	105	37	0	517
6:00 PM	22	48	1	0	31	38	74	0	32	88	17	0	1	95	44	0	491
6:15 PM	13	34	2	0	40	26	81	0	34	97	16	0	3	82	35	0	463
6:30 PM	10	37	8	0	40	32	72	0	26	100	17	0	3	113	37	0	495
6:45 PM	22	26	2	0	35	38	79	0	42	82	14	0	4	109	36	0	489
7:00 PM	18	36	5	0	23	30	83	0	29	76	16	0	2	113	21	0	452
7:15 PM	22	31	1	0	27	22	84	0	15	64	17	0	5	93	18	0	399
<b>TOTAL VOLUMES :</b>	251	462	43	1	405	372	905	0	373	1139	200	0	40	1261	397	0	5849
<b>APPROACH %'s :</b>	33.16%	61.03%	5.68%	0.13%	24.08%	22.12%	53.80%	0.00%	21.79%	66.53%	11.68%	0.00%	2.36%	74.26%	23.38%	0.00%	
<b>PEAK HR :</b>	05:00 PM - 06:00 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	93	161	14	1	134	127	300	0	131	433	76	0	15	454	133	0	2072
<b>PEAK HR FACTOR :</b>	0.802	0.821	0.700	0.250	0.838	0.934	0.949	0.000	0.885	0.866	0.731	0.000	0.625	0.894	0.899	0.000	0.970
	0.909				0.935				0.874				0.935				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S Ikea Way & E Verdugo Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-018  
 Date: 4/26/2018

### Total

NS/EW Streets:	S Ikea Way				S Ikea Way				E Verdugo Ave				E Verdugo Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	2	5	0	0	7	9	37	0	19	32	7	0	0	119	23	0	260
7:15 AM	2	4	0	0	8	10	31	0	22	46	3	0	0	155	18	0	299
7:30 AM	3	7	0	0	12	11	43	0	23	52	7	0	1	155	28	0	342
7:45 AM	2	5	1	0	19	14	33	0	36	74	11	0	0	165	28	0	388
8:00 AM	4	4	1	0	16	13	31	0	18	69	8	0	2	153	24	0	343
8:15 AM	4	4	2	0	21	20	23	0	16	54	4	0	3	167	33	0	351
8:30 AM	1	4	1	0	25	12	36	0	20	42	7	0	1	157	37	0	343
8:45 AM	3	8	0	0	21	17	37	0	21	34	8	0	1	137	43	0	330
9:00 AM	3	4	0	0	24	15	33	0	24	41	10	0	1	119	31	0	305
9:15 AM	4	4	3	0	22	25	25	0	24	34	9	0	2	126	17	0	295
9:30 AM	9	4	1	0	12	30	39	0	21	37	13	0	1	129	28	0	324
9:45 AM	6	9	4	0	24	31	31	0	28	39	11	0	6	135	31	0	355
<b>TOTAL VOLUMES :</b>	43	62	13	0	211	207	399	0	272	554	98	0	18	1717	341	0	3935
<b>APPROACH %'s :</b>	36.44%	52.54%	11.02%	0.00%	25.83%	25.34%	48.84%	0.00%	29.44%	59.96%	10.61%	0.00%	0.87%	82.71%	16.43%	0.00%	
<b>PEAK HR :</b>	07:45 AM - 08:45 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	11	17	5	0	81	59	123	0	90	239	30	0	6	642	122	0	1425
<b>PEAK HR FACTOR :</b>	0.688	0.850	0.625	0.000	0.810	0.738	0.854	0.000	0.625	0.807	0.682	0.000	0.500	0.961	0.824	0.000	0.918
	0.825				0.901				0.742				0.948				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
4:30 PM	34	49	0	0	27	35	76	0	28	90	10	0	6	106	24	0	485
4:45 PM	14	21	7	0	36	25	63	0	35	92	20	0	2	103	29	0	447
5:00 PM	24	48	5	0	44	30	78	0	41	100	12	0	1	118	38	0	539
5:15 PM	17	43	0	0	41	25	69	0	27	88	26	0	5	95	33	0	469
5:30 PM	27	36	9	0	30	29	70	0	43	108	19	0	2	98	42	0	513
5:45 PM	12	29	4	0	25	30	63	0	36	108	13	0	5	99	42	0	466
6:00 PM	19	36	2	0	37	39	84	0	32	90	19	0	1	104	40	0	503
6:15 PM	21	33	4	0	36	37	77	0	26	95	15	0	3	117	30	0	494
6:30 PM	14	35	2	0	36	33	72	0	20	81	18	0	2	129	37	0	479
6:45 PM	23	35	4	0	36	26	56	0	30	83	16	0	1	90	19	0	419
7:00 PM	22	30	4	0	31	27	70	0	24	74	16	0	3	111	28	0	440
7:15 PM	24	33	3	0	21	35	72	0	22	46	10	0	2	104	30	0	402
<b>TOTAL VOLUMES :</b>	251	428	44	0	400	371	850	0	364	1055	194	0	33	1274	392	0	5656
<b>APPROACH %'s :</b>	34.72%	59.20%	6.09%	0.00%	24.68%	22.89%	52.44%	0.00%	22.57%	65.41%	12.03%	0.00%	1.94%	74.99%	23.07%	0.00%	
<b>PEAK HR :</b>	05:00 PM - 06:00 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	80	156	18	0	140	114	280	0	147	404	70	0	13	410	155	0	1987
<b>PEAK HR FACTOR :</b>	0.741	0.813	0.500	0.000	0.795	0.950	0.897	0.000	0.855	0.935	0.673	0.000	0.650	0.869	0.923	0.000	0.922
	0.825				0.878				0.913				0.920				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: S Front St & I-5 Freeway SB On Ramp  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-019  
 Date: 4/24/2018

**Total**

NS/EW Streets:	S Front St				S Front St				I-5 Freeway SB On Ramp				I-5 Freeway SB On Ramp				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0	1	1	0	1	2	0	0	0	0	0	0	1.5	0	0.5	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	29	121	0	2	9	0	0	0	0	0	0	41	0	9	0	211
7:15 AM	0	43	142	0	6	7	0	0	0	0	0	0	58	0	10	0	266
7:30 AM	0	44	140	0	1	8	0	0	0	0	0	0	69	0	10	0	272
7:45 AM	0	44	133	0	0	6	0	0	0	0	0	0	77	0	7	0	267
8:00 AM	0	44	133	0	0	7	0	0	0	0	0	0	70	0	7	0	261
8:15 AM	0	56	153	0	2	8	0	0	0	0	0	0	79	0	2	0	300
8:30 AM	0	34	113	0	1	7	0	0	0	0	0	0	62	0	12	0	229
8:45 AM	0	47	119	0	0	4	0	0	0	0	0	0	80	0	2	0	252
9:00 AM	0	28	97	0	0	8	0	0	0	0	0	0	51	0	4	0	188
9:15 AM	0	32	116	0	1	6	0	0	0	0	0	0	82	0	2	0	239
9:30 AM	0	30	132	0	0	7	0	0	0	0	0	0	57	0	3	0	229
9:45 AM	0	39	149	0	1	5	0	0	0	0	0	0	97	0	7	0	298
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	470	1548	0	14	82	0	0	0	0	0	0	823	0	75	0	3012
	0.00%	23.29%	76.71%	0.00%	14.58%	85.42%	0.00%	0.00%					91.65%	0.00%	8.35%	0.00%	
<b>PEAK HR :</b>	<b>07:30 AM - 08:30 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	188	559	0	3	29	0	0	0	0	0	0	295	0	26	0	1100
<b>PEAK HR FACTOR :</b>	0.000	0.839	0.913	0.000	0.375	0.906	0.000	0.000	0.000	0.000	0.000	0.000	0.934	0.000	0.650	0.000	0.917
			0.894			0.800								0.955			
PM	0	1	1	0	1	2	0	0	0	0	0	0	1.5	0	0.5	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:30 PM	0	45	180	0	0	6	0	0	0	0	0	0	106	0	6	0	343
4:45 PM	0	56	129	0	5	16	0	0	0	0	0	0	144	0	14	0	364
5:00 PM	0	41	167	0	3	14	0	0	0	0	0	0	116	0	6	0	347
5:15 PM	0	46	172	0	2	7	0	0	0	0	0	0	124	0	5	0	356
5:30 PM	0	52	149	0	2	14	0	0	0	0	0	0	124	0	7	0	348
5:45 PM	0	50	148	0	4	27	0	0	0	0	0	0	131	0	5	0	365
6:00 PM	0	59	145	0	5	10	0	0	0	0	0	0	104	0	3	0	326
6:15 PM	0	39	157	0	1	16	0	0	0	0	0	0	91	0	5	0	309
6:30 PM	0	39	124	0	2	8	0	0	0	0	0	0	112	0	6	0	291
6:45 PM	0	40	128	0	0	9	0	0	0	0	0	0	111	0	10	0	298
7:00 PM	0	44	142	0	1	10	0	0	0	0	0	0	86	0	7	0	290
7:15 PM	0	31	118	0	0	4	0	0	0	0	0	0	109	0	8	0	270
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
<b>APPROACH %'s :</b>	0	542	1759	0	25	141	0	0	0	0	0	0	1358	0	82	0	3907
	0.00%	23.55%	76.45%	0.00%	15.06%	84.94%	0.00%	0.00%					94.31%	0.00%	5.69%	0.00%	
<b>PEAK HR :</b>	<b>05:00 PM - 06:00 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	189	636	0	11	62	0	0	0	0	0	0	495	0	23	0	1416
<b>PEAK HR FACTOR :</b>	0.000	0.909	0.924	0.000	0.688	0.574	0.000	0.000	0.000	0.000	0.000	0.000	0.945	0.000	0.821	0.000	0.970
			0.946			0.589								0.952			

National Data & Surveying Services

# Intersection Turning Movement Count

Location: S Front St & I-5 Freeway SB On Ramp  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-019  
 Date: 4/25/2018

**Total**

NS/EW Streets:	S Front St				S Front St				I-5 Freeway SB On Ramp				I-5 Freeway SB On Ramp				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0	1	1	0	1	2	0	0	0	0	0	0	1.5	0	0.5	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	32	138	0	0	7	0	0	0	0	0	0	52	0	4	0	233
7:15 AM	0	44	156	0	2	6	0	0	0	0	0	0	58	0	6	0	272
7:30 AM	0	48	135	0	0	11	0	0	0	0	0	0	55	0	12	0	261
7:45 AM	0	53	143	0	2	7	0	0	0	0	0	0	91	0	5	0	301
8:00 AM	0	57	145	0	2	9	0	0	0	0	0	0	75	0	9	0	297
8:15 AM	0	47	151	0	1	4	0	0	0	0	0	0	78	0	2	0	283
8:30 AM	0	43	147	0	0	8	0	0	0	0	0	0	64	0	6	0	268
8:45 AM	0	51	140	0	0	7	0	0	0	0	0	0	89	0	4	0	291
9:00 AM	0	40	108	0	0	5	0	0	0	0	0	0	7	0	0	0	160
9:15 AM	0	49	129	0	1	6	0	0	0	0	0	0	0	0	0	0	185
9:30 AM	0	41	129	0	1	7	0	0	0	0	0	0	0	0	0	0	178
9:45 AM	0	42	132	0	0	3	0	0	0	0	0	0	0	0	0	0	177
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	547	1653	0	9	80	0	0	0	0	0	0	569	0	48	0	2906
<b>APPROACH %'s :</b>	0.00%	24.86%	75.14%	0.00%	10.11%	89.89%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	92.22%	0.00%	7.78%	0.00%	
<b>PEAK HR :</b>	<b>07:45 AM - 08:45 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	200	586	0	5	28	0	0	0	0	0	0	308	0	22	0	1149
<b>PEAK HR FACTOR :</b>	0.000	0.877	0.970	0.000	0.625	0.778	0.000	0.000	0.000	0.000	0.000	0.000	0.846	0.000	0.611	0.000	0.954
	0.973				0.750								0.859				
PM	0	1	1	0	1	2	0	0	0	0	0	0	1.5	0	0.5	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:30 PM	0	56	156	0	0	5	0	0	0	0	0	0	115	0	2	0	334
4:45 PM	0	50	127	0	7	18	0	0	0	0	0	0	154	0	12	0	368
5:00 PM	0	56	156	0	2	20	0	0	0	0	0	0	139	0	7	0	380
5:15 PM	0	55	146	0	3	7	0	0	0	0	0	0	131	0	6	0	348
5:30 PM	0	81	151	0	4	19	0	0	0	0	0	0	136	0	9	0	400
5:45 PM	0	65	125	0	5	17	0	0	0	0	0	0	166	0	9	0	387
6:00 PM	0	55	134	0	3	13	0	0	0	0	0	0	130	0	14	0	349
6:15 PM	0	46	130	0	3	7	0	0	0	0	0	0	131	0	23	0	340
6:30 PM	0	62	133	0	2	7	0	0	0	0	0	0	139	0	36	0	379
6:45 PM	0	70	141	0	1	11	0	0	0	0	0	0	118	0	36	0	377
7:00 PM	0	58	158	0	3	17	0	0	0	0	0	0	96	0	9	0	341
7:15 PM	0	39	159	0	4	8	0	0	0	0	0	0	94	0	8	0	312
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	693	1716	0	37	149	0	0	0	0	0	0	1549	0	171	0	4315
<b>APPROACH %'s :</b>	0.00%	28.77%	71.23%	0.00%	19.89%	80.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	90.06%	0.00%	9.94%	0.00%	
<b>PEAK HR :</b>	<b>05:00 PM - 06:00 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	257	578	0	14	63	0	0	0	0	0	0	572	0	31	0	1515
<b>PEAK HR FACTOR :</b>	0.000	0.793	0.926	0.000	0.700	0.788	0.000	0.000	0.000	0.000	0.000	0.000	0.861	0.000	0.861	0.000	0.947
	0.900				0.837								0.861				

National Data & Surveying Services

# Intersection Turning Movement Count

Location: S Front St & I 5 Freeway SB On Ramp  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-019  
 Date: 4/26/2018

**Total**

NS/EW Streets:	S Front St				S Front St				I 5 Freeway SB On Ramp				I 5 Freeway SB On Ramp				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0	1	1	0	1	2	0	0	0	0	0	0	1.5	0	0.5	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	30	129	0	2	6	0	0	0	0	0	0	49	0	4	0	220
7:15 AM	0	48	140	0	3	7	0	0	0	0	0	0	69	0	6	0	273
7:30 AM	0	51	150	0	1	9	0	0	0	0	0	0	71	0	9	0	291
7:45 AM	0	57	143	0	1	8	0	0	0	0	0	0	115	0	5	0	329
8:00 AM	0	47	139	0	0	7	0	0	0	0	0	0	90	0	5	0	288
8:15 AM	0	54	139	0	0	5	0	0	0	0	0	0	63	0	2	0	263
8:30 AM	0	49	141	0	2	6	0	0	0	0	0	0	69	0	3	0	270
8:45 AM	0	50	123	0	1	4	0	0	0	0	0	0	55	0	6	0	239
9:00 AM	0	45	113	0	0	7	0	0	0	0	0	0	67	0	3	0	235
9:15 AM	0	48	109	0	1	4	0	0	0	0	0	0	66	0	3	0	231
9:30 AM	0	43	127	0	2	9	0	0	0	0	0	0	62	0	4	0	247
9:45 AM	0	51	124	0	2	2	0	0	0	0	0	0	71	0	4	0	254
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	573	1577	0	15	74	0	0	0	0	0	0	847	0	54	0	3140
<b>APPROACH %'s :</b>	0.00%	26.65%	73.35%	0.00%	16.85%	83.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	94.01%	0.00%	5.99%	0.00%	
<b>PEAK HR :</b>	<b>07:15 AM - 08:15 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	203	572	0	5	31	0	0	0	0	0	0	345	0	25	0	1181
<b>PEAK HR FACTOR :</b>	0.000	0.890	0.953	0.000	0.417	0.861	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.694	0.000	0.897
	0.964				0.900								0.771				
PM	0	1	1	0	1	2	0	0	0	0	0	0	1.5	0	0.5	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:30 PM	0	69	153	0	1	4	0	0	0	0	0	0	122	0	2	0	351
4:45 PM	0	50	129	0	3	23	0	0	0	0	0	0	133	0	11	0	349
5:00 PM	0	60	162	0	3	10	0	0	0	0	0	0	153	0	10	0	398
5:15 PM	0	55	128	0	1	15	0	0	0	0	0	0	133	0	5	0	337
5:30 PM	0	63	129	0	1	16	0	0	0	0	0	0	137	0	4	0	350
5:45 PM	0	54	114	0	4	18	0	0	0	0	0	0	140	0	5	0	335
6:00 PM	0	69	143	0	5	17	0	0	0	0	0	0	125	0	5	0	364
6:15 PM	0	80	138	0	1	14	0	0	0	0	0	0	126	0	10	0	369
6:30 PM	0	74	135	0	3	9	0	0	0	0	0	0	105	0	13	0	339
6:45 PM	0	52	119	0	3	11	0	0	0	0	0	0	115	0	17	0	317
7:00 PM	0	59	142	0	2	13	0	0	0	0	0	0	96	0	6	0	318
7:15 PM	0	43	159	0	1	5	0	0	0	0	0	0	76	0	4	0	288
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	728	1651	0	28	155	0	0	0	0	0	0	1461	0	92	0	4115
<b>APPROACH %'s :</b>	0.00%	30.60%	69.40%	0.00%	15.30%	84.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	94.08%	0.00%	5.92%	0.00%	
<b>PEAK HR :</b>	<b>04:30 PM - 05:30 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	234	572	0	8	52	0	0	0	0	0	0	541	0	28	0	1435
<b>PEAK HR FACTOR :</b>	0.000	0.848	0.883	0.000	0.667	0.565	0.000	0.000	0.000	0.000	0.000	0.000	0.884	0.000	0.636	0.000	0.901
	0.908				0.577								0.873				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S First St & E Angeleno Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-015  
 Date: 4/24/2018

### Total

NS/EW Streets:	S First St				S First St				E Angeleno Ave				E Angeleno Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	TOTAL
7:00 AM	26	26	10	0	6	27	5	0	33	35	13	0	3	22	9	0	215
7:15 AM	27	33	5	0	5	49	6	0	31	46	4	0	7	31	11	0	255
7:30 AM	26	25	6	0	6	47	6	0	38	56	13	0	5	16	10	0	254
7:45 AM	35	40	8	0	9	66	8	0	42	73	13	0	1	32	10	0	337
8:00 AM	30	44	3	0	7	39	7	0	45	73	13	0	7	27	13	0	308
8:15 AM	18	52	8	0	13	67	6	0	45	68	13	0	10	26	16	0	342
8:30 AM	30	34	8	0	6	47	7	0	36	64	15	0	3	30	13	0	293
8:45 AM	17	46	3	0	16	54	7	0	70	59	12	0	1	25	24	0	334
9:00 AM	21	47	1	0	7	43	7	0	72	64	16	0	3	18	11	0	310
9:15 AM	13	41	6	0	8	73	3	0	60	63	13	0	3	24	22	0	329
9:30 AM	26	47	8	0	12	55	4	0	50	52	19	0	3	15	15	0	306
9:45 AM	21	55	4	0	9	73	4	0	45	67	22	0	3	12	20	1	336
<b>TOTAL VOLUMES :</b>	NL 290	NT 490	NR 70	NU 0	SL 104	ST 640	SR 70	SU 0	EL 567	ET 720	ER 166	EU 0	WL 49	WT 278	WR 174	WU 1	<b>TOTAL</b> 3619
<b>APPROACH %'s :</b>	34.12%	57.65%	8.24%	0.00%	12.78%	78.62%	8.60%	0.00%	39.02%	49.55%	11.42%	0.00%	9.76%	55.38%	34.66%	0.20%	
<b>PEAK HR :</b>	<b>09:00 AM - 10:00 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	81	190	19	0	36	244	18	0	227	246	70	0	12	69	68	1	<b>1281</b>
<b>PEAK HR FACTOR :</b>	0.779	0.864	0.594	0.000	0.750	0.836	0.643	0.000	0.788	0.918	0.795	0.000	1.000	0.719	0.773	0.250	<b>0.953</b>
	0.895																
	0.866																
	0.893																
	0.765																
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	TOTAL
4:30 PM	39	68	16	0	8	125	14	0	37	75	24	0	17	29	23	0	475
4:45 PM	33	87	23	0	23	125	7	0	42	65	17	0	16	27	24	0	489
5:00 PM	40	80	18	0	18	106	24	1	47	67	21	0	14	40	28	0	504
5:15 PM	43	70	6	0	24	126	23	0	46	64	23	0	9	27	30	0	491
5:30 PM	38	75	10	0	22	120	18	0	47	88	16	0	11	22	26	0	493
5:45 PM	40	84	11	0	21	117	12	0	47	67	25	0	5	15	27	0	471
6:00 PM	38	52	12	0	23	102	20	1	56	89	32	0	13	24	19	0	481
6:15 PM	33	61	16	0	27	127	23	0	45	90	15	0	16	23	21	0	497
6:30 PM	38	62	6	0	26	110	15	0	43	69	18	0	8	19	30	0	444
6:45 PM	33	53	3	0	27	107	17	0	50	86	24	0	8	15	20	0	443
7:00 PM	29	75	6	0	16	102	11	0	45	56	22	0	12	15	15	0	404
7:15 PM	25	46	3	0	19	105	8	0	50	75	25	0	6	9	19	0	390
<b>TOTAL VOLUMES :</b>	NL 429	NT 813	NR 130	NU 0	SL 254	ST 1372	SR 192	SU 2	EL 555	ET 891	ER 262	EU 0	WL 135	WT 265	WR 282	WU 0	<b>TOTAL</b> 5582
<b>APPROACH %'s :</b>	31.27%	59.26%	9.48%	0.00%	13.96%	75.38%	10.55%	0.11%	32.49%	52.17%	15.34%	0.00%	19.79%	38.86%	41.35%	0.00%	
<b>PEAK HR :</b>	<b>04:45 PM - 05:45 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	154	312	57	0	87	477	72	1	182	284	77	0	50	116	108	0	<b>1977</b>
<b>PEAK HR FACTOR :</b>	0.895	0.897	0.620	0.000	0.906	0.946	0.750	0.250	0.968	0.807	0.837	0.000	0.781	0.725	0.900	0.000	<b>0.981</b>
	0.914																
	0.921																
	0.899																
	0.835																



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S First St & E Angeleno Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-015  
 Date: 4/25/2018

### Total

NS/EW Streets:	S First St				S First St				E Angeleno Ave				E Angeleno Ave				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	TOTAL
7:00 AM	22	27	4	0	5	36	2	0	29	40	11	0	1	25	14	0	216
7:15 AM	22	31	8	0	6	42	10	0	37	43	14	0	9	34	9	0	265
7:30 AM	20	38	4	0	16	50	2	0	38	62	12	0	2	27	15	0	286
7:45 AM	22	34	7	0	18	60	5	0	43	58	10	0	5	30	15	0	307
8:00 AM	28	41	5	0	11	61	8	1	36	70	9	0	7	39	13	0	329
8:15 AM	24	32	1	0	11	80	11	1	48	70	16	0	7	28	12	0	341
8:30 AM	34	34	2	0	9	65	9	0	44	61	12	0	7	25	25	0	327
8:45 AM	28	50	7	0	12	58	5	0	68	92	19	0	5	16	13	0	373
9:00 AM	15	40	1	0	13	57	4	0	67	63	12	0	2	22	19	0	315
9:15 AM	14	24	3	0	6	52	6	0	83	67	21	0	10	19	17	0	322
9:30 AM	23	36	2	0	7	70	4	0	66	47	19	0	9	23	14	0	320
9:45 AM	22	39	1	0	6	77	8	0	59	55	22	0	3	14	18	0	324
<b>TOTAL VOLUMES :</b>	NL 274	NT 426	NR 45	NU 0	SL 120	ST 708	SR 74	SU 2	EL 618	ET 728	ER 177	EU 0	WL 67	WT 302	WR 184	WU 0	<b>TOTAL</b> 3725
<b>APPROACH %'s :</b>	36.78%	57.18%	6.04%	0.00%	13.27%	78.32%	8.19%	0.22%	40.58%	47.80%	11.62%	0.00%	12.12%	54.61%	33.27%	0.00%	
<b>PEAK HR :</b>	08:00 AM - 09:00 AM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	114	157	15	0	43	264	33	2	196	293	56	0	26	108	63	0	1370
<b>PEAK HR FACTOR :</b>	0.838	0.785	0.536	0.000	0.896	0.825	0.750	0.500	0.721	0.796	0.737	0.000	0.929	0.692	0.630	0.000	0.918
			0.841			0.830				0.761				0.835			
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	TOTAL
4:30 PM	32	80	12	0	21	107	12	1	36	66	15	0	13	29	27	0	451
4:45 PM	36	86	13	0	23	107	15	0	40	78	23	0	14	26	26	0	487
5:00 PM	47	62	10	0	16	122	31	0	42	85	13	0	11	30	30	0	499
5:15 PM	29	80	6	0	17	140	25	0	46	71	18	0	6	41	21	0	500
5:30 PM	34	69	9	0	18	117	18	0	40	82	20	0	17	26	21	0	471
5:45 PM	41	77	17	0	30	120	14	1	42	73	18	0	13	24	34	0	504
6:00 PM	37	70	14	0	19	130	17	1	49	69	15	0	5	21	22	0	469
6:15 PM	45	64	15	0	18	121	16	0	56	86	27	0	7	23	11	0	489
6:30 PM	30	82	6	0	28	138	17	0	38	90	20	0	15	16	27	0	507
6:45 PM	37	56	10	0	22	144	15	0	46	73	23	0	12	19	16	0	473
7:00 PM	31	51	7	0	22	108	11	0	41	66	22	0	11	17	15	0	402
7:15 PM	23	46	4	0	25	120	9	0	40	69	22	0	11	18	18	0	405
<b>TOTAL VOLUMES :</b>	NL 422	NT 823	NR 123	NU 0	SL 259	ST 1474	SR 200	SU 3	EL 516	ET 908	ER 236	EU 0	WL 135	WT 290	WR 268	WU 0	<b>TOTAL</b> 5657
<b>APPROACH %'s :</b>	30.85%	60.16%	8.99%	0.00%	13.38%	76.14%	10.33%	0.15%	31.08%	54.70%	14.22%	0.00%	19.48%	41.85%	38.67%	0.00%	
<b>PEAK HR :</b>	05:00 PM - 06:00 PM																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	151	288	42	0	81	499	88	1	170	311	69	0	47	121	106	0	1974
<b>PEAK HR FACTOR :</b>	0.803	0.900	0.618	0.000	0.675	0.891	0.710	0.250	0.924	0.915	0.863	0.000	0.691	0.738	0.779	0.000	0.979
			0.891			0.919				0.968				0.965			

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: S First St & E Angeleno Ave  
 City: Burbank  
 Control: Signalized

Project ID: 18-05253-015  
 Date: 4/26/2018

### Total

NS/EW Streets:	S First St				S First St				E Angeleno Ave				E Angeleno Ave				TOTAL	
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
AM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	TOTAL	
7:00 AM	23	25	8	0	6	38	6	0	19	33	7	0	9	26	10	0	210	
7:15 AM	23	29	12	0	2	34	4	0	47	54	13	0	6	22	15	0	261	
7:30 AM	30	33	8	0	14	48	2	0	40	50	10	0	9	20	9	0	273	
7:45 AM	33	43	13	0	14	63	13	0	35	62	17	0	3	30	12	0	338	
8:00 AM	17	39	5	0	8	48	11	0	38	69	10	0	9	37	9	0	300	
8:15 AM	23	34	6	0	14	55	10	0	53	64	8	0	7	35	10	0	319	
8:30 AM	33	38	4	0	11	65	7	0	41	64	15	0	9	33	9	0	329	
8:45 AM	38	46	2	0	16	64	5	0	61	76	17	0	6	22	19	0	372	
9:00 AM	15	47	1	0	11	53	6	0	69	59	24	0	3	22	13	0	323	
9:15 AM	12	30	5	0	12	59	4	1	66	64	9	0	8	20	26	0	316	
9:30 AM	21	34	6	0	11	64	4	0	57	58	20	0	5	25	16	0	321	
9:45 AM	25	43	9	0	11	66	7	0	44	54	17	0	7	20	12	0	315	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
<b>APPROACH %'s :</b>	36.04%	54.24%	9.72%	0.00%	14.99%	75.78%	9.11%	0.12%	39.47%	48.96%	11.57%	0.00%	14.65%	56.42%	28.93%	0.00%	3677	
<b>PEAK HR :</b>	08:15 AM - 09:15 AM																	TOTAL
<b>PEAK HR VOL :</b>	109	165	13	0	52	237	28	0	224	263	64	0	25	112	51	0	1343	
<b>PEAK HR FACTOR :</b>	0.717	0.878	0.542	0.000	0.813	0.912	0.700	0.000	0.812	0.865	0.667	0.000	0.694	0.800	0.671	0.000	0.903	
			0.834			0.932				0.894				0.904				
PM	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	TOTAL	
4:30 PM	40	72	8	0	16	119	17	0	53	68	21	0	7	26	26	0	473	
4:45 PM	21	65	12	0	23	102	21	0	39	65	22	0	18	31	24	0	443	
5:00 PM	35	80	14	0	18	130	11	0	54	69	14	0	10	50	21	0	506	
5:15 PM	39	72	7	0	31	126	21	0	53	56	16	0	10	25	20	0	476	
5:30 PM	34	89	14	0	20	121	21	2	45	58	13	0	16	26	26	0	485	
5:45 PM	26	71	21	0	21	122	21	0	37	73	11	0	7	20	23	0	453	
6:00 PM	41	75	6	0	25	140	12	0	45	74	16	0	9	30	25	0	498	
6:15 PM	29	66	10	0	26	132	28	0	44	86	24	0	10	25	42	0	522	
6:30 PM	33	77	11	0	31	143	15	0	40	81	17	0	15	32	25	0	520	
6:45 PM	27	60	9	0	23	104	10	0	61	74	18	0	8	19	26	0	439	
7:00 PM	31	56	9	0	16	108	12	1	56	71	25	0	12	20	26	0	443	
7:15 PM	26	69	4	0	27	116	14	1	68	81	20	0	5	8	13	0	452	
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
<b>APPROACH %'s :</b>	28.11%	62.69%	9.20%	0.00%	14.23%	75.14%	10.43%	0.21%	35.67%	51.32%	13.01%	0.00%	17.26%	42.39%	40.35%	0.00%	5710	
<b>PEAK HR :</b>	05:45 PM - 06:45 PM																	TOTAL
<b>PEAK HR VOL :</b>	129	289	48	0	103	537	76	0	166	314	68	0	41	107	115	0	1993	
<b>PEAK HR FACTOR :</b>	0.787	0.938	0.571	0.000	0.831	0.939	0.679	0.000	0.922	0.913	0.708	0.000	0.683	0.836	0.685	0.000	0.955	
			0.955			0.947				0.890				0.854				

# National Data & Surveying Services Intersection Turning Movement Count

Location: W Olive Ave & W Wendigo Ave | Sparks St  
City: Burbank  
Control: Signalized

Project ID: 18-05263-024  
Date: 4/24/2019

NS/EW Streets	Total																																																
	W Olive Ave						W Wendigo Ave						W Wendigo Ave   Sparks St						W Wendigo Ave   Sparks St						WESTBOUND2						TOTAL																		
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND																											
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1		2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	64	7	0	1	5	0	137	17	0	0	0	0	32	35	0	0	0	0	3	0	0	0	0	0	16	18	0	0	0	0	1	1	3	0	0	0	2	3	1	1	1	0	2	0	1	4	0	1
7:50 AM	0	72	20	0	1	5	0	139	27	0	2	0	0	17	22	1	0	0	0	2	0	0	0	0	0	44	0	0	2	0	0	2	13	0	2	2	0	2	11	6	1	1	0	7	0	8	17	0	2
7:55 AM	0	100	29	0	2	12	0	191	50	0	0	0	0	35	26	1	0	0	0	3	29	88	0	0	0	2	0	0	0	0	0	0	0	0	4	30	0	2	0	4	30	2	0						
8:00 AM	1	105	18	0	2	4	0	194	24	0	0	0	0	36	43	1	0	0	0	1	26	44	0	0	0	2	0	0	0	0	0	0	0	0	2	19	0	4	3	4	3	1	0	6	0	4	1	4	0
8:05 AM	1	114	18	0	0	9	0	146	29	0	1	0	0	36	68	0	0	0	0	3	1	24	27	0	0	0	0	0	0	0	0	1	5	0	1	2	0	2	2	1	1	1	0	0	0	4	5	5	0
8:10 AM	0	130	14	0	1	3	0	190	29	0	2	0	0	40	56	1	0	0	0	5	2	27	36	0	0	3	0	0	0	0	0	1	3	0	3	2	0	1	0	6	11	0	0						
8:15 AM	2	115	12	0	3	11	0	222	24	0	0	1	0	42	43	0	0	0	0	4	0	4	2	21	0	0	0	0	0	0	0	1	2	0	4	8	0	1	2	0	8	1	0						
8:20 AM	1	135	15	0	3	9	0	180	28	0	2	2	0	48	37	1	0	0	0	2	2	13	27	0	0	0	0	0	0	0	0	2	2	0	3	7	0	2	0	8	5	6	1						
8:25 AM	0	138	24	0	3	9	0	158	29	0	0	0	0	46	40	0	0	0	0	1	0	0	0	17	0	0	0	0	0	0	0	1	0	0	2	2	0	2	0	0	0	0	0						
TOTAL VOLUMES	16	65	165	0	16	62	51	57	38	0	51	63	68	63	62	62	63	65	67	68	69	71	62	67	68	63	67	63	62	67	65	62	67	63	62	67	65	62	67	63	62	67	65	62	67	63	62		
APPROACH %	0.45%	36.26%	23.27%	0.00%	1.42%	5.94%	0.16%	91.84%	11.03%	0.00%	1.50%	0.67%	38.27%	55.20%	1.20%	0.00%	3.72%	1.52%	26.92%	57.59%	0.00%	0.00%	2.47%	1.10%	29.50%	0.00%	8.30%	37.05%	18.25%	6.12%	0.00%	16.92%	0.00%	22.44%	35.56%	15.35%	6.69%	0.00%	16.92%	0.00%	22.44%	35.56%	15.35%	6.69%					
PEAK HR	2	40	78	0	8	33	1	194	112	0	18	4	153	268	4	0	16	8	112	195	0	0	7	1	63	0	11	58	14	8	0	18	0	39	42	37	2	248	0	39	42	37	2	248	0	39	42	37	2
PEAK HR VOL	0.000	0.888	0.672	0.000	0.750	0.688	0.250	0.824	0.660	0.000	0.643	0.500	0.832	0.882	0.500	0.000	0.800	0.500	0.848	0.554	0.000	0.000	0.583	0.250	0.917	0.000	0.688	0.483	0.583	0.500	0.000	0.679	0.000	0.833	0.375	0.850	0.438	0.843	0.679	0.000	0.833	0.375	0.850	0.438					
PEAK HR FACTOR							0.918						0.907					0.862																		0.792													

NS/EW Streets	Total																																																
	W Olive Ave						W Wendigo Ave						W Wendigo Ave   Sparks St						W Wendigo Ave   Sparks St						WESTBOUND2						TOTAL																		
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND																											
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1		2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	
4:30 PM	0	173	23	0	3	4	0	154	45	0	0	0	0	66	54	0	0	0	0	30	18	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	200	15	0	3	4	0	191	49	0	0	0	0	60	60	0	0	0	0	4	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM	0	200	21	0	0	6	0	111	54	0	4	1	0	70	53	1	0	0	0	7	1	16	56	0	0	1	0	0	0	0	0	0	0	0	3	6	0	3	4	1	1	1	0	8	0	3	4	1	0
5:15 PM	0	202	22	0	4	9	0	130	60	0	0	0	0	43	44	2	0	0	0	3	22	41	1	0	0	3	0	0	0	0	0	0	0	0	4	5	0	4	0	5	15	8	1						
5:30 PM	0	213	18	0	4	3	0	158	49	0	7	6	0	55	57	2	0	0	0	3	4	15	47	0	0	1	0	0	0	0	0	0	0	0	3	6	0	3	6	3	4	4	0	9	0	3	10	4	1
5:45 PM	0	218	17	0	1	7	0	130	50	0	0	0	0	40	50	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:00 PM	0	225	29	0	3	2	1	135	52	0	0	0	0	68	73	1	0	0	0	2	4	21	42	0	0	5	0	0	0	0	0	2	0	0	2	10	1	1	1	0	5	8	2	1					
6:15 PM	0	245	22	0	5	3	0	144	65	0	1	0	0	99	44	1	0	0	0	2	2	16	40	0	0	0	1	0	0	0	0	1	0	0	3	8	1	1	1	0	5	0	0						
6:30 PM	0	236	21	0	2	4	0	97	53	0	3	2	0	52	63	0	0	0	0	2	0	20	33	0	0	2	0	0	0	0	0	0	0	0	1	7	1	1	1	0	3	9	2	3					
6:45 PM	0	195	28	0	4	7	0	105	45	0	3	0	0	43	38	2	0	0	0	3	3	20	42	0	0	1	1	0	0	0	0	1	1	0	8	10	3	2	0	6	0	0	0						
7:00 PM	0	170	25	0	4	10	0	130	39	0	3	1	0	33	39	1	0	0	0	5	0	15	25	0	0	1	0	0	0	0	0	1	0	2	4	5	0	0	0	2	9	3	1						
7:15 PM	0	191	14	0	2	5	0	135	41	0	0	1	0	27	41	1	0	0	0	5	3	13	27	0	0	0	0	0	0	0	0	1	1	0	2	5	0	2	0	5	4	3	0						
TOTAL VOLUMES	16	177	165	0	16	62	51	57	38	0	51	63	68	63	62	62	63	65	67	68	69	71	62	67	68	63	67	63	62	67	65	62	67	63	62	67	65	62	67	63	62	67	65	62	67	63	62		
APPROACH %	0.00%	87.44%	8.99%	0.00%	1.29%	2.27%	0.17%	70.88%	28.10%	1.67%	1.12%	46.33%	48.47%	1.65%	0.00%	2.65%	1.52%	20.60%	49.13%	0.00%	0.00%	3.02%	1.42%	22.88%	0.00%	21.20%	34.67%	11.91%	8.94%	0.00%	25.54%	0.00%	15.98%	32.60%	14.02%	5.18%	0.00%	25.54%	0.00%	15.98%	32.60%	14.02%	5.18%						
PEAK HR	1	921	96	0	13	15	1	566	399	0	12	13	242	251	4	0	7	10	70	185	0	0	8	8	19	0	22	31	18	0	0	20	0	11	38	38	2	277	0	38	38	2	0	277	0	38	38	2	0
PEAK HR VOL	0.000	0.940	0.741	0.000	0.650	0.536	0.250	0.896	0.765	0.000	0.429	0.542	0.890	0.860	0.500	0.000	0.583	0.625	0.833	0.826	0.000	0.000	0.500	0.250	0.679	0.000	0.611	0.775	0.550	0.500	0.000	0.556	0.000	0.550	0.864	0.625	0.500	0.843	0.556	0.000	0.550	0.864	0.625	0.500					
PEAK HR FACTOR							0.899						0.863					0.833																		0.792													

# National Data & Surveying Services Intersection Turning Movement Count

Location: W Olive Ave & W Wendigo Ave/ S Sparks St  
City: Burbank  
Control: Signalized

Project ID: 18-05263-024  
Date: 4/25/2018

NS/EW Streets	Total																																				
	W Olive Ave						W Wendigo Ave						W Wendigo Ave/ S Sparks St						W Wendigo Ave/ S Sparks St																		
	NORTHBOUND		SOUTHBOUND		EASTBOUND		WESTBOUND		NORTHBOUND		SOUTHBOUND		EASTBOUND		WESTBOUND		NORTHBOUND		SOUTHBOUND		EASTBOUND		WESTBOUND														
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6								
<b>AM</b>	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6							
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
7:15 AM	1	57	13	0	0	7	0	131	20	0	4	0	21	46	0	0	3	0	14	28	0	0	0	1	1	1	1	1	1	1							
7:30 AM	0	105	21	0	0	10	0	184	32	0	2	1	25	56	0	0	1	1	26	51	0	0	2	0	2	14	3	0	0	0							
7:45 AM	1	117	29	0	2	8	0	203	51	0	1	0	41	90	1	0	3	0	27	84	0	0	1	0	0	3	19	1	0	0							
8:00 AM	0	84	20	0	2	11	1	100	35	0	3	0	37	66	1	0	1	1	28	37	0	0	2	1	3	13	4	2	0	0							
8:15 AM	0	150	12	0	0	11	0	211	45	0	4	0	45	56	2	0	4	0	34	32	0	0	1	4	0	1	8	4	2	0							
8:30 AM	1	130	71	0	0	10	0	197	37	0	1	0	47	57	0	0	4	0	35	38	0	0	1	4	0	0	0	0	0	0							
8:45 AM	1	120	39	0	3	8	0	208	38	0	7	2	57	57	0	0	5	0	36	30	0	0	2	1	10	0	5	2	2	0							
9:00 AM	0	130	25	0	0	30	0	211	52	0	0	3	51	25	4	0	7	1	22	24	0	0	1	5	0	4	8	6	1	1							
9:15 AM	1	118	11	0	6	8	0	175	23	0	2	3	39	45	3	0	3	0	24	32	0	0	3	0	4	4	6	5	1	1							
9:30 AM	1	160	22	0	2	9	0	179	50	0	6	0	51	46	3	0	6	2	24	18	0	0	0	0	0	0	0	0	0	0							
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
<b>TOTAL VOLUMES</b>	16	167	186	162	162	162	51	587	587	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51								
<b>APPROACH</b>	0.03%	26.36%	3.86%	0.00%	1.00%	0.39%	0.03%	97.77%	11.86%	0.00%	1.44%	0.00%	36.72%	57.09%	1.32%	0.00%	3.71%	0.65%	29.09%	50.86%	0.12%	0.00%	2.34%	1.50%	31.64%	50.00%	37.11%	15.23%	5.08%	0.00%	19.76%	0.00%	10.40%	45.74%	15.42%	1.73%	
<b>PEAK HR</b>	1	424	82	0	4	32	1	684	169	0	11	5	150	290	4	0	13	2	114	191	0	0	3	2	35	0	9	44	12	8							
<b>PEAK HR FACTOR</b>	0.250	0.835	0.707	0.000	0.500	0.667	0.250	0.964	0.828	0.000	0.688	0.417	0.867	0.886	0.500	0.000	0.650	0.500	0.814	0.568	0.000	0.000	0.375	0.875	0.438	0.000	0.750	0.579	0.813	0.750	0.000	0.583	0.000	0.708	0.545	0.528	0.250
<b>PM</b>	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6							
4:30 PM	2	250	22	0	0	4	1	154	39	0	0	0	45	53	0	0	0	13	13	0	0	0	0	0	0	0	0	0	0								
4:45 PM	2	220	21	0	0	5	2	194	31	0	1	0	40	50	4	0	2	0	15	27	1	0	4	0	0	5	7	6	2	0							
5:00 PM	0	208	21	0	3	5	1	132	48	0	2	1	65	61	3	0	1	3	22	55	0	0	4	0	0	0	2	0	1	4							
5:15 PM	2	240	17	0	2	5	0	171	61	0	1	3	55	55	3	0	4	5	37	49	0	0	1	3	3	5	6	11	0	0							
5:30 PM	1	187	29	0	4	4	2	133	58	0	6	1	76	77	0	0	6	5	31	55	0	0	1	0	4	0	5	9	3	3							
5:45 PM	0	210	28	0	0	7	1	138	28	0	0	0	77	50	0	0	0	31	39	0	0	1	0	0	0	0	0	0	0								
6:00 PM	2	220	27	0	1	1	0	185	62	0	1	5	54	58	0	0	4	4	26	57	0	0	5	1	0	0	6	5	1	1							
6:15 PM	0	233	15	0	2	5	0	150	66	0	2	4	59	49	2	0	5	2	25	52	0	0	6	1	4	0	10	3	4	0							
6:30 PM	0	203	27	0	8	8	0	105	46	0	1	3	69	72	0	0	7	1	22	39	0	0	4	0	2	0	6	12	1	0							
6:45 PM	0	225	29	0	4	11	0	127	45	0	2	0	66	65	0	0	1	1	22	40	0	0	2	0	0	0	8	11	3	3							
7:00 PM	0	195	22	0	4	5	0	140	53	0	1	0	46	51	0	0	7	1	22	31	0	0	3	0	3	0	3	12	4	6							
7:15 PM	0	244	24	0	0	0	0	122	66	0	3	0	43	39	2	0	4	1	33	24	0	0	0	0	1	0	3	7	1	1							
<b>TOTAL VOLUMES</b>	12	1258	282	0	46	60	6	1682	634	0	28	33	704	717	15	0	53	29	249	500	1	0	25	0	51	0	33	34	34	0							
<b>APPROACH %</b>	0.40%	86.66%	9.41%	0.00%	1.53%	2.00%	0.27%	76.98%	24.61%	0.00%	1.17%	1.38%	46.38%	47.22%	0.59%	0.00%	3.49%	1.93%	21.48%	43.21%	0.00%	0.00%	4.42%	0.76%	19.56%	0.00%	27.51%	37.84%	13.55%	13.55%	0.00%	28.62%	0.00%	14.10%	32.91%	18.90%	5.55%
<b>PEAK HR</b>	1	892	103	0	12	12	2	988	238	0	15	12	239	263	3	0	19	14	95	199	0	0	9	3	21	0	16	24	12	12							
<b>PEAK HR FACTOR</b>	0.625	0.899	0.871	0.000	0.600	0.600	0.250	0.869	0.975	0.000	0.536	0.600	0.852	0.860	0.250	0.000	0.792	0.700	0.766	0.873	0.000	0.000	0.460	0.750	0.875	0.000	0.667	0.667	0.650	0.500	0.000	0.682	0.000	0.688	0.800	0.943	0.500



**VOLUME**

N Front St S/O W Burbank Blvd

Day: Tuesday  
Date: 4/24/2018City: Burbank  
Project #: CA18\_5254\_001

DAILY TOTALS					NB	SB	EB	WB	Total		
					2,478	0	0	0	2,478		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	7	0			7	12:00	50	0			50
00:15	6	0			6	12:15	30	0			30
00:30	5	0			5	12:30	39	0			39
00:45	0	18	0		18	12:45	32	151	0		183
01:00	0	0			0	13:00	41	0			41
01:15	1	0			1	13:15	38	0			38
01:30	3	0			3	13:30	32	0			32
01:45	1	5	0		6	13:45	46	157	0		203
02:00	2	0			2	14:00	38	0			38
02:15	2	0			2	14:15	50	0			50
02:30	1	0			1	14:30	45	0			45
02:45	1	6	0		7	14:45	41	174	0		215
03:00	0	0			0	15:00	38	0			38
03:15	1	0			1	15:15	35	0			35
03:30	4	0			4	15:30	37	0			37
03:45	5	10	0		15	15:45	44	154	0		198
04:00	1	0			1	16:00	49	0			49
04:15	4	0			4	16:15	39	0			39
04:30	5	0			5	16:30	43	0			43
04:45	4	14	0		18	16:45	42	173	0		215
05:00	5	0			5	17:00	43	0			43
05:15	4	0			4	17:15	64	0			64
05:30	11	0			11	17:30	51	0			51
05:45	15	35	0		50	17:45	65	223	0		288
06:00	10	0			10	18:00	41	0			41
06:15	8	0			8	18:15	49	0			49
06:30	16	0			16	18:30	52	0			52
06:45	30	64	0		94	18:45	34	176	0		210
07:00	29	0			29	19:00	38	0			38
07:15	30	0			30	19:15	39	0			39
07:30	37	0			37	19:30	29	0			29
07:45	41	137	0		178	19:45	30	136	0		166
08:00	41	0			41	20:00	35	0			35
08:15	45	0			45	20:15	31	0			31
08:30	38	0			38	20:30	23	0			23
08:45	40	164	0		204	20:45	23	112	0		135
09:00	35	0			35	21:00	20	0			20
09:15	45	0			45	21:15	24	0			24
09:30	41	0			41	21:30	19	0			19
09:45	39	160	0		199	21:45	14	77	0		91
10:00	38	0			38	22:00	17	0			17
10:15	39	0			39	22:15	17	0			17
10:30	32	0			32	22:30	9	0			9
10:45	22	131	0		153	22:45	6	49	0		55
11:00	32	0			32	23:00	5	0			5
11:15	27	0			27	23:15	6	0			6
11:30	38	0			38	23:30	7	0			7
11:45	30	127	0		157	23:45	7	25	0		32
<b>TOTALS</b>	<b>871</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>871</b>	<b>TOTALS</b>	<b>1607</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1607</b>
<b>SPLIT %</b>	<b>100.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>35.1%</b>	<b>SPLIT %</b>	<b>100.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>64.9%</b>

DAILY TOTALS					NB	SB	EB	WB	Total	
					2,478	0	0	0	2,478	
AM Peak Hour	07:45				07:45				17:00	17:00
AM Pk Volume	165				165				223	223
Pk Hr Factor	0.917				0.917				0.858	0.858
7 - 9 Volume	301	0	0	0	301	4 - 6 Volume	396	0	0	396
7 - 9 Peak Hour	07:45				07:45	4 - 6 Peak Hour	17:00			17:00
7 - 9 Pk Volume	165	0	0	0	165	4 - 6 Pk Volume	223	0	0	223
Pk Hr Factor	0.917	0.000	0.000	0.000	0.917	Pk Hr Factor	0.858	0.000	0.000	0.858

**VOLUME**

N Front St S/O W Burbank Blvd

Day: Wednesday  
Date: 4/25/2018

City: Burbank  
Project #: CA18\_5254\_001

DAILY TOTALS					NB	SB	EB	WB	Total		
					2,710	0	0	0	2,710		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	2	0			2	12:00	31	0			31
00:15	5	0			5	12:15	32	0			32
00:30	4	0			4	12:30	39	0			39
00:45	2	13	0		2	12:45	39	141	0		39
01:00	1	0			1	13:00	45	0			45
01:15	2	0			2	13:15	62	0			62
01:30	2	0			2	13:30	32	0			32
01:45	0	5	0		0	13:45	40	179	0		40
02:00	1	0			1	14:00	42	0			42
02:15	1	0			1	14:15	46	0			46
02:30	4	0			4	14:30	43	0			43
02:45	2	8	0		2	14:45	37	168	0		37
03:00	0	0			0	15:00	49	0			49
03:15	0	0			0	15:15	48	0			48
03:30	1	0			1	15:30	38	0			38
03:45	2	3	0		2	15:45	52	187	0		52
04:00	2	0			2	16:00	52	0			52
04:15	2	0			2	16:15	47	0			47
04:30	2	0			2	16:30	43	0			43
04:45	8	14	0		8	16:45	53	195	0		53
05:00	2	0			2	17:00	52	0			52
05:15	9	0			9	17:15	61	0			61
05:30	12	0			12	17:30	50	0			50
05:45	8	31	0		8	17:45	56	219	0		56
06:00	15	0			15	18:00	52	0			52
06:15	15	0			15	18:15	48	0			48
06:30	18	0			18	18:30	38	0			38
06:45	19	67	0		19	18:45	44	182	0		44
07:00	32	0			32	19:00	38	0			38
07:15	27	0			27	19:15	41	0			41
07:30	40	0			40	19:30	38	0			38
07:45	42	141	0		42	19:45	33	150	0		33
08:00	47	0			47	20:00	45	0			45
08:15	45	0			45	20:15	41	0			41
08:30	40	0			40	20:30	30	0			30
08:45	36	168	0		36	20:45	27	143	0		27
09:00	37	0			37	21:00	32	0			32
09:15	35	0			35	21:15	57	0			57
09:30	46	0			46	21:30	55	0			55
09:45	31	149	0		31	21:45	15	159	0		15
10:00	33	0			33	22:00	23	0			23
10:15	43	0			43	22:15	17	0			17
10:30	42	0			42	22:30	10	0			10
10:45	28	146	0		28	22:45	9	59	0		9
11:00	27	0			27	23:00	12	0			12
11:15	38	0			38	23:15	18	0			18
11:30	31	0			31	23:30	10	0			10
11:45	40	136	0		40	23:45	7	47	0		7
<b>TOTALS</b>	881				<b>881</b>	<b>TOTALS</b>	1829				<b>1829</b>
<b>SPLIT %</b>	100.0%				<b>32.5%</b>	<b>SPLIT %</b>	100.0%				<b>67.5%</b>

DAILY TOTALS					NB	SB	EB	WB	Total
					2,710	0	0	0	2,710

AM Peak Hour	07:30			07:30	PM Peak Hour	17:00			17:00
AM Pk Volume	174			174	PM Pk Volume	219			219
Pk Hr Factor	0.926			0.926	Pk Hr Factor	0.898			0.898
7 - 9 Volume	309	0	0	309	4 - 6 Volume	414	0	0	414
7 - 9 Peak Hour	07:30			07:30	4 - 6 Peak Hour	17:00			17:00
7 - 9 Pk Volume	174	0	0	174	4 - 6 Pk Volume	219	0	0	219
Pk Hr Factor	0.926	0.000	0.000	0.926	Pk Hr Factor	0.898	0.000	0.000	0.898

### VOLUME

N Front St S/O W Burbank Blvd

Day: Thursday  
Date: 4/26/2018

City: Burbank  
Project #: CA18\_5254\_001

DAILY TOTALS					NB	SB	EB	WB	Total		
					2,905	0	0	0	2,905		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	6	0			6	12:00	57	0			57
00:15	1	0			1	12:15	47	0			47
00:30	6	0			6	12:30	44	0			44
00:45	3	16	0		3	12:45	35	183	0		35
01:00	3	0			3	13:00	41	0			41
01:15	3	0			3	13:15	41	0			41
01:30	1	0			1	13:30	19	0			19
01:45	3	10	0		3	13:45	48	149	0		48
02:00	0	0			0	14:00	46	0			46
02:15	1	0			1	14:15	56	0			56
02:30	1	0			1	14:30	43	0			43
02:45	0	2	0		0	14:45	53	198	0		53
03:00	3	0			3	15:00	59	0			59
03:15	1	0			1	15:15	59	0			59
03:30	3	0			3	15:30	60	0			60
03:45	4	11	0		4	15:45	64	242	0		64
04:00	2	0			2	16:00	58	0			58
04:15	2	0			2	16:15	62	0			62
04:30	1	0			1	16:30	63	0			63
04:45	7	12	0		7	16:45	50	233	0		50
05:00	3	0			3	17:00	56	0			56
05:15	5	0			5	17:15	62	0			62
05:30	9	0			9	17:30	48	0			48
05:45	12	29	0		12	17:45	69	235	0		69
06:00	14	0			14	18:00	60	0			60
06:15	11	0			11	18:15	61	0			61
06:30	13	0			13	18:30	51	0			51
06:45	33	71	0		33	18:45	45	217	0		45
07:00	24	0			24	19:00	50	0			50
07:15	32	0			32	19:15	39	0			39
07:30	40	0			40	19:30	44	0			44
07:45	40	136	0		40	19:45	27	160	0		27
08:00	41	0			41	20:00	33	0			33
08:15	36	0			36	20:15	33	0			33
08:30	50	0			50	20:30	32	0			32
08:45	43	170	0		43	20:45	25	123	0		25
09:00	38	0			38	21:00	32	0			32
09:15	46	0			46	21:15	54	0			54
09:30	30	0			30	21:30	48	0			48
09:45	32	146	0		32	21:45	16	150	0		16
10:00	40	0			40	22:00	18	0			18
10:15	39	0			39	22:15	17	0			17
10:30	34	0			34	22:30	24	0			24
10:45	45	158	0		45	22:45	17	76	0		17
11:00	27	0			27	23:00	11	0			11
11:15	31	0			31	23:15	7	0			7
11:30	43	0			43	23:30	12	0			12
11:45	38	139	0		38	23:45	9	39	0		9
<b>TOTALS</b>	900				<b>900</b>	<b>TOTALS</b>	2005				<b>2005</b>
<b>SPLIT %</b>	100.0%				<b>31.0%</b>	<b>SPLIT %</b>	100.0%				<b>69.0%</b>

DAILY TOTALS					NB	SB	EB	WB	Total
					2,905	0	0	0	2,905

AM Peak Hour	11:45				11:45	PM Peak Hour	15:45				15:45
AM Pk Volume	186				186	PM Pk Volume	247				247
Pk Hr Factor	0.816				0.816	Pk Hr Factor	0.965				0.965
7 - 9 Volume	306	0	0	0	306	4 - 6 Volume	468	0	0	0	468
7 - 9 Peak Hour	08:00				08:00	4 - 6 Peak Hour	17:00				17:00
7 - 9 Pk Volume	170	0	0	0	170	4 - 6 Pk Volume	235	0	0	0	235
Pk Hr Factor	0.850	0.000	0.000	0.000	0.850	Pk Hr Factor	0.851	0.000	0.000	0.000	0.851



## **APPENDIX B**

### **Intersection Level of Service Worksheets**

**EXISTING**

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #1 N Glenoaks Blvd & Amherst Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.629
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, Amherst Dr), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

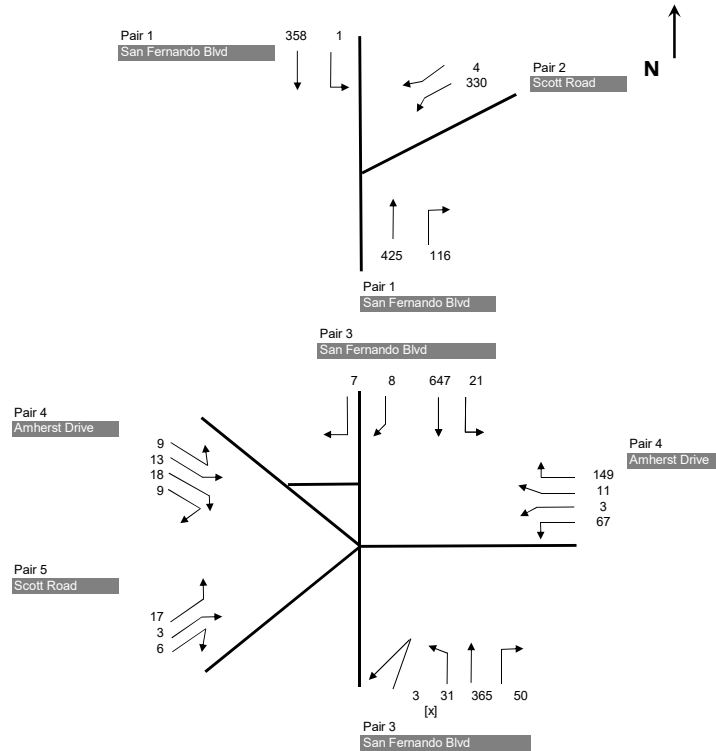
Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

\*\*\*\*\*

**Intersection 2 - San Fernando Blvd/Amherst Drive/Scott Road**

**Existing Conditions - AM Peak Hour**



Capacity Per Lane  
1444

Pair 1 Max $\left\{ \frac{\text{SBT } 358 + \text{SBR } 0}{2} = 179 \right\}$ or $\left\{ \frac{\text{NBT } 425 + \text{NBR } 116}{3} + \frac{\text{SBL}}{1} = 181 \right\}$ San Fernando Blvd SB Critical Volume = 181 v/c = 0.126
Pair 3 Sum $\left\{ \frac{\text{WBL } 330 + \text{WBR } 4}{1} = 334 \right\}$ Scott Rd NB Critical Volume = 334 v/c = 0.231
Pair 3 Max $\left\{ \frac{\text{SBT } 655 + \text{SBR}^* 0}{2} + \frac{\text{NBL } 34}{1} = 362 \right\}$ or $\left\{ \frac{\text{NBT } 365 + \text{NBR } 50}{3} + \frac{\text{SBL } 21}{1} = 159 \right\}$ San Fernando Blvd SB San Fernando Blvd NB San Fernando Blvd NB San Fernando Blvd SB Critical Volume = 362 v/c = 0.250 *SBR is excluded due to channelization
Pair 4 Max $\left\{ \frac{\text{EBT } 13 + \text{EBR } 27}{1} + \frac{\text{WBL } 70}{2} = 75 \right\}$ or $\left\{ \frac{\text{WBT } 11 + \text{WBR } 149}{2} + \frac{\text{EBL } 9}{1} = 89 \right\}$ Amherst Dr EB Amherst Dr WB Amherst Dr WB Amherst Dr EB Critical Volume = 89 v/c = 0.062
Pair 5 Sum $\left\{ \frac{\text{EBL } 17 + \text{EBT } 3 + \text{EBR } 6}{1} = 26 \right\}$ Scott Rd NB Critical Volume = 26 v/c = 0.018
V/C = Pair 1 0.126 + Pair 2 0.231 + Pair 3 0.250 + Pair 4 0.062 + Pair 5 0.018 + Loss 0.000 - ATS 0 = 0.687 LOS = B

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #3 N Glenoaks Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.669
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 N 3rd St & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.504
Loss Time (sec): 0 Average Delay (sec/veh): 12.1
Optimal Cycle: 0 Level Of Service: B

Street Name: N 3rd St Delaware Rd
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0

Volume Module:
Base Vol: 107 119 148 11 147 31 7 117 55 106 162 6
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 107 119 148 11 147 31 7 117 55 106 162 6
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 107 119 148 11 147 31 7 117 55 106 162 6
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 107 119 148 11 147 31 7 117 55 106 162 6
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 107 119 148 11 147 31 7 117 55 106 162 6

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.83 0.17 0.06 0.94 1.00 0.39 0.59 0.02
Final Sat.: 495 530 592 488 443 94 29 489 578 211 322 12

Capacity Analysis Module:
Vol/Sat: 0.22 0.22 0.25 0.02 0.33 0.33 0.24 0.24 0.10 0.50 0.50 0.50
Crit Moves: \*\*\*\*
Delay/Veh: 11.5 10.9 10.3 9.8 11.8 11.8 11.1 11.1 9.0 15.2 15.2 15.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 11.5 10.9 10.3 9.8 11.8 11.8 11.1 11.1 9.0 15.2 15.2 15.2
LOS by Move: B B B A B B B B A C C C
ApproachDel: 10.8 11.7 10.5 15.2
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 10.8 11.7 10.5 15.2
LOS by Appr: B B B C
AllWayAvgQ: 0.3 0.3 0.3 0.0 0.4 0.4 0.3 0.3 0.1 0.9 0.9 0.9

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #5 N San Fernando Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.386
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Table with columns for Street Name (N San Fernando Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #6 N 3rd St & E Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.588
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: A

Table with columns for Street Name (N 3rd St, E Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted, Permitted, Permitted), Rights (Include, Include, Ovl, Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.



Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #7 N San Fernando Blvd & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.745
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 89 Level Of Service: C

Table with columns for Street Name (N San Fernando Blvd, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #8 I-5 NB Off-Ramps & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.498
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Table with columns for Street Name (I-5 NB Off-Ramps, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Ignored), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #9 I-5 SB Off-Ramp/N Front St & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.905
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include I-5 SB Off-Ramp/N Front St and W Burbank Blvd with various movement details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for different approaches.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 N Victory Pl & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.780
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 103 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include N Victory Pl and W Burbank Blvd with various traffic movements and lane configurations.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across multiple lanes.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different lane configurations.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various lane and movement combinations.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #11 W Victory Blvd & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.502
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: A

Table with columns for Street Name (W Victory Blvd, W Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach and movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach and movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach and movement.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #12 N Glenoaks Blvd & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.652
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #13 N 1st St & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.488
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: A

Table with columns for Street Name (N 1st St, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #14 Victory Blvd & W Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.783
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 105 Level Of Service: C

Table with columns for Street Name (Victory Blvd, W Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach and movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach and movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach and movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #15 Victory Blvd & W Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.616
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: B

Table with columns for Street Name (Victory Blvd, W Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #16 S Glenoaks Blvd & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.713
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 79 Level Of Service: C

Table with columns for Street Name (S Glenoaks Blvd, E Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #17 South First Street & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.599
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: A

Table with columns for Street Name (South First Street, E Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Ov1, Include), Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #18 S Victory Blvd & W Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.806
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 117 Level Of Service: D

Table with columns for Street Name (S Victory Blvd, W Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #19 S Glenoaks Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.663
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: B

Table with columns for Street Name (S Glenoaks Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #20 S San Fernando Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.604
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level Of Service: B

Table with columns for Street Name (S San Fernando Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #21 South Ikea Way & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.585
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: A

Table with columns for Street Name (South Ikea Way, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #22 S Front St & I-5 SB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.508
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Table with columns for Street Name (S Front St, I-5 SB Ramps), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights (Ovl, Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #23 South First Street/Ikea Way & E Angeleno Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.367
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include South First Street/Ikea Way and E Angeleno Ave with North, South, East, and West bound movements.

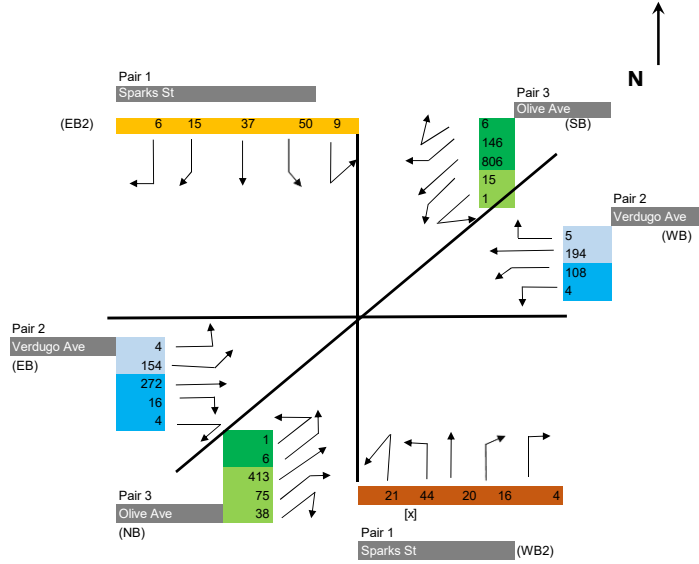
Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movement categories.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movement types.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

**Intersection 24 - Olive/Sparks & Verdugo**

**Existing Conditions - AM Peak Hour**



Capacity Per Lane  
1444

<p>Pair 1 Max <b>Sparks St</b></p> $\left\{ \frac{SBT}{37} + \frac{SBR}{21} + \frac{SBL}{59} = 117 \right\} \text{ or } \left\{ \frac{NBT}{20} + \frac{NBR}{20} + \frac{NBL}{65} = 105 \right\}$ <p>Critical Volume = 117 v/c = 0.081</p>
<p>Pair 2 Max <b>Verdugo Ave EB</b></p> $\left\{ \frac{EBT}{272} + \frac{EBR^*}{16} = 144 \right\} \text{ or } \left\{ \frac{EBL}{158} = 158 \right\}$ <p>Critical Volume = 158 v/c = 0.109</p> <p><small>*EBR* to olive is excluded due to channelization</small></p>
<p>Pair 3 Max <b>Verdugo Ave WB</b></p> $\left\{ \frac{WBL}{112} = 112 \right\} \text{ or } \left\{ \frac{WBT}{194} + \frac{WBR}{5} = 199 \right\}$ <p>Critical Volume = 199 v/c = 0.138</p>
<p>Pair 4 Max <b>Olive Ave</b></p> $\left\{ \frac{NBT}{413} + \frac{NBR}{113} + \frac{SBL}{16} = 279 \right\} \text{ or } \left\{ \frac{SBT}{952} \text{ or } \frac{SBR}{6} + \frac{NBL}{7} = 483 \right\}$ <p>Critical Volume = 483 v/c = 0.334</p>
<p>V/C = 0.081 + 0.109 + 0.138 + 0.334 + 0.000 - 0 = 0.663</p> <p>LOS = B</p> <p style="text-align: right;">Loss Time ATSA C Credit</p>

Level Of Service Computation Report  
Circular 212 Planning Method (Base Volume Alternative)

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Intersection #1 N Glenoaks Blvd & Amherst Dr  
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Cycle (sec): 100 Critical Vol./Cap.(X): 0.544  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 41 Level Of Service: A  
\*\*\*\*\*

Street Name:	N Glenoaks Blvd					Amherst Dr										
Approach:	North Bound		South Bound			East Bound			West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Prot+Permit		Permitted			Permitted			Permitted							
Rights:	Include		Include			Include			Include							
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Lanes:	1	0	1	1	0	1	0	2	0	1	1	0	1	0	1	0

Volume Module:

Base Vol:	67	1166	18	12	1143	87	131	64	27	24	38	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	1166	18	12	1143	87	131	64	27	24	38	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	67	1166	18	12	1143	87	131	64	27	24	38	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	1166	18	12	1143	87	131	64	27	24	38	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	67	1166	18	12	1143	87	131	64	27	24	38	7

Saturation Flow Module:

Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Lanes:	1.00	1.97	0.03	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.84	0.16
Final Sat.:	1496	2947	45	1496	2993	1496	1496	1496	1496	1496	1264	233

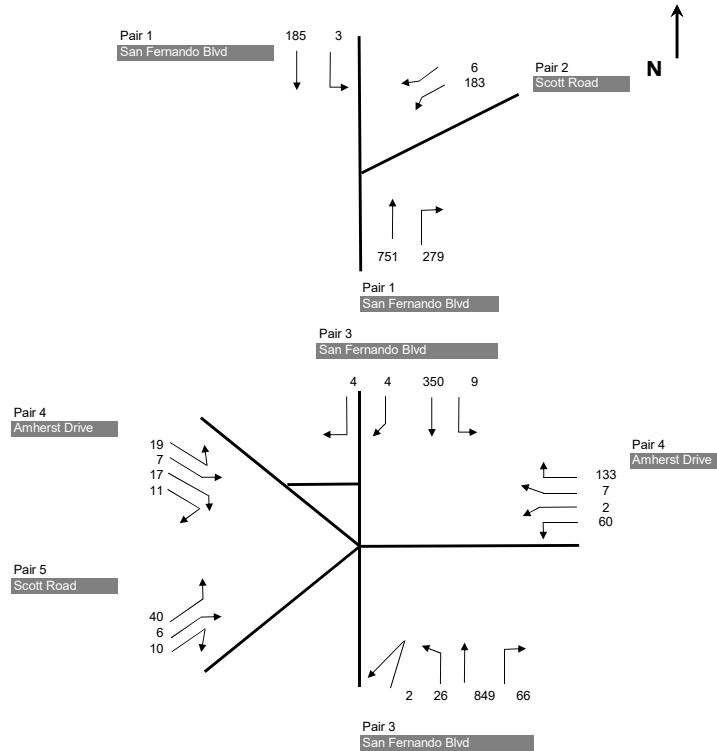
Capacity Analysis Module:

Vol/Sat:	0.04	0.40	0.40	0.01	0.38	0.06	0.09	0.04	0.02	0.02	0.03	0.03
Crit Volume:	67			572			131				45	
Crit Moves:	****			****			****				****	

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**Intersection 2 - San Fernando Blvd/Amherst Drive/Scott Road**

**Existing Conditions - PM Peak Hour**



Capacity Per Lane  
1444

Pair 1 Max $\left\{ \frac{SBT}{185} + \frac{SBR}{0} = 93 \right\}$ or $\left\{ \frac{NBT}{751} + \frac{NBR}{279} + \frac{SBL}{1} = 346 \right\}$ Critical Volume = 346 v/c = 0.240
Pair 3 Sum $\left\{ \frac{WBL}{183} + \frac{WBR}{6} = 189 \right\}$ Critical Volume = 189 v/c = 0.131
Pair 3 Max $\left\{ \frac{SBT}{354} + \frac{SBR^*}{0} + \frac{NBL}{28} = 205 \right\}$ or $\left\{ \frac{NBT}{849} + \frac{NBR}{66} + \frac{SBL}{9} = 314 \right\}$ Critical Volume = 314 v/c = 0.217 *SBR is excluded due to channelization
Pair 4 Max $\left\{ \frac{EBT}{7} + \frac{EBR}{28} + \frac{WBL}{62} = 66 \right\}$ or $\left\{ \frac{WBT}{7} + \frac{WBR}{133} + \frac{EBL}{19} = 89 \right\}$ Critical Volume = 89 v/c = 0.062
Pair 5 Sum $\left\{ \frac{EBL}{40} + \frac{EBT}{6} + \frac{EBR}{10} = 56 \right\}$ Critical Volume = 56 v/c = 0.039
V/C = Pair 1 0.240 + Pair 2 0.131 + Pair 3 0.217 + Pair 4 0.062 + Pair 5 0.039 + Loss 0.000 - ATSA 0 = 0.689 LOS = B

Level Of Service Computation Report  
Circular 212 Planning Method (Base Volume Alternative)

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Intersection #3 N Glenoaks Blvd & Delaware Rd  
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Cycle (sec): 100 Critical Vol./Cap.(X): 0.694  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 47 Level Of Service: B  
\*\*\*\*\*

Street Name:	N Glenoaks Blvd				Delaware Rd										
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Permitted		Permitted		Permitted		Permitted								
Rights:	Include		Include		Include		Include								
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:	1	0	1	1	0	1	0	1	1	0	0	0	1	0	0

Volume Module:

Base Vol:	152	1046	9	7	953	124	169	68	156	10	40	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	1046	9	7	953	124	169	68	156	10	40	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	152	1046	9	7	953	124	169	68	156	10	40	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	1046	9	7	953	124	169	68	156	10	40	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	152	1046	9	7	953	124	169	68	156	10	40	2

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Lanes:	1.00	1.98	0.02	1.00	1.77	0.23	0.43	0.17	0.40	0.19	0.77	0.04
Final Sat.:	1575	3123	27	1575	2787	363	677	273	625	303	1212	61

Capacity Analysis Module:

Vol/Sat:	0.10	0.33	0.33	0.00	0.34	0.34	0.25	0.25	0.25	0.03	0.03	0.03
Crit Volume:	152					539	393			10		
Crit Moves:	****					****	****			****		

\*\*\*\*\*

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 N 3rd St & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.556
Loss Time (sec): 0 Average Delay (sec/veh): 14.0
Optimal Cycle: 0 Level Of Service: B

Table with columns for Street Name (N 3rd St, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), Min. Green (0), and Lanes (1, 0, 1, 0, 1).

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across 12 lanes.

Saturation Flow Module table with columns for Adjustment, Lanes, and Final Sat. across 12 lanes.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ across 12 lanes.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #5 N San Fernando Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.528
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level Of Service: A

Table with columns for Street Name (N San Fernando Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #6 N 3rd St & E Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.607
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include N 3rd St and E Burbank Blvd with various movement and control details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.



Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #7 N San Fernando Blvd & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.722
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 82 Level Of Service: C

Table with columns for Street Name (N San Fernando Blvd, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #8 I-5 NB Off-Ramps & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.582
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: A

Table with columns for Street Name (I-5 NB Off-Ramps, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report  
Circular 212 Planning Method (Base Volume Alternative)

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Intersection #9 I-5 SB Off-Ramp/N Front St & W Burbank Blvd  
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Cycle (sec): 100 Critical Vol./Cap.(X): 0.983  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 180 Level Of Service: E  
\*\*\*\*\*

Street Name:	I-5 SB Off-Ramp/N Front St				W Burbank Blvd															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Split Phase		Split Phase		Permitted		Protected													
Rights:	Include		Include		Include		Include													
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0								
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0								
Lanes:	1	0	0	0	1	1	1	0	0	1	0	0	2	1	0	1	0	3	0	0

Volume Module:

Base Vol:	281	0	41	483	39	330	0	1936	377	19	1612	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	281	0	41	483	39	330	0	1936	377	19	1612	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	281	0	41	483	39	330	0	1936	377	19	1612	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	281	0	41	483	39	330	0	1936	377	19	1612	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	281	0	41	531	39	330	0	1936	377	19	1612	0

Saturation Flow Module:

Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	1.86	0.14	1.00	0.00	2.51	0.49	1.00	3.00	0.00
Final Sat.:	1425	0	1425	2655	195	1425	0	3578	697	1425	4275	0

Capacity Analysis Module:

Vol/Sat:	0.20	0.00	0.03	0.20	0.20	0.23	0.00	0.54	0.54	0.01	0.38	0.00
Crit Volume:	281					330			771	19		
Crit Moves:	****					****			****	****		

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Level Of Service Computation Report  
Circular 212 Planning Method (Base Volume Alternative)

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Intersection #10 N Victory Pl & W Burbank Blvd

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.869  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 174 Level Of Service: D

\*\*\*\*\*

Street Name:	N Victory Pl						W Burbank Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	1	1	0	1	2	0	3	0

Volume Module:

Base Vol:	511	522	264	746	461	142	119	1356	315	300	1363	513
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	511	522	264	746	461	142	119	1356	315	300	1363	513
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	511	522	264	746	461	142	119	1356	315	300	1363	513
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	511	522	264	746	461	142	119	1356	315	300	1363	513
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
FinalVolume:	562	522	264	821	461	142	131	1356	315	330	1363	513

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Lanes:	2.00	2.00	1.00	2.56	1.44	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	2805	2805	1403	3592	2018	1403	2805	4208	1403	2805	4208	1403

Capacity Analysis Module:

Vol/Sat:	0.20	0.19	0.19	0.23	0.23	0.10	0.05	0.32	0.22	0.12	0.32	0.37
Crit Volume:	281			320				452		165		
Crit Moves:	****			****				****		****		

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #11 W Victory Blvd & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.494
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. It details the configuration for W Victory Blvd and W Burbank Blvd, including split phase and permitted movements.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each approach.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #12 N Glenoaks Blvd & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.671
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #13 N 1st St & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.753
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 92 Level Of Service: C

Table with columns for Street Name (N 1st St, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #14 Victory Blvd & W Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.874
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: D

Table with columns for Street Name (Victory Blvd, W Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #15 Victory Blvd & W Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.584
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: A

Table with columns for Street Name (Victory Blvd, W Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #16 S Glenoaks Blvd & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.689
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 73 Level Of Service: B

Table with columns for Street Name (S Glenoaks Blvd, E Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #17 South First Street & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.709
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 78 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include South First Street and E Olive Ave with North, South, East, and West bound movements.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movement categories.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movement types.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Level Of Service Computation Report  
Circular 212 Planning Method (Base Volume Alternative)

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Intersection #18 S Victory Blvd & W Olive Ave  
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Cycle (sec): 100 Critical Vol./Cap.(X): 0.841  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 144 Level Of Service: D  
\*\*\*\*\*

Street Name: S Victory Blvd W Olive Ave  
Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R  
Control: Prot+Permit Prot+Permit Prot+Permit Prot+Permit  
Rights: Include Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0  
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 1 1 0 1 0 2 0 1

Volume Module:  
Base Vol: 75 705 171 191 879 219 205 1008 39 113 631 204  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 75 705 171 191 879 219 205 1008 39 113 631 204  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Volume: 75 705 171 191 879 219 205 1008 39 113 631 204  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 75 705 171 191 879 219 205 1008 39 113 631 204  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 75 705 171 191 879 219 205 1008 39 113 631 204

Saturation Flow Module:  
Sat/Lane: 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375  
Adjustment: 1.02 1.02 1.02 1.02 1.02 1.02 1.02 1.02 1.02 1.02 1.02 1.02  
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 1.93 0.07 1.00 2.00 1.00  
Final Sat.: 1403 2805 1403 1403 2805 1403 1403 2701 104 1403 2805 1403

Capacity Analysis Module:  
Vol/Sat: 0.05 0.25 0.12 0.14 0.31 0.16 0.15 0.37 0.37 0.08 0.22 0.15  
Crit Volume: 353 191 524 113  
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*  
\*\*\*\*\*

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #19 S Glenoaks Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.643
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: B

Table with columns for Street Name (S Glenoaks Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach and movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach and movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach and movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #20 S San Fernando Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.702
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level Of Service: C

Table with columns for Street Name (S San Fernando Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #21 South Ikea Way & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.636
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 63 Level Of Service: B

Table with columns for Street Name (South Ikea Way, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted), Rights (Include, Ovl), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #22 S Front St & I-5 SB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.610
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: B

Table with columns for Street Name (S Front St, I-5 SB Ramps), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights (Ovl, Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #23 South First Street/Ikea Way & E Angeleno Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.524
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include South First Street/Ikea Way and E Angeleno Ave with North, South, East, and West bound movements.

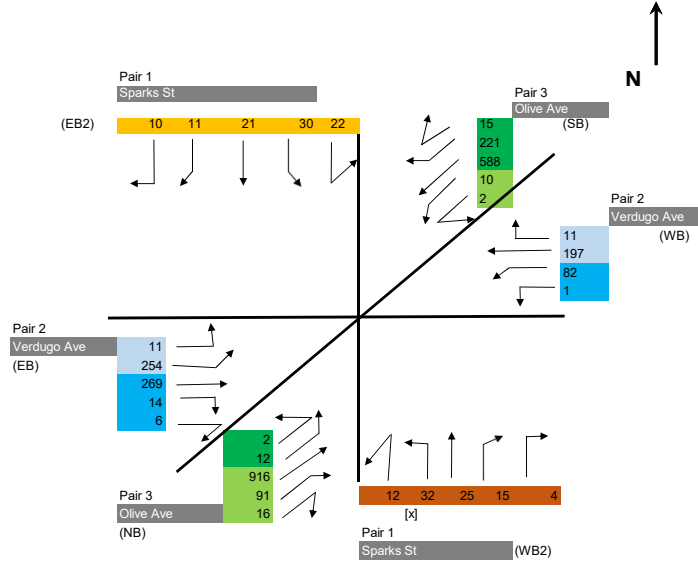
Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movement categories.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movement types.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Intersection 24 - Olive/Sparks & Verdugo

Existing Conditions - PM Peak Hour



Capacity Per Lane  
1444

<p>Pair 1 Max Sparks St</p> $\left\{ \frac{SBT}{21} + \frac{SBR}{21} + \frac{SBL}{52} = 94 \right\} \text{ or } \left\{ \frac{NBT}{25} + \frac{NBR}{19} + \frac{NBL}{44} = 88 \right\}$ <p>Critical Volume = 94 v/c = 0.065</p>
<p>Pair 2 Max Verdugo Ave EB</p> $\left\{ \frac{EBT}{269} + \frac{EBR^*}{14} = 142 \right\} \text{ or } \left\{ \frac{EBL}{265} = 265 \right\}$ <p>Critical Volume = 265 v/c = 0.184</p> <p>*EBR to olive is excluded due to channelization</p>
<p>Pair 2 Max Verdugo Ave WB</p> $\left\{ \frac{WBL}{83} = 83 \right\} \text{ or } \left\{ \frac{WBT}{197} + \frac{WBR}{11} = 208 \right\}$ <p>Critical Volume = 208 v/c = 0.144</p>
<p>Pair 4 Max Olive Ave</p> $\left\{ \frac{NBT}{916} + \frac{NBR}{107} + \frac{SBL}{12} = 524 \right\} \text{ or } \left\{ \frac{SBT}{809} \text{ or } \frac{SBR}{15} + \frac{NBL}{14} = 419 \right\}$ <p>Critical Volume = 524 v/c = 0.363</p>
<p>V/C = 0.065 + 0.184 + 0.144 + 0.363 + 0.000 - 0 = 0.755</p> <p>LOS = C</p> <p>Loss Time ATSA C Credit</p>

**EXISTING PLUS PROJECT**

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #1 N Glenoaks Blvd & Amherst Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.630
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, Amherst Dr), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

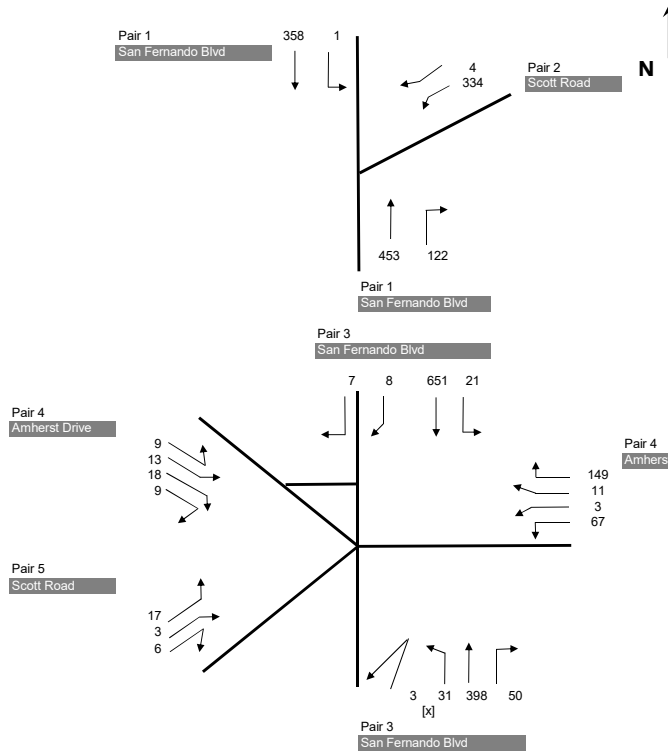
Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

**Intersection 2 - San Fernando Blvd/Amherst Drive/Scott Road**

**Existing + Project Conditions - AM Peak Hour**



Capacity Per Lane  
1444

Pair 1 Max	$\left\{ \frac{\text{SBT } 358 + \text{SBR } 0}{2} = 179 \right\}$	or	$\left\{ \frac{\text{NBT } 453 + \text{NBR } 122}{3} + \frac{\text{SBL } 1}{1} = 193 \right\}$						
Critical Volume	= 193								
v/c	= 0.133								
Pair 3 Sum	$\left\{ \frac{\text{WBL } 334 + \text{WBR } 4}{1} = 338 \right\}$								
Critical Volume	= 338								
v/c	= 0.234								
Pair 3 Max	$\left\{ \frac{\text{SBT } 659 + \text{SBR}^* 0}{2} + \frac{\text{NBL } 34}{1} = 364 \right\}$	or	$\left\{ \frac{\text{NBT } 398 + \text{NBR } 50}{3} + \frac{\text{SBL } 21}{1} = 170 \right\}$						
Critical Volume	= 364								
v/c	= 0.252	*SBR is excluded due to channelization							
Pair 4 Max	$\left\{ \frac{\text{EBT } 13 + \text{EBR } 27}{1} + \frac{\text{WBL } 70}{2} = 75 \right\}$	or	$\left\{ \frac{\text{WBT } 11 + \text{WBR } 149}{2} + \frac{\text{EBL } 9}{1} = 89 \right\}$						
Critical Volume	= 89								
v/c	= 0.062								
Pair 5 Sum	$\left\{ \frac{\text{EBL } 17 + \text{EBT } 3 + \text{EBR } 6}{1} = 26 \right\}$								
Critical Volume	= 26								
v/c	= 0.018								
V/C =	Pair 1	Pair 2	Pair 3	Pair 4	Pair 5	Loss	ATS	=	0.699
	0.133	0.234	0.252	0.062	0.018	0.000	0		
LOS =	<b>B</b>								

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #3 N Glenoaks Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.672
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 N 3rd St & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.510
Loss Time (sec): 0 Average Delay (sec/veh): 12.2
Optimal Cycle: 0 Level Of Service: B

Street Name: N 3rd St Delaware Rd
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 0 0

Volume Module:
Base Vol: 107 119 152 11 147 31 7 117 55 109 162 6
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 107 119 152 11 147 31 7 117 55 109 162 6
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 107 119 152 11 147 31 7 117 55 109 162 6
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 107 119 152 11 147 31 7 117 55 109 162 6
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 107 119 152 11 147 31 7 117 55 109 162 6

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.83 0.17 0.06 0.94 1.00 0.39 0.59 0.02
Final Sat.: 494 530 590 487 441 93 29 488 575 214 318 12

Capacity Analysis Module:
Vol/Sat: 0.22 0.22 0.26 0.02 0.33 0.33 0.24 0.24 0.10 0.51 0.51 0.51
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*
Delay/Veh: 11.5 11.0 10.4 9.8 11.9 11.9 11.1 11.1 9.1 15.4 15.4 15.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 11.5 11.0 10.4 9.8 11.9 11.9 11.1 11.1 9.1 15.4 15.4 15.4
LOS by Move: B B B A B B B B A C C C
ApproachDel: 10.9 11.7 10.5 15.4
Delay Adj: 1.00 1.00
ApprAdjDel: 10.9 11.7 10.5 15.4
LOS by Appr: B B B C
AllWayAvgQ: 0.3 0.3 0.3 0.0 0.4 0.4 0.3 0.3 0.1 0.9 0.9 0.9

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #5 N San Fernando Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.387
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Table with columns for Street Name (N San Fernando Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.



Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #6 N 3rd St & E Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.596
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: A

Table with columns for Street Name (N 3rd St, E Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted, Permitted, Permitted), Rights (Include, Include, Ovl, Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #7 N San Fernando Blvd & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.752
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 92 Level Of Service: C

Table with columns for Street Name (N San Fernando Blvd, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #8 I-5 NB Off-Ramps & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.503
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Table with columns for Street Name (I-5 NB Off-Ramps, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Ignored), Rights (Include), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #9 I-5 SB Off-Ramp/N Front St & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.003
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include I-5 SB Off-Ramp/N Front St and W Burbank Blvd with various movement details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for different approaches.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 N Victory Pl & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.804
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 116 Level Of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include N Victory Pl and W Burbank Blvd with various traffic movements and lane configurations.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #11 W Victory Blvd & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.512
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: A

Table with columns for Street Name (W Victory Blvd, W Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach and movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach and movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach and movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #12 N Glenoaks Blvd & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.654
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 54 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #13 N 1st St & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.488
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: A

Table with columns for Street Name (N 1st St, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #14 Victory Blvd & W Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.795
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 111 Level Of Service: C

Table with columns for Street Name (Victory Blvd, W Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #15 Victory Blvd & W Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.618
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: B

Table with columns for Street Name (Victory Blvd, W Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include, Ignore), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for different movements.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #16 S Glenoaks Blvd & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.714
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 80 Level Of Service: C

Table with columns for Street Name (S Glenoaks Blvd, E Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #17 South First Street & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.599
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: A

Table with columns for Street Name (South First Street, E Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Ov1, Include), Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #18 S Victory Blvd & W Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.822
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 128 Level Of Service: D

Table with columns for Street Name (S Victory Blvd, W Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #19 S Glenoaks Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.667
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: B

Table with columns for Street Name (S Glenoaks Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #20 S San Fernando Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.612
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: B

Table with columns for Street Name (S San Fernando Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #21 South Ikea Way & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.591
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 56 Level Of Service: A

Table with columns for Street Name (South Ikea Way, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted), Rights (Include, Ovl), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.



Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #22 S Front St & I-5 SB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.517
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level Of Service: A

Table with columns for Street Name (S Front St, I-5 SB Ramps), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights (Ovl, Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #23 South First Street/Ikea Way & E Angeleno Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.367
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. It details the configuration for South First Street/Ikea Way and E Angeleno Ave.

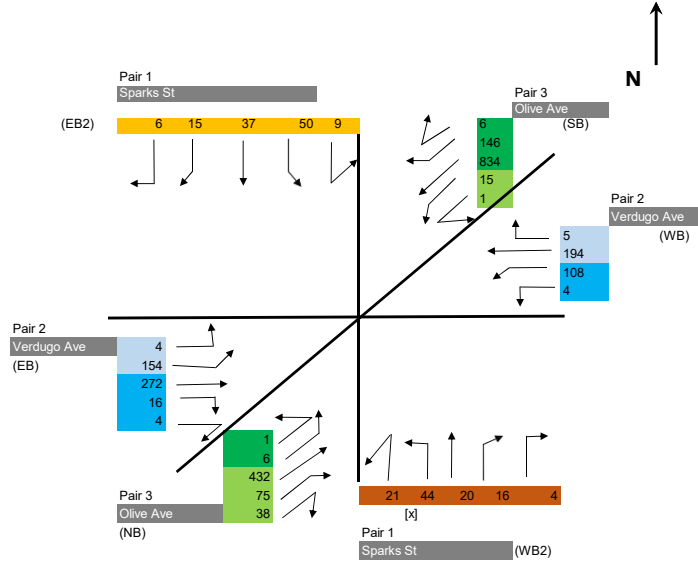
Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Intersection 24 - Olive/Sparks & Verdugo

Existing + Project Conditions - AM Peak Hour



Capacity Per Lane  
1444

<p>Pair 1 Max Sparks St</p> $\left\{ \frac{SBT}{37} + \frac{SBR}{21} + \frac{SBL}{59} = 117 \right\} \text{ or } \left\{ \frac{NBT}{20} + \frac{NBR}{20} + \frac{NBL}{65} = 105 \right\}$ <p>Critical Volume = 117 v/c = 0.081</p>
<p>Pair 2 Max Verdugo Ave EB</p> $\left\{ \frac{EBT}{272} + \frac{EBR^*}{16} = 144 \right\} \text{ or } \left\{ \frac{EBL}{158} = 158 \right\}$ <p>Critical Volume = 158 v/c = 0.109</p> <p>*EBR to olive is excluded due to channelization</p>
<p>Pair 2 Max Verdugo Ave WB</p> $\left\{ \frac{WBL}{112} = 112 \right\} \text{ or } \left\{ \frac{WBT}{194} + \frac{WBR}{5} = 199 \right\}$ <p>Critical Volume = 199 v/c = 0.138</p>
<p>Pair 4 Max Olive Ave</p> $\left\{ \frac{NBT}{432} + \frac{NBR}{113} + \frac{SBL}{16} = 289 \right\} \text{ or } \left\{ \frac{SBT}{980} \text{ or } \frac{SBR}{6} + \frac{NBL}{7} = 497 \right\}$ <p>Critical Volume = 497 v/c = 0.344</p>
<p>V/C = 0.081 + 0.109 + 0.138 + 0.344 + 0.000 - 0 = 0.672</p> <p>LOS = B</p> <p>Loss Time ATSA C Credit = 0</p>

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #1 N Glenoaks Blvd & Amherst Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.546
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: A

Table with columns for Street Name (N Glenoaks Blvd, Amherst Dr), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted), Rights (Include), Min. Green, Y+R, and Lanes.

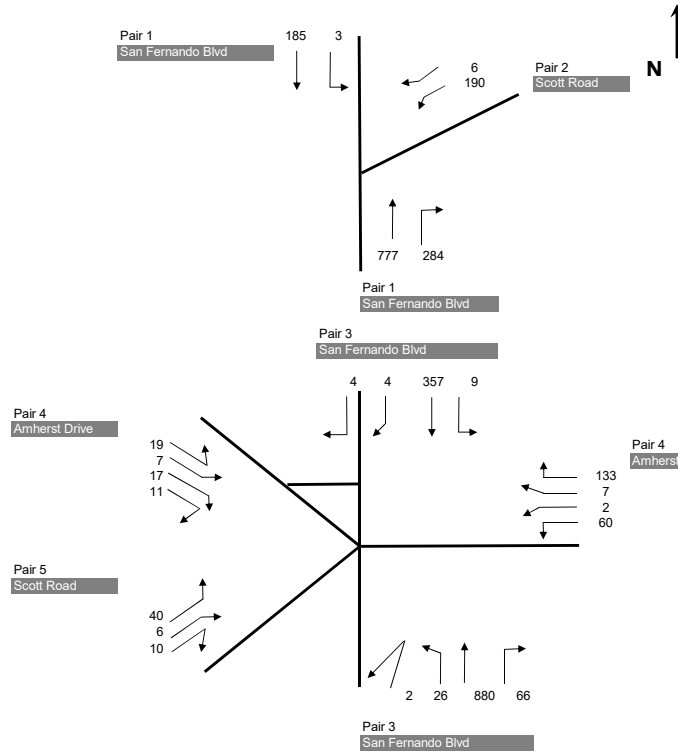
Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

**Intersection 2 - San Fernando Blvd/Amherst Drive/Scott Road**

**Existing + Project Conditions - PM Peak Hour**



Capacity Per Lane  
1444

<p>Pair 1 Max <math>\left\{ \frac{\text{SBT } 185 + \text{SBR } 0}{2} = 93 \right\}</math> or <math>\left\{ \frac{\text{NBT } 777 + \text{NBR } 284}{3} + \frac{\text{SBL}}{1} = 357 \right\}</math></p> <p>Critical Volume = 357 v/c = 0.247</p>
<p>Pair 3 Sum <math>\left\{ \frac{\text{WBL } 190 + \text{WBR } 6}{1} = 196 \right\}</math></p> <p>Critical Volume = 196 v/c = 0.136</p>
<p>Pair 3 Max <math>\left\{ \frac{\text{SBT } 361 + \text{SBR}^* 0}{2} + \frac{\text{NBL } 28}{1} = 209 \right\}</math> or <math>\left\{ \frac{\text{NBT } 880 + \text{NBR } 66}{3} + \frac{\text{SBL } 9}{1} = 324 \right\}</math></p> <p>Critical Volume = 324 v/c = 0.225</p> <p><small>*SBR is excluded due to channelization</small></p>
<p>Pair 4 Max <math>\left\{ \frac{\text{EBT } 7 + \text{EBR } 28}{1} + \frac{\text{WBL } 62}{2} = 66 \right\}</math> or <math>\left\{ \frac{\text{WBT } 7 + \text{WBR } 133}{2} + \frac{\text{EBL } 19}{1} = 89 \right\}</math></p> <p>Critical Volume = 89 v/c = 0.062</p>
<p>Pair 5 Sum <math>\left\{ \frac{\text{EBL } 40 + \text{EBT } 6 + \text{EBR } 10}{1} = 56 \right\}</math></p> <p>Critical Volume = 56 v/c = 0.039</p>
<p>V/C = Pair 1 0.247 + Pair 2 0.136 + Pair 3 0.225 + Pair 4 0.062 + Pair 5 0.039 + Loss 0.000 - ATSA 0 = 0.708</p> <p>LOS = C</p>

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #3 N Glenoaks Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.698
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 N 3rd St & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.566
Loss Time (sec): 0 Average Delay (sec/veh): 14.2
Optimal Cycle: 0 Level Of Service: B

Street Name: N 3rd St Delaware Rd
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0

Volume Module:
Base Vol: 152 201 198 30 101 21 20 201 55 101 176 10
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 152 201 198 30 101 21 20 201 55 101 176 10
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 152 201 198 30 101 21 20 201 55 101 176 10
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 152 201 198 30 101 21 20 201 55 101 176 10
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 152 201 198 30 101 21 20 201 55 101 176 10

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.83 0.17 0.09 0.91 1.00 0.35 0.62 0.03
Final Sat.: 473 506 560 435 391 81 45 448 544 178 311 18

Capacity Analysis Module:
Vol/Sat: 0.32 0.40 0.35 0.07 0.26 0.26 0.45 0.45 0.10 0.57 0.57 0.57
Crit Moves: \*\*\*\*
Delay/Veh: 13.4 13.8 12.1 10.9 12.0 12.0 14.8 14.8 9.6 17.9 17.9 17.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.4 13.8 12.1 10.9 12.0 12.0 14.8 14.8 9.6 17.9 17.9 17.9
LOS by Move: B B B B B B B B A C C C
ApproachDel: 13.1 11.8 13.8 17.9
Delay Adj: 1.00 1.00
ApprAdjDel: 13.1 11.8 13.8 17.9
LOS by Appr: B B B C
AllWayAvgQ: 0.4 0.6 0.5 0.1 0.3 0.3 0.7 0.7 0.1 1.1 1.1 1.1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #5 N San Fernando Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.538
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: A

Table with columns for Street Name (N San Fernando Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.



Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #6 N 3rd St & E Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.619
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include N 3rd St and E Burbank Blvd with various traffic movements and lane configurations.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #7 N San Fernando Blvd & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.742
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 88 Level Of Service: C

Table with columns for Street Name (N San Fernando Blvd, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #8 I-5 NB Off-Ramps & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.591
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: A

Table with columns for Street Name (I-5 NB Off-Ramps, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Ignored), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #9 I-5 SB Off-Ramp/N Front St & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.105
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include I-5 SB Off-Ramp/N Front St and W Burbank Blvd with various movement details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 N Victory Pl & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.897
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include N Victory Pl and W Burbank Blvd with various traffic movements and lane configurations.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #11 W Victory Blvd & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.505
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: A

Table with columns for Street Name (W Victory Blvd, W Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #12 N Glenoaks Blvd & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.676
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

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Intersection #13 N 1st St & E Magnolia Blvd

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.754
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 93 Level Of Service: C

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Table with columns for Street Name (N 1st St, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module:

Table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module:

Table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table with columns for Vol/Sat, Crit Volume, and Crit Moves.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #14 Victory Blvd & W Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.889
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: D

Table with columns for Street Name (Victory Blvd, W Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #15 Victory Blvd & W Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.586
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: A

Table with columns for Street Name (Victory Blvd, W Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #16 S Glenoaks Blvd & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.691
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 74 Level Of Service: B

Table with columns for Street Name (S Glenoaks Blvd, E Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #17 South First Street & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.709
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 78 Level Of Service: C

Table with columns for Street Name (South First Street, E Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Ovl, Include), Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #18 S Victory Blvd & W Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.845
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 147 Level Of Service: D

Table with columns for Street Name (S Victory Blvd, W Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #19 S Glenoaks Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.648
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: B

Table with columns for Street Name (S Glenoaks Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach and movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach and movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach and movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #20 S San Fernando Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.715
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level Of Service: C

Table with columns for Street Name (S San Fernando Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #21 South Ikea Way & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.646
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 64 Level Of Service: B

Table with columns for Street Name (South Ikea Way, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #22 S Front St & I-5 SB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.618
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: B

Table with columns for Street Name (S Front St, I-5 SB Ramps), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights (Ovl, Include), and various traffic volume and delay metrics.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #23 South First Street/Ikea Way & E Angeleno Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.524
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include South First Street/Ikea Way and E Angeleno Ave with North, South, East, and West bound movements.

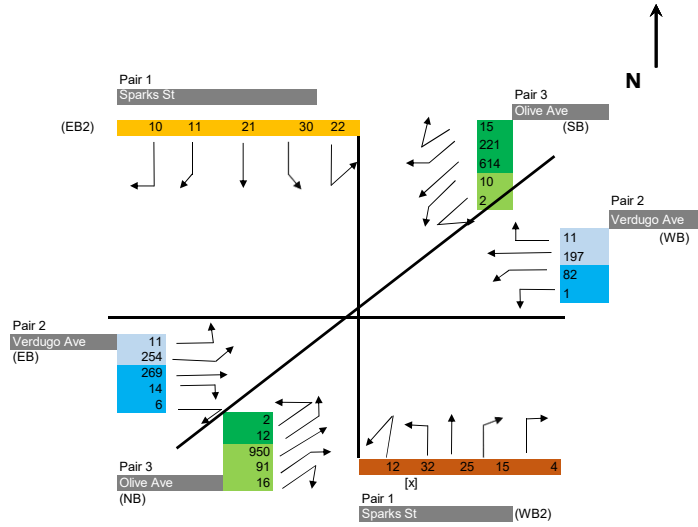
Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume. Rows list various adjustment factors and resulting volumes.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat. Rows show saturation flow values and adjustments.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves. Rows show capacity ratios and critical values.

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**Intersection 24 - Olive/Sparks & Verdugo**  
**Existing + Project Conditions - PM Peak Hour**



Capacity Per Lane  
1444

<p>Pair 1 Max <b>Sparks St</b></p> $\left\{ \frac{SBT}{21} + \frac{SBR}{21} + \frac{SBL}{52} = 94 \right\} \text{ or } \left\{ \frac{NBT}{25} + \frac{NBR}{19} + \frac{NBL}{44} = 88 \right\}$ <p>Critical Volume = 94 v/c = 0.065</p>
<p>Pair 2 Max <b>Verdugo Ave EB</b></p> $\left\{ \frac{EBT}{269} + \frac{EBR^*}{14} = 142 \right\} \text{ or } \left\{ \frac{EBL}{265} = 265 \right\}$ <p>Critical Volume = 265 v/c = 0.184</p> <p>*EBR to olive is excluded due to channelization</p>
<p>Pair 2 Max <b>Verdugo Ave WB</b></p> $\left\{ \frac{WBL}{83} = 83 \right\} \text{ or } \left\{ \frac{WBT}{197} + \frac{WBR}{11} = 208 \right\}$ <p>Critical Volume = 208 v/c = 0.144</p>
<p>Pair 4 Max <b>Olive Ave</b></p> $\left\{ \frac{NBT}{950} + \frac{NBR}{107} + \frac{SBL}{12} = 541 \right\} \text{ or } \left\{ \frac{SBT}{835} \text{ or } \frac{SBR}{15} + \frac{NBL}{14} = 432 \right\}$ <p>Critical Volume = 541 v/c = 0.374</p>
<p>V/C = 0.065 + 0.184 + 0.144 + 0.374 + 0.000 - 0 = 0.767</p> <p>LOS = C</p> <p>Loss Time = 0.000 ATSA C Credit = 0</p>

**FUTURE BASE**

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #1 N Glenoaks Blvd & Amherst Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.673
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, Amherst Dr), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

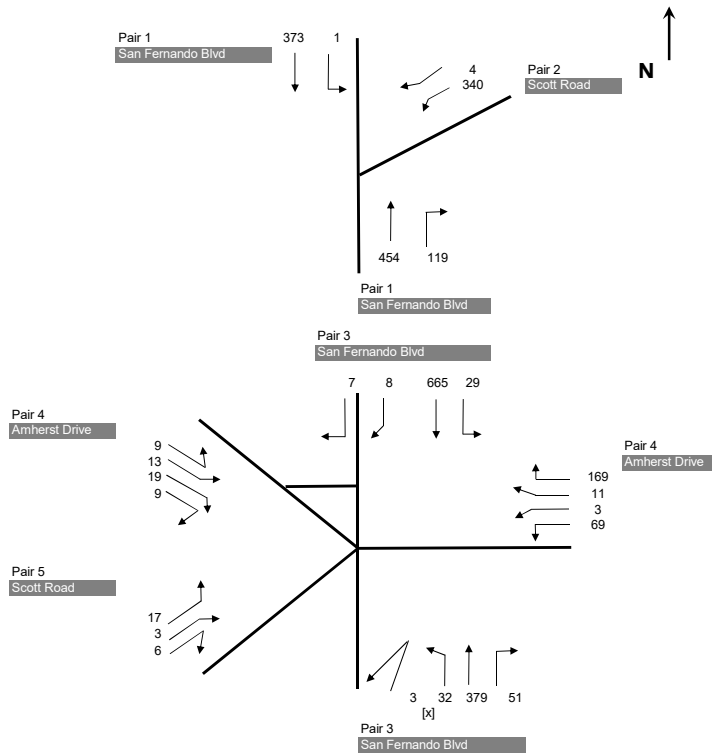
Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

**Intersection 2 - San Fernando Blvd/Amherst Drive/Scott Road**

**Future Base Conditions - AM Peak Hour**



Capacity Per Lane  
1444

Pair 1 Max $\left\{ \frac{\text{SBT } 373 + \text{SBR } 0}{2} = 187 \right\}$ or $\left\{ \frac{\text{NBT } 454 + \text{NBR } 119}{3} + \frac{\text{SBL } 1}{1} = 192 \right\}$ Critical Volume = 192 v/c = 0.133
Pair 3 Sum $\left\{ \frac{\text{WBL } 340 + \text{WBR } 4}{1} = 344 \right\}$ Critical Volume = 344 v/c = 0.238
Pair 3 Max $\left\{ \frac{\text{SBT } 673 + \text{SBR}^* 0}{2} + \frac{\text{NBL } 35}{1} = 372 \right\}$ or $\left\{ \frac{\text{NBT } 379 + \text{NBR } 51}{3} + \frac{\text{SBL } 29}{1} = 172 \right\}$ Critical Volume = 372 v/c = 0.257 <small>*SBR is excluded due to channelization</small>
Pair 4 Max $\left\{ \frac{\text{EBT } 13 + \text{EBR } 28}{1} + \frac{\text{WBL } 72}{2} = 77 \right\}$ or $\left\{ \frac{\text{WBT } 11 + \text{WBR } 169}{2} + \frac{\text{EBL } 9}{1} = 99 \right\}$ Critical Volume = 99 v/c = 0.069
Pair 5 Sum $\left\{ \frac{\text{EBL } 17 + \text{EBT } 3 + \text{EBR } 6}{1} = 26 \right\}$ Critical Volume = 26 v/c = 0.018
V/C = Pair 1 0.133 + Pair 2 0.238 + Pair 3 0.257 + Pair 4 0.069 + Pair 5 0.018 + Loss 0.000 - ATS 0 = 0.715 LOS = C

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #3 N Glenoaks Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.711
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: C

Table with columns for Street Name (N Glenoaks Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 N 3rd St & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.535
Loss Time (sec): 0 Average Delay (sec/veh): 12.6
Optimal Cycle: 0 Level Of Service: B

Street Name: N 3rd St Delaware Rd
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0

Volume Module:
Base Vol: 110 122 161 11 151 32 7 120 57 115 167 6
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 110 122 161 11 151 32 7 120 57 115 167 6
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 110 122 161 11 151 32 7 120 57 115 167 6
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 110 122 161 11 151 32 7 120 57 115 167 6
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 110 122 161 11 151 32 7 120 57 115 167 6

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.83 0.17 0.06 0.94 1.00 0.40 0.58 0.02
Final Sat.: 488 523 582 480 434 92 28 481 566 215 312 11

Capacity Analysis Module:
Vol/Sat: 0.23 0.23 0.28 0.02 0.35 0.35 0.25 0.25 0.10 0.54 0.54 0.54
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*
Delay/Veh: 11.7 11.2 10.7 9.9 12.2 12.2 11.3 11.3 9.2 16.1 16.1 16.1
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 11.7 11.2 10.7 9.9 12.2 12.2 11.3 11.3 9.2 16.1 16.1 16.1
LOS by Move: B B B A B B B B A C C C
ApproachDel: 11.1 12.1 10.7 16.1
Delay Adj: 1.00 1.00
ApprAdjDel: 11.1 12.1 10.7 16.1
LOS by Appr: B B B C
AllWayAvgQ: 0.3 0.3 0.3 0.0 0.4 0.4 0.3 0.3 0.1 1.0 1.0 1.0

Note: Queue reported is the number of cars per lane.



Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #5 N San Fernando Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.419
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: A

Table with columns for Street Name (N San Fernando Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #6 N 3rd St & E Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.623
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include N 3rd St and E Burbank Blvd with various movement details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #7 N San Fernando Blvd & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.690
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 73 Level Of Service: B

Table with columns for Street Name (N San Fernando Blvd, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Ov1, Ignore, Include), Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

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Intersection #8 I-5 NB Off-Ramps & Burbank Blvd

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.723
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 67 Level Of Service: C

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Table with columns for Street Name (I-5 NB Off-Ramps, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Protected, Permitted), Rights (Include, Ignore), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #9 I-5 SB Off-Ramp/N Front St & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.019
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include I-5 SB Off-Ramp/N Front St and W Burbank Blvd with various movement and control details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 N Victory Pl & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.847
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 149 Level Of Service: D

Table with columns for Street Name (N Victory Pl, W Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Protected), Rights (Ovl, Include), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for different movements.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #11 W Victory Blvd & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.542
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: A

Table with columns for Street Name (W Victory Blvd, W Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #12 N Glenoaks Blvd & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.695
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include N Glenoaks Blvd and E Magnolia Blvd with various traffic movements and signal settings.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #13 N 1st St & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.598
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: A

Table with columns for Street Name (N 1st St, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach and movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach and movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach and movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #14 Victory Blvd & W Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.901
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Table with columns for Street Name (Victory Blvd, W Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #15 Victory Blvd & W Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.672
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

Table with columns for Street Name (Victory Blvd, W Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #16 S Glenoaks Blvd & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.757
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 94 Level Of Service: C

Table with columns for Street Name (S Glenoaks Blvd, E Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #17 South First Street & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.677
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level Of Service: B

Table with columns for Street Name (South First Street, E Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Ovl, Include), Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #18 S Victory Blvd & W Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.892
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: D

Table with columns for Street Name (S Victory Blvd, W Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #19 S Glenoaks Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.704
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: C

Table with columns for Street Name (S Glenoaks Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #20 S San Fernando Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.653
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include S San Fernando Blvd and E Verdugo Ave with North, South, East, and West bound movements.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.



Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #21 South Ikea Way & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.644
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 64 Level Of Service: B

Table with columns for Street Name (South Ikea Way, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #22 S Front St & I-5 SB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.552
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: A

Table with columns for Street Name (S Front St, I-5 SB Ramps), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights (Ovl, Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #23 South First Street/Ikea Way & E Angeleno Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.403
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. It details the configuration for South First Street/Ikea Way and E Angeleno Ave.

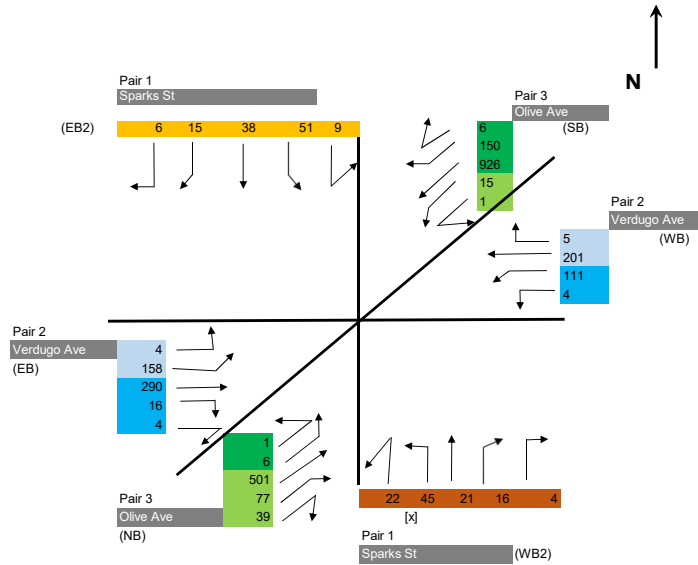
Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Intersection 24 - Olive/Sparks & Verdugo

Future Base - AM Peak Hour



Capacity Per Lane  
1444

<p>Pair 1 Max Sparks St</p> $\left\{ \frac{SBT}{1} + \frac{SBR}{21} + \frac{SBL}{60} = 119 \right\} \text{ or } \left\{ \frac{NBT}{21} + \frac{NBR}{20} + \frac{NBL}{67} = 108 \right\}$ <p>Critical Volume = 119 v/c = 0.082</p>
<p>Pair 2 Max Verdugo Ave EB</p> $\left\{ \frac{EBT}{2} + \frac{EBR^*}{16} = 153 \right\} \text{ or } \left\{ \frac{EBL}{1} = 162 \right\}$ <p>Critical Volume = 162 v/c = 0.112</p> <p>*EBR to olive is excluded due to channelization</p>
<p>Pair 2 Max Verdugo Ave WB</p> $\left\{ \frac{WBL}{1} = 115 \right\} \text{ or } \left\{ \frac{WBT}{201} + \frac{WBR}{5} = 206 \right\}$ <p>Critical Volume = 206 v/c = 0.143</p>
<p>Pair 4 Max Olive Ave</p> $\left\{ \frac{NBT}{501} + \frac{NBR}{116} + \frac{SBL}{16} = 325 \right\} \text{ or } \left\{ \frac{SBT}{1076} + \frac{SBR}{6} + \frac{NBL}{7} = 545 \right\}$ <p>Critical Volume = 545 v/c = 0.377</p>
<p>V/C = 0.082 + 0.112 + 0.143 + 0.377 + 0.000 - 0 = 0.715</p> <p>LOS = C</p> <p>Loss Time ATSA C Credit</p>

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #1 N Glenoaks Blvd & Amherst Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.617
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, Amherst Dr), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

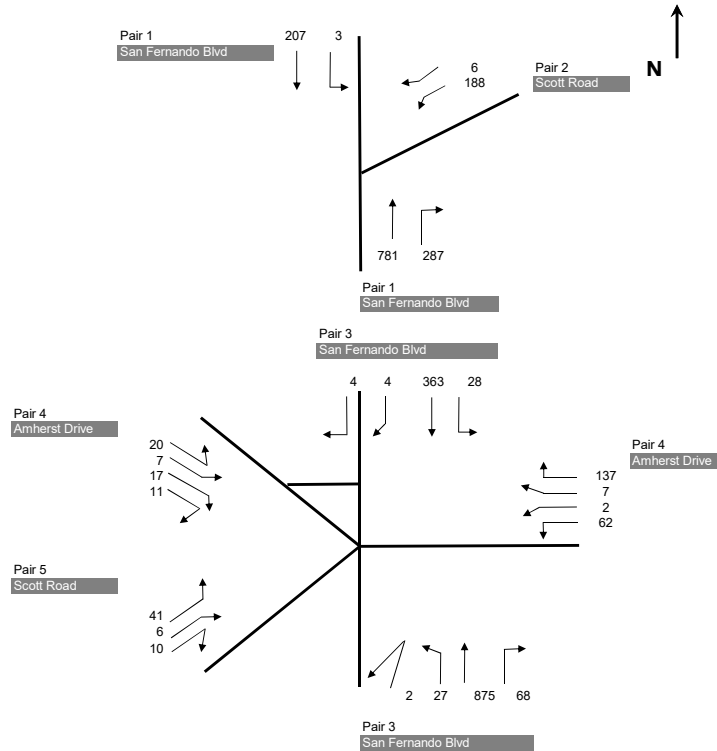
Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

**Intersection 2 - San Fernando Blvd/Amherst Drive/Scott Road**

**Future Base Conditions - PM Peak Hour**



Capacity Per Lane  
1444

Pair 1 Max $\left\{ \frac{\text{SBT } 207 + \text{SBR } 0}{2} = 104 \right\}$	or $\left\{ \frac{\text{NBT } 781 + \text{NBR } 287}{3} + \frac{\text{SBL } 6}{1} = 359 \right\}$
Critical Volume = 359 v/c = 0.249	
Pair 3 Sum $\left\{ \frac{\text{WBL } 188 + \text{WBR } 6}{1} = 194 \right\}$	
Critical Volume = 194 v/c = 0.134	
Pair 3 Max $\left\{ \frac{\text{SBT } 367 + \text{SBR}^* 0}{2} + \frac{\text{NBL } 29}{1} = 213 \right\}$	or $\left\{ \frac{\text{NBT } 875 + \text{NBR } 68}{3} + \frac{\text{SBL } 28}{1} = 342 \right\}$
Critical Volume = 342 v/c = 0.237	*SBR is excluded due to channelization
Pair 4 Max $\left\{ \frac{\text{EBT } 7 + \text{EBR } 28}{1} + \frac{\text{WBL } 64}{2} = 67 \right\}$	or $\left\{ \frac{\text{WBT } 7 + \text{WBR } 137}{2} + \frac{\text{EBL } 20}{1} = 92 \right\}$
Critical Volume = 92 v/c = 0.064	
Pair 5 Sum $\left\{ \frac{\text{EBL } 41 + \text{EBT } 6 + \text{EBR } 10}{1} = 57 \right\}$	
Critical Volume = 57 v/c = 0.039	
V/C = 0.249 + 0.134 + 0.237 + 0.064 + 0.039 + 0.000 - 0 = 0.723	ATSA = 0
LOS = C	

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #3 N Glenoaks Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.770
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 63 Level Of Service: C

Table with columns for Street Name (N Glenoaks Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 N 3rd St & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.595
Loss Time (sec): 0 Average Delay (sec/veh): 14.8
Optimal Cycle: 0 Level Of Service: B

Street Name: N 3rd St Delaware Rd
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0

Volume Module:
Base Vol: 156 207 207 31 104 22 21 207 57 107 181 10
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 156 207 207 31 104 22 21 207 57 107 181 10
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 156 207 207 31 104 22 21 207 57 107 181 10
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 156 207 207 31 104 22 21 207 57 107 181 10
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 156 207 207 31 104 22 21 207 57 107 181 10

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.83 0.17 0.09 0.91 1.00 0.36 0.61 0.03
Final Sat.: 466 498 552 428 383 81 45 441 536 180 304 17

Capacity Analysis Module:
Vol/Sat: 0.34 0.42 0.38 0.07 0.27 0.27 0.47 0.47 0.11 0.60 0.60 0.60
Crit Moves: \*\*\*\*
Delay/Veh: 13.8 14.4 12.6 11.1 12.3 12.3 15.5 15.5 9.8 19.1 19.1 19.1
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.8 14.4 12.6 11.1 12.3 12.3 15.5 15.5 9.8 19.1 19.1 19.1
LOS by Move: B B B B B B C C A C C C
ApproachDel: 13.5 12.0 14.3 19.1
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 13.5 12.0 14.3 19.1
LOS by Appr: B B B C
AllWayAvgQ: 0.5 0.6 0.5 0.1 0.3 0.3 0.8 0.8 0.1 1.3 1.3 1.3

Note: Queue reported is the number of cars per lane.



Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #5 N San Fernando Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.572
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: A

Table with columns for Street Name (N San Fernando Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #6 N 3rd St & E Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.648
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include N 3rd St and E Burbank Blvd with various movement details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for different movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #7 N San Fernando Blvd & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.799
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 113 Level Of Service: C

Table with columns for Street Name (N San Fernando Blvd, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Ov1, Ignore, Include), Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #8 I-5 NB Off-Ramps & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.760
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 77 Level Of Service: C

Table with columns for Street Name (I-5 NB Off-Ramps, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Protected, Permitted), Rights (Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach and movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach and movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach and movement.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #9 I-5 SB Off-Ramp/N Front St & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.992
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. It details traffic flow for I-5 SB Off-Ramp/N Front St and W Burbank Blvd.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for different traffic movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 N Victory Pl & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.948
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include N Victory Pl and W Burbank Blvd with various traffic movements and lane configurations.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #11 W Victory Blvd & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.537
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: A

Table with columns for Street Name (W Victory Blvd, W Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach and movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach and movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach and movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #12 N Glenoaks Blvd & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.725
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 68 Level Of Service: C

Table with columns for Street Name (N Glenoaks Blvd, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.



Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #13 N 1st St & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.832
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 136 Level Of Service: D

Table with columns for Street Name (N 1st St, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #14 Victory Blvd & W Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.019
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Table with columns for Street Name (Victory Blvd, W Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #15 Victory Blvd & W Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.649
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: B

Table with columns for Street Name (Victory Blvd, W Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #16 S Glenoaks Blvd & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.769
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 99 Level Of Service: C

Table with columns for Street Name (S Glenoaks Blvd, E Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #17 South First Street & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.855
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 157 Level Of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include South First Street and E Olive Ave with various traffic movements and lane configurations.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #18 S Victory Blvd & W Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.008
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Table with columns for Street Name (S Victory Blvd, W Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

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Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #19 S Glenoaks Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.704
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: C

Table with columns for Street Name (S Glenoaks Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #20 S San Fernando Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.749
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: C

Table with columns for Street Name (S San Fernando Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #21 South Ikea Way & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.694
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 74 Level Of Service: B

Table with columns for Street Name (South Ikea Way, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #22 S Front St & I-5 SB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.658
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: B

Table with columns for Street Name (S Front St, I-5 SB Ramps), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights (Ovl, Include), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #23 South First Street/Ikea Way & E Angeleno Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.545
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include South First Street/Ikea Way and E Angeleno Ave with North, South, East, and West bound movements.

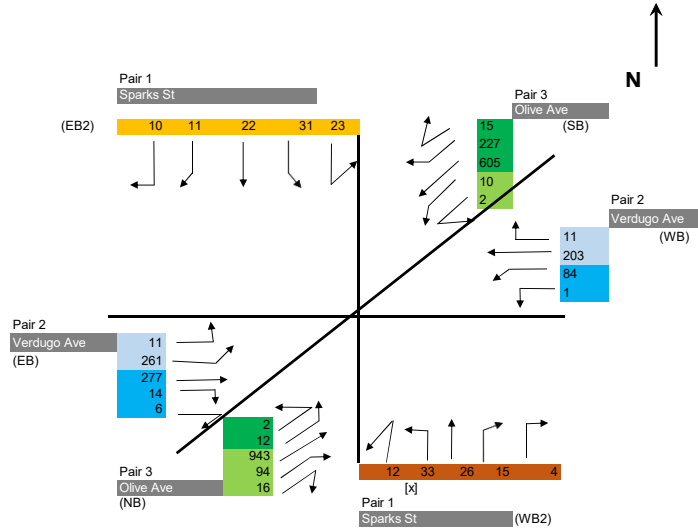
Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movement categories.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movement types.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Intersection 24 - Olive/Sparks & Verdugo

Future Base - PM Peak Hour



Capacity Per Lane  
1444

<p>Pair 1 Max Sparks St</p> $\left\{ \frac{SBT}{1} + \frac{SBR}{1} + \frac{SBL}{1} = 97 \right\} \text{ or } \left\{ \frac{NBT}{1} + \frac{NBR}{1} + \frac{NBL}{1} = 90 \right\}$ <p>Critical Volume = 97 v/c = 0.067</p>
<p>Pair 2 Max Verdugo Ave EB</p> $\left\{ \frac{EBT}{2} + \frac{EBR^*}{2} = 146 \right\} \text{ or } \left\{ \frac{EBL}{1} = 272 \right\}$ <p>Critical Volume = 272 v/c = 0.188</p> <p>*EBR* to olive is excluded due to channelization</p>
<p>Pair 2 Max Verdugo Ave WB</p> $\left\{ \frac{WBL}{1} = 85 \right\} \text{ or } \left\{ \frac{WBT}{1} + \frac{WBR}{1} = 214 \right\}$ <p>Critical Volume = 214 v/c = 0.148</p>
<p>Pair 4 Max Olive Ave</p> $\left\{ \frac{NBT}{2} + \frac{NBR}{2} + \frac{SBL}{1} = 539 \right\} \text{ or } \left\{ \frac{SBT}{2} + \frac{SBR}{1} + \frac{NBL}{1} = 430 \right\}$ <p>Critical Volume = 539 v/c = 0.373</p>
<p>V/C = 0.067 + 0.188 + 0.148 + 0.373 + 0.000 - 0 = 0.777</p> <p>LOS = C</p> <p>Loss Time = 0.000 ATSA C Credit = 0</p>

## **FUTURE PLUS PROJECT**

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #1 N Glenoaks Blvd & Amherst Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.674
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, Amherst Dr), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

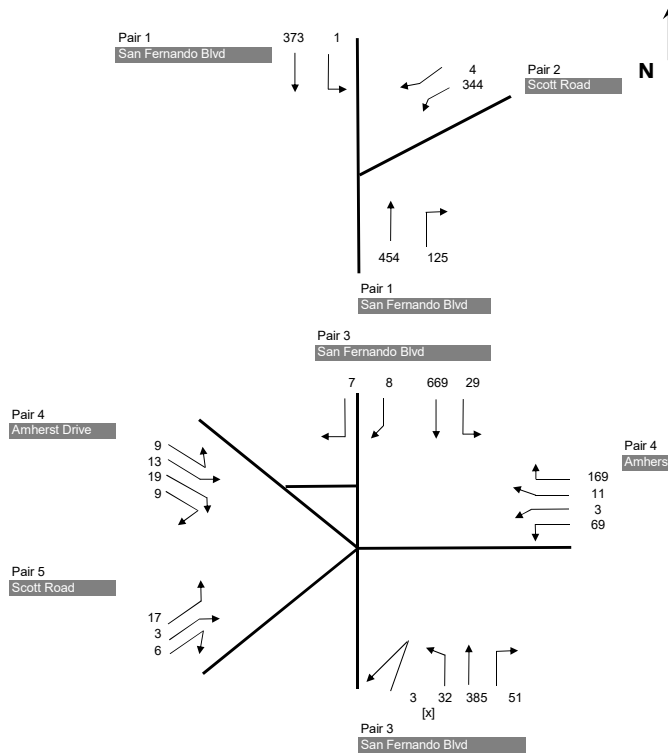
Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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**Intersection 2 - San Fernando Blvd/Amherst Drive/Scott Road**

**Future + Project Conditions - AM Peak Hour**



Capacity Per Lane  
1444

Pair 1 Max	$\left\{ \frac{\text{SBT } 373 + \text{SBR } 0}{2} = 187 \right\}$	or	$\left\{ \frac{\text{NBT } 454 + \text{NBR } 125}{3} + \frac{\text{SBL } 1}{1} = 194 \right\}$												
Critical Volume	= 194														
v/c	= 0.134														
Pair 3 Sum	$\left\{ \frac{\text{WBL } 344 + \text{WBR } 4}{1} = 348 \right\}$														
Critical Volume	= 348														
v/c	= 0.241														
Pair 3 Max	$\left\{ \frac{\text{SBT } 677 + \text{SBR}^* 0}{2} + \frac{\text{NBL } 35}{1} = 374 \right\}$	or	$\left\{ \frac{\text{NBT } 385 + \text{NBR } 51}{3} + \frac{\text{SBL } 29}{1} = 174 \right\}$												
Critical Volume	= 374														
v/c	= 0.259	*SBR is excluded due to channelization													
Pair 4 Max	$\left\{ \frac{\text{EBT } 13 + \text{EBR } 28}{1} + \frac{\text{WBL } 72}{2} = 77 \right\}$	or	$\left\{ \frac{\text{WBT } 11 + \text{WBR } 169}{2} + \frac{\text{EBL } 9}{1} = 99 \right\}$												
Critical Volume	= 99														
v/c	= 0.069														
Pair 5 Sum	$\left\{ \frac{\text{EBL } 17 + \text{EBT } 3 + \text{EBR } 6}{1} = 26 \right\}$														
Critical Volume	= 26														
v/c	= 0.018														
V/C =	Pair 1 0.134	+	Pair 2 0.241	+	Pair 3 0.259	+	Pair 4 0.069	+	Pair 5 0.018	+	Loss 0.000	-	ATS 0	=	0.721
LOS =	C														

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #3 N Glenoaks Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.714
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: C

Table with columns for Street Name (N Glenoaks Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.



Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 N 3rd St & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.542
Loss Time (sec): 0 Average Delay (sec/veh): 12.7
Optimal Cycle: 0 Level Of Service: B

Street Name: N 3rd St Delaware Rd
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0

Volume Module:
Base Vol: 110 122 165 11 151 32 7 120 57 118 167 6
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 110 122 165 11 151 32 7 120 57 118 167 6
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 110 122 165 11 151 32 7 120 57 118 167 6
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 110 122 165 11 151 32 7 120 57 118 167 6
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 110 122 165 11 151 32 7 120 57 118 167 6

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.83 0.17 0.06 0.94 1.00 0.41 0.57 0.02
Final Sat.: 487 522 581 479 433 92 28 480 564 218 308 11

Capacity Analysis Module:
Vol/Sat: 0.23 0.23 0.28 0.02 0.35 0.35 0.25 0.25 0.10 0.54 0.54 0.54
Crit Moves: \*\*\*\*
Delay/Veh: 11.8 11.2 10.8 9.9 12.2 12.2 11.4 11.4 9.2 16.3 16.3 16.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 11.8 11.2 10.8 9.9 12.2 12.2 11.4 11.4 9.2 16.3 16.3 16.3
LOS by Move: B B B A B B B B A C C C
ApproachDel: 11.2 12.1 10.7 16.3
Delay Adj: 1.00 1.00
ApprAdjDel: 11.2 12.1 10.7 16.3
LOS by Appr: B B B C
AllWayAvgQ: 0.3 0.3 0.4 0.0 0.5 0.5 0.3 0.3 0.1 1.0 1.0 1.0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #5 N San Fernando Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.420
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: A

Table with columns for Street Name (N San Fernando Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Prot+Permit), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #6 N 3rd St & E Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.632
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include N 3rd St and E Burbank Blvd with various movement types (L, T, R) and their respective values.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different approaches.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each approach.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #7 N San Fernando Blvd & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.696
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 75 Level Of Service: B

Table with columns for Street Name (N San Fernando Blvd, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Ov1, Ignore, Include), Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #8 I-5 NB Off-Ramps & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.738
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level Of Service: C

Table with columns for Street Name (I-5 NB Off-Ramps, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Protected, Permitted), Rights (Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #9 I-5 SB Off-Ramp/N Front St & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.140
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include I-5 SB Off-Ramp/N Front St and W Burbank Blvd with various movement details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for different movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 N Victory Pl & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.871
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 177 Level Of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include N Victory Pl and W Burbank Blvd with various traffic movements and lane configurations.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various traffic movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different traffic movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various traffic movements.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #11 W Victory Blvd & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.553
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: A

Table with columns for Street Name (W Victory Blvd, W Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach and movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach and movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach and movement.



Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #12 N Glenoaks Blvd & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.697
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #13 N 1st St & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.598
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: A

Table with columns for Street Name (N 1st St, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #14 Victory Blvd & W Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.914
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Table with columns for Street Name (Victory Blvd, W Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #15 Victory Blvd & W Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.675
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

Table with columns for Street Name (Victory Blvd, W Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report  
Circular 212 Planning Method (Base Volume Alternative)

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Intersection #16 S Glenoaks Blvd & E Olive Ave  
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Cycle (sec): 100 Critical Vol./Cap.(X): 0.759  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 95 Level Of Service: C  
\*\*\*\*\*

Street Name:	S Glenoaks Blvd					E Olive Ave									
Approach:	North Bound		South Bound			East Bound		West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Prot+Permit		Prot+Permit			Prot+Permit		Prot+Permit			Prot+Permit				
Rights:	Include		Include			Include		Include			Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	1	1	0

Volume Module:

Base Vol:	172	677	34	55	1116	199	106	135	91	128	471	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	172	677	34	55	1116	199	106	135	91	128	471	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	172	677	34	55	1116	199	106	135	91	128	471	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	677	34	55	1116	199	106	135	91	128	471	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	172	677	34	55	1116	199	106	135	91	128	471	48

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.82	0.18
Final Sat.:	1444	2888	1444	1444	2888	1444	1444	2888	1444	1444	2620	267

Capacity Analysis Module:

Vol/Sat:	0.12	0.23	0.02	0.04	0.39	0.14	0.07	0.05	0.06	0.09	0.18	0.18
Crit Volume:	172				558		106					260
Crit Moves:	****				****		****					****

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #17 South First Street & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.677
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include South First Street and E Olive Ave with various traffic movements and lane configurations.

Volume Module table showing traffic volume adjustments. Columns include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table showing saturation flow rates and adjustments. Columns include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table showing volume-to-saturation ratios and critical volumes. Columns include Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #18 S Victory Blvd & W Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.908
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Table with columns for Street Name (S Victory Blvd, W Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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 Level Of Service Computation Report  
 Circular 212 Planning Method (Base Volume Alternative)  
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 Intersection #19 S Glenoaks Blvd & E Verdugo Ave  
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Cycle (sec): 100 Critical Vol./Cap.(X): 0.708  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 49 Level Of Service: C  
 \*\*\*\*\*

Street Name:	S Glenoaks Blvd						E Verdugo Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	1	0	1	0	0	1

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Volume Module:

Base Vol:	117	731	15	37	1079	215	54	97	73	56	308	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	117	731	15	37	1079	215	54	97	73	56	308	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	117	731	15	37	1079	215	54	97	73	56	308	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	731	15	37	1079	215	54	97	73	56	308	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	117	731	15	37	1079	215	54	97	73	56	308	41

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Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Lanes:	1.00	1.96	0.04	1.00	2.00	1.00	1.00	0.57	0.43	0.14	0.76	0.10
Final Sat.:	1575	3087	63	1575	3150	1575	1575	899	676	218	1198	159

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Capacity Analysis Module:

Vol/Sat:	0.07	0.24	0.24	0.02	0.34	0.14	0.03	0.11	0.11	0.26	0.26	0.26
Crit Volume:	117			539			54			405		
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #20 S San Fernando Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.661
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: B

Table with columns for Street Name (S San Fernando Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #21 South Ikea Way & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.650
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 65 Level Of Service: B

Table with columns for Street Name (South Ikea Way, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #22 S Front St & I-5 SB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.568
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 33 Level Of Service: A

Table with columns for Street Name (S Front St, I-5 SB Ramps), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights (Ovl, Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #23 South First Street/Ikea Way & E Angeleno Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.403
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include South First Street/Ikea Way and E Angeleno Ave with North, South, East, and West bound movements.

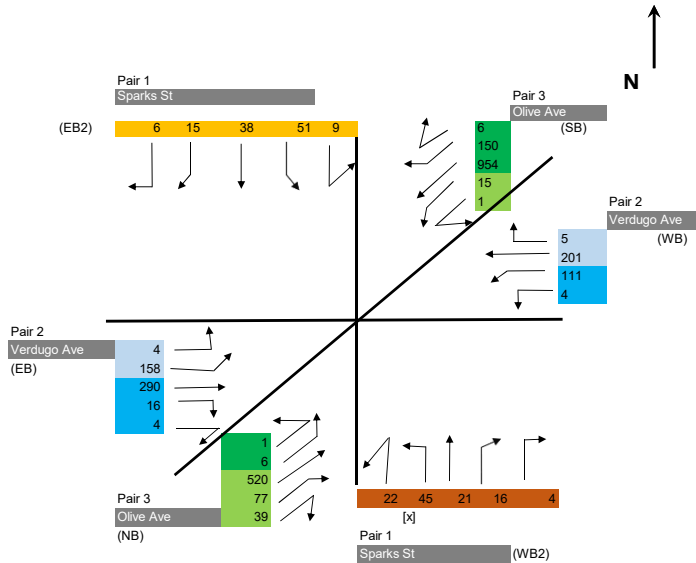
Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movement categories.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movement types.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Intersection 24 - Olive/Sparks & Verdugo

Future + Project Conditions - AM Peak Hour



Capacity Per Lane  
1444

<p>Pair 1 Max Sparks St</p> $\left\{ \frac{SBT}{1} + \frac{SBR}{21} + \frac{SBL}{60} = 119 \right\} \text{ or } \left\{ \frac{NBT}{21} + \frac{NBR}{20} + \frac{NBL}{67} = 108 \right\}$ <p>Critical Volume = 119 v/c = 0.082</p>
<p>Pair 2 Max Verdugo Ave EB</p> $\left\{ \frac{EBT}{2} + \frac{EBR^*}{16} = 153 \right\} \text{ or } \left\{ \frac{EBL}{1} = 162 \right\}$ <p>Critical Volume = 162 v/c = 0.112</p> <p>*EBR to olive is excluded due to channelization</p>
<p>Pair 2 Max Verdugo Ave WB</p> $\left\{ \frac{WBL}{1} = 115 \right\} \text{ or } \left\{ \frac{WBT}{201} + \frac{WBR}{5} = 206 \right\}$ <p>Critical Volume = 206 v/c = 0.143</p>
<p>Pair 4 Max Olive Ave</p> $\left\{ \frac{NBT}{2} + \frac{NBR}{116} + \frac{SBL}{16} = 334 \right\} \text{ or } \left\{ \frac{SBT}{1104} \text{ or } \frac{SBR}{6} + \frac{NBL}{7} = 559 \right\}$ <p>Critical Volume = 559 v/c = 0.387</p>
<p>V/C = 0.082 + 0.112 + 0.143 + 0.387 + 0.000 - 0 = 0.724</p> <p>LOS = C</p> <p>Loss Time ATSA C Credit</p>

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #1 N Glenoaks Blvd & Amherst Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.618
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B

Table with columns for Street Name (N Glenoaks Blvd, Amherst Dr), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted), Rights (Include), Min. Green, Y+R, and Lanes.

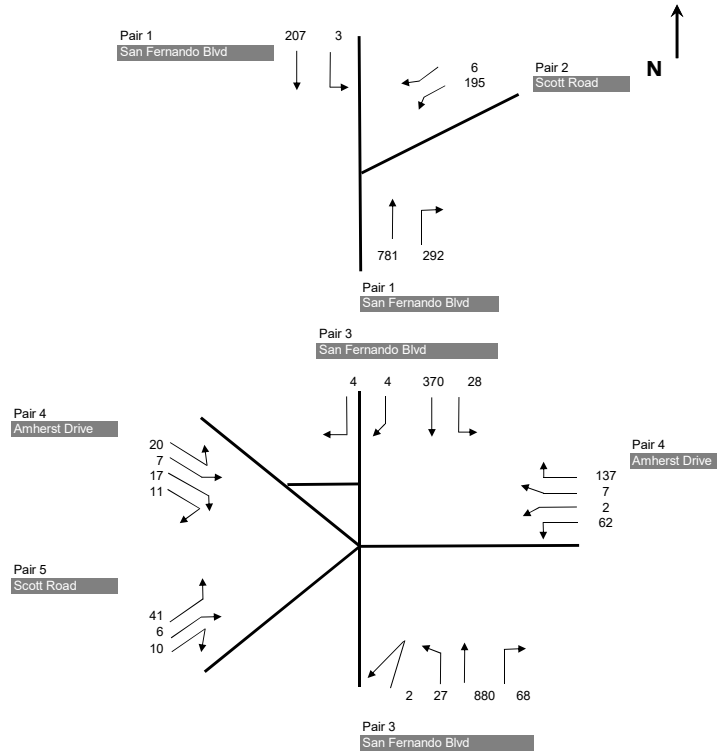
Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

**Intersection 2 - San Fernando Blvd/Amherst Drive/Scott Road**

**Future + Project Conditions - PM Peak Hour**



Capacity Per Lane  
1444

Pair 1 Max $\left\{ \frac{\text{SBT } 207 + \text{SBR } 0}{2} = 104 \right\}$ or $\left\{ \frac{\text{NBT } 781 + \text{NBR } 292}{3} + \frac{\text{SBL } 1}{1} = 361 \right\}$ Critical Volume = 361 v/c = 0.250
Pair 3 Sum $\left\{ \frac{\text{WBL } 195 + \text{WBR } 6}{1} = 201 \right\}$ Critical Volume = 201 v/c = 0.139
Pair 3 Max $\left\{ \frac{\text{SBT } 374 + \text{SBR}^* 0}{2} + \frac{\text{NBL } 29}{1} = 216 \right\}$ or $\left\{ \frac{\text{NBT } 880 + \text{NBR } 68}{3} + \frac{\text{SBL } 28}{1} = 344 \right\}$ Critical Volume = 344 v/c = 0.238 <small>*SBR is excluded due to channelization</small>
Pair 4 Max $\left\{ \frac{\text{EBT } 7 + \text{EBR } 28}{1} + \frac{\text{WBL } 64}{2} = 67 \right\}$ or $\left\{ \frac{\text{WBT } 7 + \text{WBR } 137}{2} + \frac{\text{EBL } 20}{1} = 92 \right\}$ Critical Volume = 92 v/c = 0.064
Pair 5 Sum $\left\{ \frac{\text{EBL } 41 + \text{EBT } 6 + \text{EBR } 10}{1} = 57 \right\}$ Critical Volume = 57 v/c = 0.039
V/C = Pair 1 0.250 + Pair 2 0.139 + Pair 3 0.238 + Pair 4 0.064 + Pair 5 0.039 + Loss 0.000 - ATSA 0 = 0.730 LOS = C

Level Of Service Computation Report  
Circular 212 Planning Method (Base Volume Alternative)

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Intersection #3 N Glenoaks Blvd & Delaware Rd  
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Cycle (sec): 100 Critical Vol./Cap.(X): 0.773  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 64 Level Of Service: C  
\*\*\*\*\*

Street Name:	N Glenoaks Blvd						Delaware Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	0	0	1	0	0	1

Volume Module:

Base Vol:	194	1106	9	7	1059	141	183	70	161	10	41	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	194	1106	9	7	1059	141	183	70	161	10	41	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	194	1106	9	7	1059	141	183	70	161	10	41	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	194	1106	9	7	1059	141	183	70	161	10	41	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	194	1106	9	7	1059	141	183	70	161	10	41	2

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Lanes:	1.00	1.98	0.02	1.00	1.76	0.24	0.44	0.17	0.39	0.19	0.77	0.04
Final Sat.:	1575	3125	25	1575	2780	370	696	266	613	297	1218	59

Capacity Analysis Module:

Vol/Sat:	0.12	0.35	0.35	0.00	0.38	0.38	0.26	0.26	0.26	0.03	0.03	0.03
Crit Volume:	194			600			414	10				
Crit Moves:	****			****			****	****				

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 N 3rd St & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.606
Loss Time (sec): 0 Average Delay (sec/veh): 15.0
Optimal Cycle: 0 Level Of Service: B

Street Name: N 3rd St Delaware Rd
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0

Volume Module:
Base Vol: 156 207 210 31 104 22 21 207 57 112 181 10
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 156 207 210 31 104 22 21 207 57 112 181 10
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 156 207 210 31 104 22 21 207 57 112 181 10
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 156 207 210 31 104 22 21 207 57 112 181 10
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 156 207 210 31 104 22 21 207 57 112 181 10

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 0.83 0.17 0.09 0.91 1.00 0.37 0.60 0.03
Final Sat.: 464 497 550 427 382 81 45 439 534 185 299 17

Capacity Analysis Module:
Vol/Sat: 0.34 0.42 0.38 0.07 0.27 0.27 0.47 0.47 0.11 0.61 0.61 0.61
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*
Delay/Veh: 13.8 14.4 12.7 11.1 12.3 12.3 15.5 15.5 9.8 19.5 19.5 19.5
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.8 14.4 12.7 11.1 12.3 12.3 15.5 15.5 9.8 19.5 19.5 19.5
LOS by Move: B B B B B B C C A C C C
ApproachDel: 13.6 12.1 14.4 19.5
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 13.6 12.1 14.4 19.5
LOS by Appr: B B B C
AllWayAvgQ: 0.5 0.6 0.6 0.1 0.3 0.3 0.8 0.8 0.1 1.3 1.3 1.3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #5 N San Fernando Blvd & Delaware Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.573
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: A

Table with columns for Street Name (N San Fernando Blvd, Delaware Rd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Prot+Permit), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across 12 movement categories.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for 12 movement categories.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for 12 movement categories.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #6 N 3rd St & E Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.660
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include N 3rd St and E Burbank Blvd with various movement and control details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #7 N San Fernando Blvd & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.808
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 119 Level Of Service: D

Table with columns for Street Name (N San Fernando Blvd, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Ov1, Ignore, Include), Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #8 I-5 NB Off-Ramps & Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.784
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 86 Level Of Service: C

Table with columns for Street Name (I-5 NB Off-Ramps, Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Protected, Permitted), Rights (Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach and movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach and movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach and movement.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #9 I-5 SB Off-Ramp/N Front St & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.092
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. It details the configuration for I-5 SB Off-Ramp/N Front St and W Burbank Blvd.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for different approaches.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #10 N Victory Pl & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.977
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include N Victory Pl and W Burbank Blvd with various traffic movements and lane configurations.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for various movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #11 W Victory Blvd & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.548
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: A

Table with columns for Street Name (W Victory Blvd, W Burbank Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted), Rights (Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach and movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach and movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each approach and movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #12 N Glenoaks Blvd & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.727
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 68 Level Of Service: C

Table with columns for Street Name (N Glenoaks Blvd, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #13 N 1st St & E Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.833
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 137 Level Of Service: D

Table with columns for Street Name (N 1st St, E Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #14 Victory Blvd & W Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.034
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Table with columns for Street Name (Victory Blvd, W Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #15 Victory Blvd & W Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.651
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: B

Table with columns for Street Name (Victory Blvd, W Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include, Ignore), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #16 S Glenoaks Blvd & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.771
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 99 Level Of Service: C

Table with columns for Street Name (S Glenoaks Blvd, E Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #17 South First Street & E Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.855
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 157 Level Of Service: D

Table with columns for Street Name (South First Street, E Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #18 S Victory Blvd & W Olive Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.011
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Table with columns for Street Name (S Victory Blvd, W Olive Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #19 S Glenoaks Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.713
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: C

Table with columns for Street Name (S Glenoaks Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #20 S San Fernando Blvd & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.762
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level Of Service: C

Table with columns for Street Name (S San Fernando Blvd, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across different movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #21 South Ikea Way & E Verdugo Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.704
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 77 Level Of Service: C

Table with columns for Street Name (South Ikea Way, E Verdugo Ave), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Prot+Permit, Permitted), Rights (Include, Ovl), and traffic volume metrics (Min. Green, Y+R, Lanes).

Volume Module table showing traffic volume adjustments: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves.

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Level of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #22 S Front St & I-5 SB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.672
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

Table with columns for Street Name (S Front St, I-5 SB Ramps), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Include), Rights (Ovl, Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each movement.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for each movement.

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #23 South First Street/Ikea Way & E Angeleno Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.545
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. It details the configuration for South First Street/Ikea Way and E Angeleno Ave.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume across various movements.

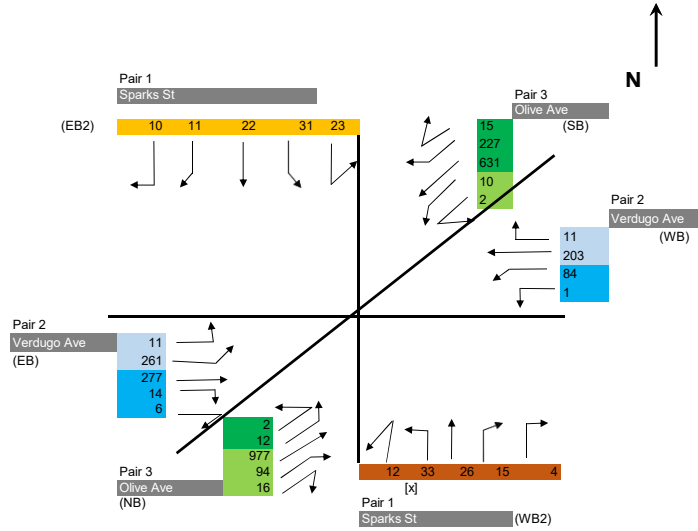
Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for different movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, and Crit Moves for various movements.

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Intersection 24 - Olive/Sparks & Verdugo

Future + Project Conditions - PM Peak Hour



Capacity Per Lane  
1444

<p>Pair 1 Max Sparks St</p> $\left\{ \frac{SBT}{22} + \frac{SBR}{21} = \frac{43}{43} \right\} + \left\{ \frac{SBL}{54} = \frac{54}{54} \right\} = 97 \text{ or } \left\{ \frac{NBT}{26} + \frac{NBR}{19} = \frac{45}{45} \right\} + \left\{ \frac{NBL}{45} = \frac{45}{45} \right\} = 90$ <p>Critical Volume = 97 v/c = 0.067</p>
<p>Pair 2 Max Verdugo Ave EB</p> $\left\{ \frac{EBT}{277} + \frac{EBR^*}{14} = \frac{291}{291} \right\} = 146 \text{ or } \left\{ \frac{EBL}{272} = \frac{272}{272} \right\} = 272$ <p>Critical Volume = 272 v/c = 0.188</p> <p>*EBR* to olive is excluded due to channelization</p>
<p>Pair 2 Max Verdugo Ave WB</p> $\left\{ \frac{WBL}{85} = \frac{85}{85} \right\} = 85 \text{ or } \left\{ \frac{WBT}{203} + \frac{WBR}{11} = \frac{214}{214} \right\} = 214$ <p>Critical Volume = 214 v/c = 0.148</p>
<p>Pair 4 Max Olive Ave</p> $\left\{ \frac{NBT}{977} + \frac{NBR}{110} = \frac{1087}{1087} \right\} + \left\{ \frac{SBL}{12} = \frac{12}{12} \right\} = 556 \text{ or } \left\{ \frac{SBT}{858} + \frac{SBR}{15} = \frac{873}{873} \right\} + \left\{ \frac{NBL}{14} = \frac{14}{14} \right\} = 443$ <p>Critical Volume = 556 v/c = 0.385</p>
<p>V/C = 0.067 + 0.188 + 0.148 + 0.385 + 0.000 - 0 = 0.788</p> <p>LOS = C</p> <p>Loss Time = 0.000 ATSA C Credit = 0</p>

**EXISTING PLUS PROJECT WITH MITIGATION**

Level Of Service Computation Report  
Circular 212 Planning Method (Base Volume Alternative)

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Intersection #9 I-5 SB Off-Ramp/N Front St & W Burbank Blvd

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.931  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 180 Level Of Service: E

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Street Name:	I-5 SB Off-Ramp/N Front St						W Burbank Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	0	1	0	0	2	1	0	3

Volume Module:

Base Vol:	321	0	83	218	121	284	0	1501	688	95	1707	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	321	0	83	218	121	284	0	1501	688	95	1707	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	321	0	83	218	121	284	0	1501	688	95	1707	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	321	0	83	218	121	284	0	1501	688	95	1707	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	353	0	83	240	121	284	0	1501	688	95	1707	0

Saturation Flow Module:

Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.62	0.00	0.38	1.33	0.67	1.00	0.00	2.06	0.94	1.00	3.00	0.00
Final Sat.:	2308	0	542	1894	956	1425	0	2931	1344	1425	4275	0

Capacity Analysis Module:

Vol/Sat:	0.15	0.00	0.15	0.13	0.13	0.20	0.00	0.51	0.51	0.07	0.40	0.00
Crit Volume:	218			284			730			95		
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report  
 Circular 212 Planning Method (Base Volume Alternative)

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Intersection #10 N Victory Pl & W Burbank Blvd

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.794  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 111 Level Of Service: C

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Street Name:	N Victory Pl						W Burbank Blvd								
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Split Phase		Split Phase		Protected		Protected								
Rights:	Ovl		Include		Ovl		Ovl								
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:	2	0	2	0	1	2	1	1	0	1	2	0	3	0	1

Volume Module:

Base Vol:	234	227	155	570	518	56	44	1397	412	449	1227	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	234	227	155	570	518	56	44	1397	412	449	1227	572
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	234	227	155	570	518	56	44	1397	412	449	1227	572
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	234	227	155	570	518	56	44	1397	412	449	1227	572
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
FinalVolume:	257	227	155	627	518	56	48	1397	412	494	1227	572

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Lanes:	2.00	2.00	1.00	2.19	1.81	1.00	2.00	3.09	0.91	2.00	3.00	1.00
Final Sat.:	2805	2805	1403	3072	2538	1403	2805	4332	1278	2805	4208	1403

Capacity Analysis Module:

Vol/Sat:	0.09	0.08	0.11	0.20	0.20	0.04	0.02	0.32	0.32	0.18	0.29	0.41
Crit Volume:	129			286			452		247			
Crit Moves:	****			****			****		****			

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #9 I-5 SB Off-Ramp/N Front St & W Burbank Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.028
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include I-5 SB Off-Ramp/N Front St and W Burbank Blvd with various movement and lane configurations.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume across various movements.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, Final Sat. for different movements.

Capacity Analysis Module table showing Vol/Sat, Crit Volume, Crit Moves for different movements.

Level Of Service Computation Report  
 Circular 212 Planning Method (Base Volume Alternative)

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Intersection #10 N Victory Pl & W Burbank Blvd

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.870  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 176 Level Of Service: D

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Street Name:	N Victory Pl						W Burbank Blvd					
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	1	0	2	0	3	1	0	2

Volume Module:

Base Vol:	511	522	318	757	461	142	119	1399	315	341	1396	522
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	511	522	318	757	461	142	119	1399	315	341	1396	522
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	511	522	318	757	461	142	119	1399	315	341	1396	522
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	511	522	318	757	461	142	119	1399	315	341	1396	522
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
FinalVolume:	562	522	318	833	461	142	131	1399	315	375	1396	522

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Lanes:	2.00	2.00	1.00	2.57	1.43	1.00	2.00	3.26	0.74	2.00	3.00	1.00
Final Sat.:	2805	2805	1403	3611	1999	1403	2805	4579	1031	2805	4208	1403

Capacity Analysis Module:

Vol/Sat:	0.20	0.19	0.23	0.23	0.23	0.10	0.05	0.31	0.31	0.13	0.33	0.37
Crit Volume:	281			323			428			188		
Crit Moves:	****			****			****			****		

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## **FUTURE PLUS PROJECT WITH MITIGATION**

Level Of Service Computation Report  
 Circular 212 Planning Method (Base Volume Alternative)

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 Intersection #9 I-5 SB Off-Ramp/N Front St & W Burbank Blvd  
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Cycle (sec): 100 Critical Vol./Cap.(X): 1.060  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F  
 \*\*\*\*\*

Street Name:	I-5 SB Off-Ramp/N Front St						W Burbank Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	0	1	0	0	3	1	0	0

Volume Module:

Base Vol:	331	0	72	280	114	326	0	1591	729	670	1837	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	331	0	72	280	114	326	0	1591	729	670	1837	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	331	0	72	280	114	326	0	1591	729	670	1837	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	331	0	72	280	114	326	0	1591	729	670	1837	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.10	1.00	1.10	1.00	1.00	1.00	1.10	1.00	1.00
FinalVolume:	364	0	72	308	114	359	0	1591	729	737	1837	0

Saturation Flow Module:

Sat/Lane:	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1425
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.67	0.00	0.33	1.57	0.58	1.85	0.00	3.00	1.00	2.00	3.00	0.00
Final Sat.:	2379	0	471	2244	832	2625	0	4275	1425	2850	4275	0

Capacity Analysis Module:

Vol/Sat:	0.15	0.00	0.15	0.14	0.14	0.14	0.00	0.37	0.51	0.26	0.43	0.00
Crit Volume:	218			196			729			369		
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report  
 Circular 212 Planning Method (Base Volume Alternative)

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 Intersection #10 N Victory Pl & W Burbank Blvd  
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Cycle (sec): 100 Critical Vol./Cap.(X): 0.862  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 165 Level Of Service: D  
 \*\*\*\*\*

Street Name:	N Victory Pl						W Burbank Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	1	0	1	2	0	3	1	0

Volume Module:

Base Vol:	269	283	159	601	558	58	45	1491	446	495	1329	604
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	269	283	159	601	558	58	45	1491	446	495	1329	604
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	269	283	159	601	558	58	45	1491	446	495	1329	604
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	269	283	159	601	558	58	45	1491	446	495	1329	604
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
FinalVolume:	296	283	159	661	558	58	50	1491	446	545	1329	604

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Lanes:	2.00	2.00	1.00	2.17	1.83	1.00	2.00	3.08	0.92	2.00	3.00	1.00
Final Sat.:	2805	2805	1403	3042	2568	1403	2805	4318	1292	2805	4208	1403

Capacity Analysis Module:

Vol/Sat:	0.11	0.10	0.11	0.22	0.22	0.04	0.02	0.35	0.35	0.19	0.32	0.43
Crit Volume:	148			305			484			272		
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report  
 Circular 212 Planning Method (Base Volume Alternative)

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Intersection #14 Victory Blvd & W Magnolia Blvd

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.865  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 169 Level Of Service: D

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Street Name:	Victory Blvd						W Magnolia Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	2	0	1	0	2	0	1	1

Volume Module:

Base Vol:	152	535	136	226	1070	135	118	603	221	293	636	153
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	535	136	226	1070	135	118	603	221	293	636	153
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	152	535	136	226	1070	135	118	603	221	293	636	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	535	136	226	1070	135	118	603	221	293	636	153
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	167	535	136	249	1070	135	118	603	221	293	636	153

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2805	2805	1403	2805	2805	1403	1403	2805	1403	1403	2805	1403

Capacity Analysis Module:

Vol/Sat:	0.06	0.19	0.10	0.09	0.38	0.10	0.08	0.21	0.16	0.21	0.23	0.11
Crit Volume:	84			535			302			293		
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #14 Victory Blvd & W Magnolia Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.888
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: D

Table with columns for Street Name (Victory Blvd, W Magnolia Blvd), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Volume, and Crit Moves.

Level Of Service Computation Report  
 Circular 212 Planning Method (Base Volume Alternative)

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 Intersection #18 S Victory Blvd & W Olive Ave  
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Cycle (sec): 100 Critical Vol./Cap.(X): 0.850  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 152 Level Of Service: D  
 \*\*\*\*\*

Street Name:	S Victory Blvd						W Olive Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	2	0	2	0	1	1

Volume Module:

Base Vol:	107	547	122	196	1104	305	181	565	51	141	866	114
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	547	122	196	1104	305	181	565	51	141	866	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	107	547	122	196	1104	305	181	565	51	141	866	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	547	122	196	1104	305	181	565	51	141	866	114
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
FinalVolume:	107	547	122	216	1104	305	199	565	51	155	866	114

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1403	2805	1403	2805	2805	1403	2805	2805	1403	2805	2805	1403

Capacity Analysis Module:

Vol/Sat:	0.08	0.20	0.09	0.08	0.39	0.22	0.07	0.20	0.04	0.06	0.31	0.08
Crit Volume:	107			552		100				433		
Crit Moves:	****			****		****				****		

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Level Of Service Computation Report  
 Circular 212 Planning Method (Base Volume Alternative)

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 Intersection #18 S Victory Blvd & W Olive Ave  
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Cycle (sec): 100 Critical Vol./Cap.(X): 0.882  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: D  
 \*\*\*\*\*

Street Name:	S Victory Blvd						W Olive Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	1	0	2	0	1	1

Volume Module:

Base Vol:	107	547	122	196	1104	305	181	565	51	141	866	114
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	547	122	196	1104	305	181	565	51	141	866	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	107	547	122	196	1104	305	181	565	51	141	866	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	547	122	196	1104	305	181	565	51	141	866	114
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	107	547	122	196	1104	305	181	565	51	141	866	114

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1444	2888	1444	1444	2888	1444	1444	2888	1444	1444	2888	1444

Capacity Analysis Module:

Vol/Sat:	0.07	0.19	0.08	0.14	0.38	0.21	0.13	0.20	0.04	0.10	0.30	0.08
Crit Volume:	107			552			181			433		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report  
Circular 212 Planning Method (Base Volume Alternative)

\*\*\*\*\*  
Intersection #9 I-5 SB Off-Ramp/N Front St & W Burbank Blvd  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.003  
Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 180 Level Of Service: F  
\*\*\*\*\*

Street Name: I-5 SB Off-Ramp/N Front St W Burbank Blvd  
Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R  
Control: Split Phase Split Phase Permitted Protected  
Rights: Include Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0  
Lanes: 1 0 1! 0 0 1 1 0 1 1 0 0 3 1 0 2 0 3 0 0

Volume Module:  
Base Vol: 391 0 99 575 56 373 0 2063 508 375 1713 0  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 391 0 99 575 56 373 0 2063 508 375 1713 0  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Volume: 391 0 99 575 56 373 0 2063 508 375 1713 0  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 391 0 99 575 56 373 0 2063 508 375 1713 0  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.10 1.00 1.00 1.10 1.00 1.10 1.00 1.00 1.00 1.10 1.00 1.00  
FinalVolume: 430 0 99 633 56 410 0 2063 508 413 1713 0

Saturation Flow Module:  
Sat/Lane: 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425 1425  
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 1.63 0.00 0.37 2.00 0.24 1.76 0.00 3.21 0.79 2.00 3.00 0.00  
Final Sat.: 2317 0 533 2850 342 2508 0 4574 1126 2850 4275 0

Capacity Analysis Module:  
Vol/Sat: 0.19 0.00 0.19 0.22 0.16 0.16 0.00 0.45 0.45 0.14 0.40 0.00  
Crit Volume: 265 316 643 206  
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*  
\*\*\*\*\*

Level Of Service Computation Report  
 Circular 212 Planning Method (Base Volume Alternative)

\*\*\*\*\*

Intersection #10 N Victory Pl & W Burbank Blvd

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.951  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: E

\*\*\*\*\*

Street Name:	N Victory Pl						W Burbank Blvd					
Approach:	North Bound		South Bound		East Bound		West Bound		East Bound		West Bound	
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	1	1	2	0	3	1	0	2

Volume Module:

Base Vol:	553	568	326	793	536	146	122	1508	360	383	1495	551
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	553	568	326	793	536	146	122	1508	360	383	1495	551
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	553	568	326	793	536	146	122	1508	360	383	1495	551
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	553	568	326	793	536	146	122	1508	360	383	1495	551
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
FinalVolume:	608	568	326	872	536	146	134	1508	360	421	1495	551

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Lanes:	2.00	2.00	1.00	2.48	1.52	1.00	2.00	3.23	0.77	2.00	3.00	1.00
Final Sat.:	2805	2805	1403	3475	2135	1403	2805	4529	1081	2805	4208	1403

Capacity Analysis Module:

Vol/Sat:	0.22	0.20	0.23	0.25	0.25	0.10	0.05	0.33	0.33	0.15	0.36	0.39
Crit Volume:	304			352			467			211		
Crit Moves:	****			****			****			****		

\*\*\*\*\*

Level Of Service Computation Report  
 Circular 212 Planning Method (Base Volume Alternative)

\*\*\*\*\*  
 Intersection #14 Victory Blvd & W Magnolia Blvd  
 \*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.939  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: E  
 \*\*\*\*\*

Street Name:	Victory Blvd						W Magnolia Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	2	0	1	0	2	0	1	1

Volume Module:

Base Vol:	228	936	210	292	1004	179	176	1004	174	188	730	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	228	936	210	292	1004	179	176	1004	174	188	730	244
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	228	936	210	292	1004	179	176	1004	174	188	730	244
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	228	936	210	292	1004	179	176	1004	174	188	730	244
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	251	936	210	321	1004	179	176	1004	174	188	730	244

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2805	2805	1403	2805	2805	1403	1403	2805	1403	1403	2805	1403

Capacity Analysis Module:

Vol/Sat:	0.09	0.33	0.15	0.11	0.36	0.13	0.13	0.36	0.12	0.13	0.26	0.17
Crit Volume:	125			502			502			188		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report  
 Circular 212 Planning Method (Base Volume Alternative)

\*\*\*\*\*

Intersection #14 Victory Blvd & W Magnolia Blvd

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.004  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: F

\*\*\*\*\*

Street Name:	Victory Blvd						W Magnolia Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	1	0	2	0	1	1

Volume Module:

Base Vol:	228	936	210	292	1004	179	176	1004	174	188	730	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	228	936	210	292	1004	179	176	1004	174	188	730	244
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	228	936	210	292	1004	179	176	1004	174	188	730	244
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	228	936	210	292	1004	179	176	1004	174	188	730	244
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	228	936	210	292	1004	179	176	1004	174	188	730	244

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1444	2888	1444	1444	2888	1444	1444	2888	1444	1444	2888	1444

Capacity Analysis Module:

Vol/Sat:	0.16	0.32	0.15	0.20	0.35	0.12	0.12	0.35	0.12	0.13	0.25	0.17
Crit Volume:	468			292			502			188		
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report  
 Circular 212 Planning Method (Base Volume Alternative)

\*\*\*\*\*

Intersection #18 S Victory Blvd & W Olive Ave

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.903  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: E

\*\*\*\*\*

Street Name:	S Victory Blvd						W Olive Ave								
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit				
Rights:	Include		Include		Include		Include		Include		Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:	1	0	2	0	1	2	0	2	0	1	2	0	2	0	1

Volume Module:

Base Vol:	77	855	213	229	1027	254	249	1192	40	146	735	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	77	855	213	229	1027	254	249	1192	40	146	735	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	77	855	213	229	1027	254	249	1192	40	146	735	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	855	213	229	1027	254	249	1192	40	146	735	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
FinalVolume:	77	855	213	252	1027	254	274	1192	40	161	735	210

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1403	2805	1403	2805	2805	1403	2805	2805	1403	2805	2805	1403

Capacity Analysis Module:

Vol/Sat:	0.05	0.30	0.15	0.09	0.37	0.18	0.10	0.42	0.03	0.06	0.26	0.15
Crit Volume:	77			514			596		80			
Crit Moves:	****			****			****		****			

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Level Of Service Computation Report  
 Circular 212 Planning Method (Base Volume Alternative)

\*\*\*\*\*

Intersection #18 S Victory Blvd & W Olive Ave

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.969  
 Loss Time (sec): 0 Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 180 Level Of Service: E

\*\*\*\*\*

Street Name:	S Victory Blvd						W Olive Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	1	0	2	0	1	1

Volume Module:

Base Vol:	77	855	213	229	1027	254	249	1192	40	146	735	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	77	855	213	229	1027	254	249	1192	40	146	735	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	77	855	213	229	1027	254	249	1192	40	146	735	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	855	213	229	1027	254	249	1192	40	146	735	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	855	213	229	1027	254	249	1192	40	146	735	210

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1444	2888	1444	1444	2888	1444	1444	2888	1444	1444	2888	1444

Capacity Analysis Module:

Vol/Sat:	0.05	0.30	0.15	0.16	0.36	0.18	0.17	0.41	0.03	0.10	0.25	0.15
Crit Volume:	428			229			596			146		
Crit Moves:	****			****			****			****		

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## **INTERSECTION 9 - HCM ANALYSIS**



HCM Signalized Intersection Capacity Analysis  
 9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Existing Conditions  
 AM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑↑↑		↔		↔	↔	↔	↔
Traffic Volume (vph)	0	1501	626	64	1707	0	232	0	11	218	102	284
Future Volume (vph)	0	1501	626	64	1707	0	232	0	11	218	102	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.3		4.1	5.3		5.0		5.0	5.0	5.0	5.0
Lane Util. Factor		0.91		1.00	0.91		1.00		1.00	0.95	0.95	1.00
Frt		0.96		1.00	1.00		1.00		0.85	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	0.98	1.00
Satd. Flow (prot)		4861		1770	5085		1770		1583	1681	1737	1583
Flt Permitted		1.00		0.95	1.00		0.95		1.00	0.95	0.98	1.00
Satd. Flow (perm)		4861		1770	5085		1770		1583	1681	1737	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1632	680	70	1855	0	252	0	12	237	111	309
RTOR Reduction (vph)	0	30	0	0	0	0	0	0	10	0	0	48
Lane Group Flow (vph)	0	2282	0	70	1855	0	252	0	2	171	177	261
Turn Type		NA		Prot	NA		Prot		Prot	Split	NA	Prot
Protected Phases		2		1	6		4		4	3	3	3
Permitted Phases												
Actuated Green, G (s)		105.5		14.0	123.6		33.1		33.1	38.0	38.0	38.0
Effective Green, g (s)		105.5		14.0	123.6		33.1		33.1	38.0	38.0	38.0
Actuated g/C Ratio		0.50		0.07	0.59		0.16		0.16	0.18	0.18	0.18
Clearance Time (s)		5.3		4.1	5.3		5.0		5.0	5.0	5.0	5.0
Vehicle Extension (s)		4.0		3.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Grp Cap (vph)		2442		118	2992		278		249	304	314	286
v/s Ratio Prot		c0.47		0.04	c0.36		c0.14		0.00	0.10	0.10	c0.16
v/s Ratio Perm												
v/c Ratio		0.93		0.59	0.62		0.91		0.01	0.56	0.56	0.91
Uniform Delay, d1		49.0		95.2	28.0		86.9		74.6	78.4	78.4	84.3
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		8.2		7.8	1.0		31.1		0.0	2.9	2.8	31.6
Delay (s)		57.2		103.0	29.0		118.0		74.6	81.3	81.2	115.9
Level of Service		E		F	C		F		E	F	F	F
Approach Delay (s)		57.2			31.7			116.0			97.6	
Approach LOS		E			C			F			F	

Intersection Summary

HCM 2000 Control Delay	55.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	210.0	Sum of lost time (s)	19.4
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
 9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Existing Conditions  
 PM PEAK HOUR















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑↑↑		↖		↖	↖	↖	↖
Traffic Volume (vph)	0	1936	377	19	1612	0	281	0	41	483	39	330
Future Volume (vph)	0	1936	377	19	1612	0	281	0	41	483	39	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.3		4.1	5.3		5.0		5.0	5.0	5.0	5.0
Lane Util. Factor		0.91		1.00	0.91		1.00		1.00	0.95	0.95	1.00
Frt		0.98		1.00	1.00		1.00		0.85	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	0.96	1.00
Satd. Flow (prot)		4961		1770	5085		1770		1583	1681	1697	1583
Flt Permitted		1.00		0.95	1.00		0.95		1.00	0.95	0.96	1.00
Satd. Flow (perm)		4961		1770	5085		1770		1583	1681	1697	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2104	410	21	1752	0	305	0	45	525	42	359
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	38	0	0	48
Lane Group Flow (vph)	0	2503	0	21	1752	0	305	0	8	283	284	311
Turn Type		NA		Prot	NA		Prot		Prot	Split	NA	Prot
Protected Phases		2		1	6		4		4	3	3	3
Permitted Phases												
Actuated Green, G (s)		109.5		6.1	119.7		35.0		35.0	40.0	40.0	40.0
Effective Green, g (s)		109.5		6.1	119.7		35.0		35.0	40.0	40.0	40.0
Actuated g/C Ratio		0.52		0.03	0.57		0.17		0.17	0.19	0.19	0.19
Clearance Time (s)		5.3		4.1	5.3		5.0		5.0	5.0	5.0	5.0
Vehicle Extension (s)		4.0		3.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Grp Cap (vph)		2586		51	2898		295		263	320	323	301
v/s Ratio Prot		c0.50		0.01	c0.34		c0.17		0.00	0.17	0.17	c0.20
v/s Ratio Perm												
v/c Ratio		0.97		0.41	0.60		1.03		0.03	0.88	0.88	1.03
Uniform Delay, d1		48.6		100.2	29.6		87.5		73.3	82.7	82.7	85.0
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		11.6		5.3	0.9		61.5		0.1	24.4	23.2	61.0
Delay (s)		60.2		105.5	30.6		149.0		73.3	107.1	105.9	146.0
Level of Service		E		F	C		F		E	F	F	F
Approach Delay (s)		60.2			31.5			139.2			121.8	
Approach LOS		E			C			F			F	

Intersection Summary		
HCM 2000 Control Delay	66.3	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.99	E
Actuated Cycle Length (s)	210.0	Sum of lost time (s)
Intersection Capacity Utilization	81.3%	19.4
Analysis Period (min)	15	ICU Level of Service
		D

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
 9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Existing + Project Conditions  
 AM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑	↑↑↑		↑		↑	↑	↑	↑
Traffic Volume (vph)	0	1501	688	95	1707	0	321	0	83	218	121	284
Future Volume (vph)	0	1501	688	95	1707	0	321	0	83	218	121	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.3		4.1	5.3		5.0		5.0	5.0	5.0	5.0
Lane Util. Factor		0.91		1.00	0.91		1.00		1.00	0.95	0.95	1.00
Frt		0.95		1.00	1.00		1.00		0.85	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	0.99	1.00
Satd. Flow (prot)		4846		1770	5085		1770		1583	1681	1744	1583
Flt Permitted		1.00		0.95	1.00		0.95		1.00	0.95	0.99	1.00
Satd. Flow (perm)		4846		1770	5085		1770		1583	1681	1744	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1632	748	103	1855	0	349	0	90	237	132	309
RTOR Reduction (vph)	0	35	0	0	0	0	0	0	49	0	0	48
Lane Group Flow (vph)	0	2345	0	103	1855	0	349	0	41	182	187	261
Turn Type		NA		Prot	NA		Prot		Prot	Split	NA	Prot
Protected Phases		2		1	6		4		4	3	3	3
Permitted Phases												
Actuated Green, G (s)		100.1		17.5	121.7		35.0		35.0	38.0	38.0	38.0
Effective Green, g (s)		100.1		17.5	121.7		35.0		35.0	38.0	38.0	38.0
Actuated g/C Ratio		0.48		0.08	0.58		0.17		0.17	0.18	0.18	0.18
Clearance Time (s)		5.3		4.1	5.3		5.0		5.0	5.0	5.0	5.0
Vehicle Extension (s)		4.0		3.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Grp Cap (vph)		2309		147	2946		295		263	304	315	286
v/s Ratio Prot		c0.48		c0.06	0.36		c0.20		0.03	0.11	0.11	c0.16
v/s Ratio Perm												
v/c Ratio		1.02		0.70	0.63		1.18		0.16	0.60	0.59	0.91
Uniform Delay, d1		55.0		93.7	29.2		87.5		74.9	79.0	78.9	84.3
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		22.8		14.0	1.0		111.5		0.4	3.7	3.5	31.6
Delay (s)		77.7		107.7	30.3		199.0		75.2	82.7	82.4	115.9
Level of Service		E		F	C		F		E	F	F	F
Approach Delay (s)		77.7			34.3			173.6			97.8	
Approach LOS		E			C			F			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			72.4			HCM 2000 Level of Service			E			
HCM 2000 Volume to Capacity ratio			1.00									
Actuated Cycle Length (s)			210.0			Sum of lost time (s)			19.4			
Intersection Capacity Utilization			95.1%			ICU Level of Service			F			
Analysis Period (min)			15									

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
 9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Existing + Project Conditions  
 PM PEAK HOUR















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑↑↑		↔		↔	↔	↔	↔
Traffic Volume (vph)	0	1936	485	73	1612	0	364	0	108	483	73	330
Future Volume (vph)	0	1936	485	73	1612	0	364	0	108	483	73	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.3		4.1	5.3		5.0		5.0	5.0	5.0	5.0
Lane Util. Factor		0.91		1.00	0.91		1.00		1.00	0.95	0.95	1.00
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	0.96	1.00
Satd. Flow (prot)		4933		1770	5085		1770		1583	1681	1706	1583
Flt Permitted		1.00		0.95	1.00		0.95		1.00	0.95	0.96	1.00
Satd. Flow (perm)		4933		1770	5085		1770		1583	1681	1706	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2104	527	79	1752	0	396	0	117	525	79	359
RTOR Reduction (vph)	0	18	0	0	0	0	0	0	49	0	0	48
Lane Group Flow (vph)	0	2613	0	79	1752	0	396	0	68	299	305	311
Turn Type		NA		Prot	NA		Prot		Prot	Split	NA	Prot
Protected Phases		2		1	6		4		4	3	3	3
Permitted Phases												
Actuated Green, G (s)		100.7		14.9	119.7		35.0		35.0	40.0	40.0	40.0
Effective Green, g (s)		100.7		14.9	119.7		35.0		35.0	40.0	40.0	40.0
Actuated g/C Ratio		0.48		0.07	0.57		0.17		0.17	0.19	0.19	0.19
Clearance Time (s)		5.3		4.1	5.3		5.0		5.0	5.0	5.0	5.0
Vehicle Extension (s)		4.0		3.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Grp Cap (vph)		2365		125	2898		295		263	320	324	301
v/s Ratio Prot		c0.53		0.04	c0.34		c0.22		0.04	0.18	0.18	c0.20
v/s Ratio Perm												
v/c Ratio		1.10		0.63	0.60		1.34		0.26	0.93	0.94	1.03
Uniform Delay, d1		54.6		94.9	29.6		87.5		76.2	83.7	83.8	85.0
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		54.1		10.0	0.9		175.1		0.7	33.7	35.1	61.0
Delay (s)		108.8		104.9	30.6		262.6		76.9	117.4	118.9	146.0
Level of Service		F		F	C		F		E	F	F	F
Approach Delay (s)		108.8			33.8			220.3			128.5	
Approach LOS		F			C			F			F	

Intersection Summary		
HCM 2000 Control Delay	98.5	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	1.10	F
Actuated Cycle Length (s)	210.0	Sum of lost time (s)
Intersection Capacity Utilization	94.6%	19.4
Analysis Period (min)	15	ICU Level of Service
		F

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
 9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Existing + Project Conditions + Mitigation  
 AM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↑	↑↑↑		↑	↑		↑	↑	↑
Traffic Volume (vph)	0	1501	688	95	1707	0	321	0	83	218	121	284
Future Volume (vph)	0	1501	688	95	1707	0	321	0	83	218	121	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.3		4.1	5.3		5.0	5.0		5.0	5.0	5.0
Lane Util. Factor		0.91		1.00	0.91		0.95	0.95		0.95	0.95	1.00
Frt		0.95		1.00	1.00		1.00	0.94		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00		0.95	0.97		0.95	0.99	1.00
Satd. Flow (prot)		4846		1770	5085		1681	1612		1681	1744	1583
Flt Permitted		1.00		0.95	1.00		0.95	0.97		0.95	0.99	1.00
Satd. Flow (perm)		4846		1770	5085		1681	1612		1681	1744	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1632	748	103	1855	0	349	0	90	237	132	309
RTOR Reduction (vph)	0	34	0	0	0	0	0	50	0	0	0	48
Lane Group Flow (vph)	0	2346	0	103	1855	0	223	166	0	182	187	261
Turn Type		NA		Prot	NA		Split	NA		Split	NA	Prot
Protected Phases		2		1	6		4	4		3	3	3
Permitted Phases												
Actuated Green, G (s)		103.0		17.5	124.6		32.1	32.1		38.0	38.0	38.0
Effective Green, g (s)		103.0		17.5	124.6		32.1	32.1		38.0	38.0	38.0
Actuated g/C Ratio		0.49		0.08	0.59		0.15	0.15		0.18	0.18	0.18
Clearance Time (s)		5.3		4.1	5.3		5.0	5.0		5.0	5.0	5.0
Vehicle Extension (s)		4.0		3.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Grp Cap (vph)		2376		147	3017		256	246		304	315	286
v/s Ratio Prot		c0.48		c0.06	0.36		c0.13	0.10		0.11	0.11	c0.16
v/s Ratio Perm												
v/c Ratio		0.99		0.70	0.61		0.87	0.67		0.60	0.59	0.91
Uniform Delay, d1		52.9		93.7	27.3		86.9	84.0		79.0	78.9	84.3
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		15.8		14.0	0.9		26.6	7.8		3.7	3.5	31.6
Delay (s)		68.6		107.7	28.3		113.6	91.8		82.7	82.4	115.9
Level of Service		E		F	C		F	F		F	F	F
Approach Delay (s)		68.6			32.5			102.8			97.8	
Approach LOS		E			C			F			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			62.0			HCM 2000 Level of Service				E		
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			210.0			Sum of lost time (s)			19.4			
Intersection Capacity Utilization			89.5%			ICU Level of Service				E		
Analysis Period (min)			15									
c	Critical Lane Group											

HCM Signalized Intersection Capacity Analysis  
 9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Existing + Project Conditions + Mitigation  
 PM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↖	↑↑↑		↖	↕		↖	↕	↖
Traffic Volume (vph)	0	1936	485	73	1612	0	364	0	108	483	73	330
Future Volume (vph)	0	1936	485	73	1612	0	364	0	108	483	73	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.3		4.1	5.3		5.0	5.0		5.0	5.0	5.0
Lane Util. Factor		0.91		1.00	0.91		0.95	0.95		0.95	0.95	1.00
Frt		0.97		1.00	1.00		1.00	0.93		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00		0.95	0.97		0.95	0.96	1.00
Satd. Flow (prot)		4933		1770	5085		1681	1602		1681	1706	1583
Flt Permitted		1.00		0.95	1.00		0.95	0.97		0.95	0.96	1.00
Satd. Flow (perm)		4933		1770	5085		1681	1602		1681	1706	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2104	527	79	1752	0	396	0	117	525	79	359
RTOR Reduction (vph)	0	18	0	0	0	0	0	49	0	0	0	48
Lane Group Flow (vph)	0	2613	0	79	1752	0	265	199	0	299	305	311
Turn Type		NA		Prot	NA		Split	NA		Split	NA	Prot
Protected Phases		2		1	6		4	4		3	3	3
Permitted Phases												
Actuated Green, G (s)		101.1		14.9	120.1		34.6	34.6		40.0	40.0	40.0
Effective Green, g (s)		101.1		14.9	120.1		34.6	34.6		40.0	40.0	40.0
Actuated g/C Ratio		0.48		0.07	0.57		0.16	0.16		0.19	0.19	0.19
Clearance Time (s)		5.3		4.1	5.3		5.0	5.0		5.0	5.0	5.0
Vehicle Extension (s)		4.0		3.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Grp Cap (vph)		2374		125	2908		276	263		320	324	301
v/s Ratio Prot		c0.53		0.04	c0.34		c0.16	0.12		0.18	0.18	c0.20
v/s Ratio Perm												
v/c Ratio		1.10		0.63	0.60		0.96	0.76		0.93	0.94	1.03
Uniform Delay, d1		54.5		94.9	29.4		87.0	83.7		83.7	83.8	85.0
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		52.4		10.0	0.9		43.4	12.4		33.7	35.1	61.0
Delay (s)		106.9		104.9	30.3		130.4	96.0		117.4	118.9	146.0
Level of Service		F		F	C		F	F		F	F	F
Approach Delay (s)		106.9			33.5			113.8			128.5	
Approach LOS		F			C			F			F	

Intersection Summary		
HCM 2000 Control Delay	88.4	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	1.03	F
Actuated Cycle Length (s)	210.0	Sum of lost time (s)
Intersection Capacity Utilization	90.5%	19.4
Analysis Period (min)	15	ICU Level of Service
		E

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
 9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Future Conditions (2022)  
 AM PEAK HOUR

Movement	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	SBL2	SBL	SBT	SBR
Lane Configurations	↑↑↑↑		↵	↵	↑↑↑↑	↵	↵	↵	↵	↵	↵
Traffic Volume (vph)	1591	667	490	103	1837	242	11	280	0	105	326
Future Volume (vph)	1591	667	490	103	1837	242	11	280	0	105	326
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3		4.1	4.1	5.3	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.86		0.86	0.95	0.91	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.96		1.00	1.00	1.00	1.00	0.85	1.00	1.00	0.92	0.85
Flt Protected	1.00		0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00
Satd. Flow (prot)	6124		1522	1681	5085	1770	1583	1681	1681	1630	1504
Flt Permitted	1.00		0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00
Satd. Flow (perm)	6124		1522	1681	5085	1770	1583	1681	1681	1630	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1729	725	533	112	1997	263	12	304	0	114	354
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	20	49
Lane Group Flow (vph)	2454	0	325	320	1997	263	12	152	152	221	178
Turn Type	NA		Prot	Prot	NA	Prot	Prot	Split	Split	NA	Prot
Protected Phases	2		1	1	6	4	4	3	3	3	3
Permitted Phases											
Actuated Green, G (s)	90.7		30.9	30.9	125.7	33.9	33.9	35.1	35.1	35.1	35.1
Effective Green, g (s)	90.7		30.9	30.9	125.7	33.9	33.9	35.1	35.1	35.1	35.1
Actuated g/C Ratio	0.43		0.15	0.15	0.60	0.16	0.16	0.17	0.17	0.17	0.17
Clearance Time (s)	5.3		4.1	4.1	5.3	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	4.0		3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	2644		223	247	3043	285	255	280	280	272	251
v/s Ratio Prot	c0.40		c0.21	0.19	0.39	c0.15	0.01	0.09	0.09	c0.14	0.12
v/s Ratio Perm											
v/c Ratio	1.04dr		1.46	1.30	0.66	0.92	0.05	0.54	0.54	0.81	0.71
Uniform Delay, d1	56.6		89.5	89.5	27.9	86.8	74.4	80.1	80.1	84.3	82.6
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.2		229.0	159.6	1.1	33.9	0.1	2.7	2.7	17.4	9.4
Delay (s)	63.8		318.5	249.2	29.0	120.7	74.5	82.8	82.8	101.7	92.1
Level of Service	E		F	F	C	F	E	F	F	F	F
Approach Delay (s)	63.8				91.3					91.4	
Approach LOS	E				F					F	

Intersection Summary

HCM 2000 Control Delay	81.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	210.0	Sum of lost time (s)	19.4
Intersection Capacity Utilization	91.6%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
 9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Future Conditions (2022)  
 PM PEAK HOUR

Movement	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	SBL2	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	2063	400	237	52	1713	308	42	575	0	40	373
Future Volume (vph)	2063	400	237	52	1713	308	42	575	0	40	373
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3		4.1	4.1	5.3	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.86		0.86	0.95	0.91	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.98		1.00	1.00	1.00	1.00	0.85	1.00	1.00	0.88	0.85
Flt Protected	1.00		0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00
Satd. Flow (prot)	6252		1522	1681	5085	1770	1583	1681	1681	1555	1504
Flt Permitted	1.00		0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00
Satd. Flow (perm)	6252		1522	1681	5085	1770	1583	1681	1681	1555	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2242	435	258	57	1862	335	46	625	0	43	405
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	22	48
Lane Group Flow (vph)	2677	0	157	158	1862	335	46	312	313	203	175
Turn Type	NA		Prot	Prot	NA	Prot	Prot	Split	Split	NA	Prot
Protected Phases	2		1	1	6	4	4	3	3	3	3
Permitted Phases											
Actuated Green, G (s)	89.7		25.9	25.9	119.7	35.0	35.0	40.0	40.0	40.0	40.0
Effective Green, g (s)	89.7		25.9	25.9	119.7	35.0	35.0	40.0	40.0	40.0	40.0
Actuated g/C Ratio	0.43		0.12	0.12	0.57	0.17	0.17	0.19	0.19	0.19	0.19
Clearance Time (s)	5.3		4.1	4.1	5.3	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	4.0		3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	2670		187	207	2898	295	263	320	320	296	286
v/s Ratio Prot	c0.43		c0.10	0.09	0.37	c0.19	0.03	0.19	c0.19	0.13	0.12
v/s Ratio Perm											
v/c Ratio	1.00		0.84	0.76	0.64	1.14	0.17	0.97	0.98	0.69	0.61
Uniform Delay, d1	60.1		90.0	89.1	30.6	87.5	75.1	84.5	84.6	79.2	77.9
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.0		26.8	15.3	1.1	94.1	0.4	43.3	44.0	7.0	4.4
Delay (s)	78.2		116.8	104.4	31.7	181.6	75.5	127.8	128.6	86.2	82.3
Level of Service	E		F	F	C	F	E	F	F	F	F
Approach Delay (s)	78.2				43.1					109.9	
Approach LOS	E				D					F	

Intersection Summary

HCM 2000 Control Delay	77.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	210.0	Sum of lost time (s)	19.4
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



HCM Signalized Intersection Capacity Analysis Future + Project Conditions (2022) + Mitigation  
 9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

AM PEAK HOUR

Movement	EBT	EBR	WBL2	WBL	WBT	NBL	NBT	NBR	SBL2	SBL	SBT	SBR
Lane Configurations	↑↑↑↑		↵	↵	↑↑↑	↵	↕		↵	↵	↵	↵
Traffic Volume (vph)	1591	729	490	137	1837	331	0	72	280	0	114	326
Future Volume (vph)	1591	729	490	137	1837	331	0	72	280	0	114	326
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3		4.1	4.1	5.3	5.0	5.0		5.0	5.0	5.0	5.0
Lane Util. Factor	0.86		0.86	0.95	0.91	0.95	0.95		0.95	0.95	0.95	0.95
Frt	0.95		1.00	1.00	1.00	1.00	0.95		1.00	1.00	0.93	0.85
Flt Protected	1.00		0.95	0.95	1.00	0.95	0.97		0.95	0.95	1.00	1.00
Satd. Flow (prot)	6106		1522	1681	5085	1681	1622		1681	1681	1637	1504
Flt Permitted	1.00		0.95	0.95	1.00	0.95	0.97		0.95	0.95	1.00	1.00
Satd. Flow (perm)	6106		1522	1681	5085	1681	1622		1681	1681	1637	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1729	792	533	149	1997	360	0	78	304	0	124	354
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	17	49
Lane Group Flow (vph)	2521	0	341	341	1997	223	215	0	152	152	231	181
Turn Type	NA		Prot	Prot	NA	Split	NA		Split	Split	NA	Prot
Protected Phases	2		1	1	6	4	4		3	3	3	3
Permitted Phases												
Actuated Green, G (s)	91.9		30.9	30.9	126.9	32.0	32.0		35.8	35.8	35.8	35.8
Effective Green, g (s)	91.9		30.9	30.9	126.9	32.0	32.0		35.8	35.8	35.8	35.8
Actuated g/C Ratio	0.44		0.15	0.15	0.60	0.15	0.15		0.17	0.17	0.17	0.17
Clearance Time (s)	5.3		4.1	4.1	5.3	5.0	5.0		5.0	5.0	5.0	5.0
Vehicle Extension (s)	4.0		3.0	3.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	2672		223	247	3072	256	247		286	286	279	256
v/s Ratio Prot	c0.41		c0.22	0.20	0.39	c0.13	0.13		0.09	0.09	c0.14	0.12
v/s Ratio Perm												
v/c Ratio	1.12dr		1.53	1.38	0.65	0.87	0.87		0.53	0.53	0.83	0.71
Uniform Delay, d1	56.6		89.5	89.5	27.1	87.0	87.0		79.4	79.4	84.1	82.2
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	8.4		259.5	194.5	1.1	26.6	27.3		2.4	2.4	18.6	9.2
Delay (s)	65.0		349.1	284.1	28.2	113.6	114.3		81.9	81.9	102.7	91.4
Level of Service	E		F	F	C	F	F		F	F	F	F
Approach Delay (s)	65.0				101.6		113.9				91.3	
Approach LOS	E				F		F				F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			86.8		HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio			1.00									
Actuated Cycle Length (s)			210.0		Sum of lost time (s)					19.4		
Intersection Capacity Utilization			92.8%		ICU Level of Service					F		
Analysis Period (min)			15									
dr Defacto Right Lane. Recode with 1 though lane as a right lane.												
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis  
 9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Future + Project Conditions (2022)  
 AM PEAK HOUR

Movement	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	SBL2	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	1591	729	490	137	1837	331	72	280	0	114	326	
Future Volume (vph)	1591	729	490	137	1837	331	72	280	0	114	326	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	5.3		4.1	4.1	5.3	5.0	5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	0.86		0.86	0.95	0.91	1.00	1.00	0.95	0.95	0.95	0.95	
Frt	0.95		1.00	1.00	1.00	1.00	0.85	1.00	1.00	0.93	0.85	
Flt Protected	1.00		0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	
Satd. Flow (prot)	6106		1522	1681	5085	1770	1583	1681	1681	1637	1504	
Flt Permitted	1.00		0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00	
Satd. Flow (perm)	6106		1522	1681	5085	1770	1583	1681	1681	1637	1504	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	1729	792	533	149	1997	360	78	304	0	124	354	
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	17	49	
Lane Group Flow (vph)	2521	0	341	341	1997	360	78	152	152	231	181	
Turn Type	NA		Prot	Prot	NA	Prot	Prot	Split	Split	NA	Prot	
Protected Phases	2		1	1	6	4	4	3	3	3	3	
Permitted Phases												
Actuated Green, G (s)	88.9		30.9	30.9	123.9	35.0	35.0	35.8	35.8	35.8	35.8	
Effective Green, g (s)	88.9		30.9	30.9	123.9	35.0	35.0	35.8	35.8	35.8	35.8	
Actuated g/C Ratio	0.42		0.15	0.15	0.59	0.17	0.17	0.17	0.17	0.17	0.17	
Clearance Time (s)	5.3		4.1	4.1	5.3	5.0	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	4.0		3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	2584		223	247	3000	295	263	286	286	279	256	
v/s Ratio Prot	c0.41		c0.22	0.20	0.39	c0.20	0.05	0.09	0.09	c0.14	0.12	
v/s Ratio Perm												
v/c Ratio	1.16dr		1.53	1.38	0.67	1.22	0.30	0.53	0.53	0.83	0.71	
Uniform Delay, d1	59.5		89.5	89.5	29.1	87.5	76.7	79.4	79.4	84.1	82.2	
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.8		259.5	194.5	1.2	125.8	0.9	2.4	2.4	18.6	9.2	
Delay (s)	72.3		349.1	284.1	30.3	213.3	77.6	81.9	81.9	102.7	91.4	
Level of Service	E		F	F	C	F	E	F	F	F	F	
Approach Delay (s)	72.3				103.1					91.3		
Approach LOS	E				F					F		
<b>Intersection Summary</b>												
HCM 2000 Control Delay			95.5		HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio			1.08									
Actuated Cycle Length (s)			210.0		Sum of lost time (s)					19.4		
Intersection Capacity Utilization			99.0%		ICU Level of Service					F		
Analysis Period (min)			15									
dr Defacto Right Lane. Recode with 1 though lane as a right lane.												
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis Future + Project Conditions (2022) + Mitigation  
 9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd PM PEAK HOUR

	→	↘	↙	↗	←	↖	↑	↘	↙	↓	↗	
Movement	EBT	EBR	WBL2	WBL	WBT	NBL	NBT	NBR	SBL2	SBL	SBT	SBR
Lane Configurations	↑↑↑↑		↖	↗	↑↑↑↑	↖	↕		↖	↗	↖	↗
Traffic Volume (vph)	2063	508	237	111	1713	391	0	99	575	0	56	373
Future Volume (vph)	2063	508	237	111	1713	391	0	99	575	0	56	373
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3		4.1	4.1	5.3	5.0	5.0		5.0	5.0	5.0	5.0
Lane Util. Factor	0.86		0.86	0.95	0.91	0.95	0.95		0.95	0.95	0.95	0.95
Frt	0.97		1.00	1.00	1.00	1.00	0.94		1.00	1.00	0.89	0.85
Flt Protected	1.00		0.95	0.95	1.00	0.95	0.97		0.95	0.95	1.00	1.00
Satd. Flow (prot)	6218		1522	1681	5085	1681	1613		1681	1681	1572	1504
Flt Permitted	1.00		0.95	0.95	1.00	0.95	0.97		0.95	0.95	1.00	1.00
Satd. Flow (perm)	6218		1522	1681	5085	1681	1613		1681	1681	1572	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2242	552	258	121	1862	425	0	108	625	0	61	405
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	15	48
Lane Group Flow (vph)	2794	0	188	191	1862	272	261	0	312	313	224	179
Turn Type	NA		Prot	Prot	NA	Split	NA		Split	Split	NA	Prot
Protected Phases	2		1	1	6	4	4		3	3	3	3
Permitted Phases												
Actuated Green, G (s)	86.8		28.8	28.8	119.7	35.0	35.0		40.0	40.0	40.0	40.0
Effective Green, g (s)	86.8		28.8	28.8	119.7	35.0	35.0		40.0	40.0	40.0	40.0
Actuated g/C Ratio	0.41		0.14	0.14	0.57	0.17	0.17		0.19	0.19	0.19	0.19
Clearance Time (s)	5.3		4.1	4.1	5.3	5.0	5.0		5.0	5.0	5.0	5.0
Vehicle Extension (s)	4.0		3.0	3.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	2570		208	230	2898	280	268		320	320	299	286
v/s Ratio Prot	c0.45		c0.12	0.11	0.37	0.16	c0.16		0.19	c0.19	0.14	0.12
v/s Ratio Perm												
v/c Ratio	1.09		0.90	0.83	0.64	0.97	0.97		0.97	0.98	0.75	0.63
Uniform Delay, d1	61.6		89.2	88.2	30.6	87.0	87.0		84.5	84.6	80.3	78.1
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	46.6		36.9	21.7	1.1	45.9	47.5		43.3	44.0	10.7	4.8
Delay (s)	108.2		126.1	109.9	31.7	132.9	134.6		127.8	128.6	91.0	82.9
Level of Service	F		F	F	C	F	F		F	F	F	F
Approach Delay (s)	108.2				46.3		133.7				110.6	
Approach LOS	F				D		F				F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			89.8			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.01									
Actuated Cycle Length (s)			210.0			Sum of lost time (s)				19.4		
Intersection Capacity Utilization			94.0%			ICU Level of Service				F		
Analysis Period (min)			15									

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis  
 9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Future + Project Conditions (2022)  
 PM PEAK HOUR

Movement	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	SBL2	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	2063	508	237	111	1713	391	99	575	0	56	373
Future Volume (vph)	2063	508	237	111	1713	391	99	575	0	56	373
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3		4.1	4.1	5.3	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.86		0.86	0.95	0.91	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.97		1.00	1.00	1.00	1.00	0.85	1.00	1.00	0.89	0.85
Flt Protected	1.00		0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00
Satd. Flow (prot)	6218		1522	1681	5085	1770	1583	1681	1681	1572	1504
Flt Permitted	1.00		0.95	0.95	1.00	0.95	1.00	0.95	0.95	1.00	1.00
Satd. Flow (perm)	6218		1522	1681	5085	1770	1583	1681	1681	1572	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2242	552	258	121	1862	425	108	625	0	61	405
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	15	48
Lane Group Flow (vph)	2794	0	188	191	1862	425	108	312	313	224	179
Turn Type	NA		Prot	Prot	NA	Prot	Prot	Split	Split	NA	Prot
Protected Phases	2		1	1	6	4	4	3	3	3	3
Permitted Phases											
Actuated Green, G (s)	86.8		28.8	28.8	119.7	35.0	35.0	40.0	40.0	40.0	40.0
Effective Green, g (s)	86.8		28.8	28.8	119.7	35.0	35.0	40.0	40.0	40.0	40.0
Actuated g/C Ratio	0.41		0.14	0.14	0.57	0.17	0.17	0.19	0.19	0.19	0.19
Clearance Time (s)	5.3		4.1	4.1	5.3	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	4.0		3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	2570		208	230	2898	295	263	320	320	299	286
v/s Ratio Prot	c0.45		c0.12	0.11	0.37	c0.24	0.07	0.19	c0.19	0.14	0.12
v/s Ratio Perm											
v/c Ratio	1.09		0.90	0.83	0.64	1.44	0.41	0.97	0.98	0.75	0.63
Uniform Delay, d1	61.6		89.2	88.2	30.6	87.5	78.3	84.5	84.6	80.3	78.1
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	46.6		36.9	21.7	1.1	216.6	1.4	43.3	44.0	10.7	4.8
Delay (s)	108.2		126.1	109.9	31.7	304.1	79.7	127.8	128.6	91.0	82.9
Level of Service	F		F	F	C	F	E	F	F	F	F
Approach Delay (s)	108.2				46.3					110.6	
Approach LOS	F				D					F	
























Intersection Summary		
HCM 2000 Control Delay	99.8	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	1.10	F
Actuated Cycle Length (s)	210.0	Sum of lost time (s)
Intersection Capacity Utilization	96.4%	19.4
Analysis Period (min)	15	ICU Level of Service
		F

c Critical Lane Group

## **INTERSECTION 18 - HCM ANALYSIS**
























HCM 2010 Signalized Intersection Summary  
 18: Olive Ave & Victory Blvd

Existing Conditions  
 AM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	466	50	112	760	111	104	449	98	161	980	257
Future Volume (veh/h)	156	466	50	112	760	111	104	449	98	161	980	257
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	170	507	54	122	826	121	113	488	107	175	1065	279
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	862	92	277	874	391	238	1614	722	473	1681	752
Arrive On Green	0.09	0.27	0.27	0.07	0.25	0.25	0.05	0.46	0.46	0.07	0.48	0.48
Sat Flow, veh/h	1774	3229	343	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	170	277	284	122	826	121	113	488	107	175	1065	279
Grp Sat Flow(s),veh/h/ln	1774	1770	1802	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	9.8	19.1	19.2	7.1	32.1	8.7	4.7	12.2	5.5	7.2	31.6	15.7
Cycle Q Clear(g_c), s	9.8	19.1	19.2	7.1	32.1	8.7	4.7	12.2	5.5	7.2	31.6	15.7
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	472	481	277	874	391	238	1614	722	473	1681	752
V/C Ratio(X)	0.80	0.59	0.59	0.44	0.95	0.31	0.47	0.30	0.15	0.37	0.63	0.37
Avail Cap(c_a), veh/h	327	472	481	426	885	396	544	1614	722	745	1681	752
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.4	44.6	44.6	36.7	51.8	43.0	22.5	24.0	22.2	18.1	27.6	23.4
Incr Delay (d2), s/veh	3.7	1.9	1.9	0.4	18.3	0.4	0.5	0.5	0.4	0.2	1.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	9.6	9.8	3.5	17.9	3.9	2.3	6.1	2.5	3.5	15.8	7.2
LnGrp Delay(d),s/veh	42.1	46.5	46.5	37.1	70.1	43.4	23.1	24.5	22.7	18.3	29.4	24.8
LnGrp LOS	D	D	D	D	E	D	C	C	C	B	C	C
Approach Vol, veh/h		731			1069			708			1519	
Approach Delay, s/veh		45.5			63.3			24.0			27.3	
Approach LOS		D			E			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.9	72.5	16.1	40.6	13.6	69.8	13.2	43.4				
Change Period (Y+Rc), s	4.1	6.0	4.1	6.0	4.1	6.0	4.1	6.0				
Max Green Setting (Gmax), s	30.9	33.0	20.9	35.0	30.9	33.0	20.9	35.0				
Max Q Clear Time (g_c+1), s	6.7	33.6	11.8	34.1	9.2	14.2	9.1	21.2				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.5	0.2	12.1	0.1	7.9				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			39.6									
HCM 2010 LOS			D									





























HCM 2010 Signalized Intersection Summary  
 18: Olive Ave & Victory Blvd

Existing Conditions  
 PM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	1008	39	113	631	204	75	705	171	191	879	219
Future Volume (veh/h)	205	1008	39	113	631	204	75	705	171	191	879	219
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	223	1096	42	123	686	222	82	766	186	208	955	238
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	918	35	171	786	352	258	1581	707	361	1720	769
Arrive On Green	0.11	0.26	0.26	0.07	0.22	0.22	0.04	0.45	0.45	0.08	0.49	0.49
Sat Flow, veh/h	1774	3476	133	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	223	558	580	123	686	222	82	766	186	208	955	238
Grp Sat Flow(s),veh/h/ln	1774	1770	1839	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	13.2	37.0	37.0	7.4	26.2	17.8	3.5	21.4	10.3	8.6	26.6	12.7
Cycle Q Clear(g_c), s	13.2	37.0	37.0	7.4	26.2	17.8	3.5	21.4	10.3	8.6	26.6	12.7
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	267	467	486	171	786	352	258	1581	707	361	1720	769
V/C Ratio(X)	0.84	1.19	1.19	0.72	0.87	0.63	0.32	0.48	0.26	0.58	0.56	0.31
Avail Cap(c_a), veh/h	338	467	486	316	885	396	581	1581	707	615	1720	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	51.5	51.5	41.4	52.6	49.3	21.4	27.3	24.3	19.9	25.3	21.8
Incr Delay (d2), s/veh	11.1	106.7	106.2	2.1	8.8	2.7	0.3	1.1	0.9	0.5	1.3	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	31.9	33.1	3.7	13.7	8.0	1.7	10.7	4.7	4.2	13.3	5.8
LnGrp Delay(d),s/veh	49.1	158.2	157.7	43.6	61.4	52.0	21.7	28.4	25.2	20.5	26.6	22.8
LnGrp LOS	D	F	F	D	E	D	C	C	C	C	C	C
Approach Vol, veh/h		1361			1031			1034			1401	
Approach Delay, s/veh		140.1			57.2			27.3			25.1	
Approach LOS		F			E			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	74.0	19.4	37.1	14.9	68.5	13.5	43.0				
Change Period (Y+Rc), s	4.1	6.0	4.1	6.0	4.1	6.0	4.1	6.0				
Max Green Setting (Gmax), s	30.9	33.0	20.9	35.0	30.9	33.0	20.9	35.0				
Max Q Clear Time (g_c+1), s	5.5	28.6	15.2	28.2	10.6	23.4	9.4	39.0				
Green Ext Time (p_c), s	0.1	3.8	0.2	2.9	0.3	7.7	0.1	0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			64.9									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary  
 18: Olive Ave & Victory Blvd
























Existing + Project Conditions  
 AM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 		 	 	
Traffic Volume (veh/h)	175	466	50	112	760	111	104	454	98	161	987	285
Future Volume (veh/h)	175	466	50	112	760	111	104	454	98	161	987	285
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	190	507	54	122	826	121	113	493	107	175	1073	310
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	227	887	94	285	874	391	230	1584	709	465	1653	739
Arrive On Green	0.09	0.27	0.27	0.07	0.25	0.25	0.05	0.45	0.45	0.07	0.47	0.47
Sat Flow, veh/h	1774	3229	343	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	190	277	284	122	826	121	113	493	107	175	1073	310
Grp Sat Flow(s),veh/h/ln	1774	1770	1802	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	10.9	18.9	19.0	7.1	32.1	8.7	4.8	12.5	5.6	7.4	32.5	18.2
Cycle Q Clear(g_c), s	10.9	18.9	19.0	7.1	32.1	8.7	4.8	12.5	5.6	7.4	32.5	18.2
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	486	495	285	874	391	230	1584	709	465	1653	739
V/C Ratio(X)	0.84	0.57	0.57	0.43	0.95	0.31	0.49	0.31	0.15	0.38	0.65	0.42
Avail Cap(c_a), veh/h	327	486	495	434	885	396	535	1584	709	735	1653	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	43.7	43.7	36.5	51.8	43.0	23.4	24.8	22.9	18.7	28.5	24.7
Incr Delay (d2), s/veh	8.5	1.6	1.6	0.4	18.3	0.4	0.6	0.5	0.5	0.2	2.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	9.5	9.7	3.5	17.9	3.9	2.4	6.2	2.5	3.6	16.3	8.2
LnGrp Delay(d),s/veh	46.0	45.3	45.3	36.9	70.1	43.4	24.0	25.3	23.4	18.8	30.5	26.5
LnGrp LOS	D	D	D	D	E	D	C	C	C	B	C	C
Approach Vol, veh/h		751			1069			713			1558	
Approach Delay, s/veh		45.5			63.3			24.8			28.4	
Approach LOS		D			E			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.9	71.4	17.1	40.6	13.7	68.7	13.2	44.4				
Change Period (Y+Rc), s	4.1	6.0	4.1	6.0	4.1	6.0	4.1	6.0				
Max Green Setting (Gmax), s	30.9	33.0	20.9	35.0	30.9	33.0	20.9	35.0				
Max Q Clear Time (g_c+I1), s	6.8	34.5	12.9	34.1	9.4	14.5	9.1	21.0				
Green Ext Time (p_c), s	0.1	0.0	0.2	0.5	0.2	12.1	0.1	8.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			40.0									
HCM 2010 LOS			D									



























HCM 2010 Signalized Intersection Summary  
 18: Olive Ave & Victory Blvd

Existing + Project Conditions  
 PM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	239	1008	39	113	631	204	75	714	171	191	886	245
Future Volume (veh/h)	239	1008	39	113	631	204	75	714	171	191	886	245
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	260	1096	42	123	686	222	82	776	186	208	963	266
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	961	37	171	774	346	245	1530	685	351	1673	748
Arrive On Green	0.13	0.28	0.28	0.07	0.22	0.22	0.04	0.43	0.43	0.08	0.47	0.47
Sat Flow, veh/h	1774	3476	133	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	260	558	580	123	686	222	82	776	186	208	963	266
Grp Sat Flow(s),veh/h/ln	1774	1770	1839	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	15.4	38.7	38.7	7.4	26.3	17.8	3.6	22.3	10.6	8.8	27.6	14.9
Cycle Q Clear(g_c), s	15.4	38.7	38.7	7.4	26.3	17.8	3.6	22.3	10.6	8.8	27.6	14.9
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	293	489	509	171	774	346	245	1530	685	351	1673	748
V/C Ratio(X)	0.89	1.14	1.14	0.72	0.89	0.64	0.33	0.51	0.27	0.59	0.58	0.36
Avail Cap(c_a), veh/h	335	489	509	316	885	396	567	1530	685	602	1673	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	50.6	50.6	41.6	53.0	49.7	22.6	28.9	25.6	21.1	26.7	23.4
Incr Delay (d2), s/veh	20.3	85.2	84.7	2.1	9.8	2.8	0.3	1.2	1.0	0.6	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	30.5	31.6	3.7	13.9	8.1	1.8	11.1	4.8	4.3	13.8	6.8
LnGrp Delay(d),s/veh	57.7	135.8	135.3	43.8	62.8	52.5	22.9	30.1	26.5	21.7	28.2	24.7
LnGrp LOS	E	F	F	D	E	D	C	C	C	C	C	C
Approach Vol, veh/h		1398			1031			1044			1437	
Approach Delay, s/veh		121.1			58.3			28.9			26.6	
Approach LOS		F			E			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	72.2	21.7	36.6	15.2	66.5	13.6	44.7				
Change Period (Y+Rc), s	4.1	6.0	4.1	6.0	4.1	6.0	4.1	6.0				
Max Green Setting (Gmax), s	30.9	33.0	20.9	35.0	30.9	33.0	20.9	35.0				
Max Q Clear Time (g_c+1), s	5.6	29.6	17.4	28.3	10.8	24.3	9.4	40.7				
Green Ext Time (p_c), s	0.1	3.0	0.1	2.3	0.3	7.1	0.1	0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				60.7								
HCM 2010 LOS				E								

























HCM 2010 Signalized Intersection Summary  
18: Olive Ave & Victory Blvd

Existing + Project Conditions + Mitigation  
AM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	466	50	112	760	111	104	454	98	161	987	285
Future Volume (veh/h)	175	466	50	112	760	111	104	454	98	161	987	285
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	190	507	54	122	826	121	113	493	107	175	1073	310
Adj No. of Lanes	2	2	1	2	2	1	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	929	416	473	874	391	246	1810	810	927	1794	803
Arrive On Green	0.06	0.26	0.26	0.04	0.25	0.25	0.05	0.51	0.51	0.04	0.51	0.51
Sat Flow, veh/h	3442	3539	1583	3442	3539	1583	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	190	507	54	122	826	121	113	493	107	175	1073	310
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1583	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	5.7	17.3	3.6	3.7	32.1	8.7	4.3	11.1	5.0	3.4	30.0	16.8
Cycle Q Clear(g_c), s	5.7	17.3	3.6	3.7	32.1	8.7	4.3	11.1	5.0	3.4	30.0	16.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	929	416	473	874	391	246	1810	810	927	1794	803
V/C Ratio(X)	0.60	0.55	0.13	0.26	0.95	0.31	0.46	0.27	0.13	0.19	0.60	0.39
Avail Cap(c_a), veh/h	637	929	416	845	885	396	557	1810	810	1546	1794	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	44.4	39.4	37.7	51.8	43.0	19.5	19.4	17.9	15.5	24.4	21.2
Incr Delay (d2), s/veh	0.7	0.7	0.1	0.1	18.3	0.4	0.5	0.4	0.3	0.0	1.5	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	8.5	1.6	1.7	17.9	3.9	2.1	5.5	2.2	1.6	15.0	7.6
LnGrp Delay(d),s/veh	40.7	45.1	39.6	37.8	70.1	43.4	20.0	19.8	18.3	15.6	25.9	22.6
LnGrp LOS	D	D	D	D	E	D	C	B	B	B	C	C
Approach Vol, veh/h		751			1069			713			1558	
Approach Delay, s/veh		43.6			63.4			19.6			24.1	
Approach LOS		D			E			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.4	77.0	12.1	40.6	9.8	77.6	9.9	42.7				
Change Period (Y+Rc), s	4.1	6.0	4.1	6.0	4.1	6.0	4.1	6.0				
Max Green Setting (Gmax), s	30.9	33.0	20.9	35.0	30.9	33.0	20.9	35.0				
Max Q Clear Time (g_c+I1), s	6.3	32.0	7.7	34.1	5.4	13.1	5.7	19.3				
Green Ext Time (p_c), s	0.1	0.9	0.3	0.5	0.3	12.8	0.2	8.7				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				37.2								
HCM 2010 LOS				D								





























HCM 2010 Signalized Intersection Summary  
 18: Olive Ave & Victory Blvd

Existing + Project Conditions + Mitigation  
 PM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	239	1008	39	113	631	204	75	714	171	191	886	245
Future Volume (veh/h)	239	1008	39	113	631	204	75	714	171	191	886	245
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	260	1096	42	123	686	222	82	776	186	208	963	266
Adj No. of Lanes	2	2	1	2	2	1	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	405	918	411	248	810	362	267	1800	805	678	1835	821
Arrive On Green	0.07	0.26	0.26	0.04	0.23	0.23	0.04	0.51	0.51	0.05	0.52	0.52
Sat Flow, veh/h	3442	3539	1583	3442	3539	1583	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	260	1096	42	123	686	222	82	776	186	208	963	266
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1583	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	7.8	36.3	2.8	3.8	26.0	17.6	3.1	19.3	9.2	4.0	25.2	13.6
Cycle Q Clear(g_c), s	7.8	36.3	2.8	3.8	26.0	17.6	3.1	19.3	9.2	4.0	25.2	13.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	405	918	411	248	810	362	267	1800	805	678	1835	821
V/C Ratio(X)	0.64	1.19	0.10	0.50	0.85	0.61	0.31	0.43	0.23	0.31	0.52	0.32
Avail Cap(c_a), veh/h	668	918	411	617	885	396	596	1800	805	1280	1835	821
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	51.8	39.4	42.3	51.6	48.4	17.7	21.7	19.2	16.4	22.3	19.5
Incr Delay (d2), s/veh	0.6	97.8	0.1	0.6	7.2	2.4	0.2	0.8	0.7	0.1	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	30.2	1.2	1.8	13.5	7.9	1.5	9.6	4.2	1.9	12.6	6.2
LnGrp Delay(d),s/veh	39.6	149.6	39.5	42.8	58.9	50.8	18.0	22.4	19.8	16.5	23.4	20.5
LnGrp LOS	D	F	D	D	E	D	B	C	B	B	C	C
Approach Vol, veh/h		1398			1031			1044			1437	
Approach Delay, s/veh		125.8			55.2			21.6			21.9	
Approach LOS		F			E			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.1	78.6	14.3	38.0	10.5	77.2	10.0	42.3				
Change Period (Y+Rc), s	4.1	6.0	4.1	6.0	4.1	6.0	4.1	6.0				
Max Green Setting (Gmax), s	30.9	33.0	20.9	35.0	30.9	33.0	20.9	35.0				
Max Q Clear Time (g_c+1), s	5.1	27.2	9.8	28.0	6.0	21.3	5.8	38.3				
Green Ext Time (p_c), s	0.1	4.9	0.4	4.1	0.4	9.1	0.2	0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			58.4									
HCM 2010 LOS			E									





























HCM 2010 Signalized Intersection Summary  
 18: Olive Ave & Victory Blvd

Future Conditions (2022)  
 AM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 		 	 	
Traffic Volume (veh/h)	162	565	51	141	866	114	107	542	122	196	1097	277
Future Volume (veh/h)	162	565	51	141	866	114	107	542	122	196	1097	277
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	176	614	55	153	941	124	116	589	133	213	1192	301
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	854	76	259	885	396	210	1548	693	430	1653	739
Arrive On Green	0.09	0.26	0.26	0.08	0.25	0.25	0.05	0.44	0.44	0.08	0.47	0.47
Sat Flow, veh/h	1774	3287	294	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	176	330	339	153	941	124	116	589	133	213	1192	301
Grp Sat Flow(s),veh/h/ln	1774	1770	1811	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	10.2	23.8	23.9	8.9	35.0	8.9	5.0	15.7	7.2	8.9	37.9	17.5
Cycle Q Clear(g_c), s	10.2	23.8	23.9	8.9	35.0	8.9	5.0	15.7	7.2	8.9	37.9	17.5
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	460	470	259	885	396	210	1548	693	430	1653	739
V/C Ratio(X)	0.85	0.72	0.72	0.59	1.06	0.31	0.55	0.38	0.19	0.50	0.72	0.41
Avail Cap(c_a), veh/h	316	460	470	385	885	396	512	1548	693	680	1653	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.4	47.2	47.2	36.8	52.5	42.7	25.7	26.6	24.2	19.0	30.0	24.6
Incr Delay (d2), s/veh	7.9	5.4	5.3	0.8	48.6	0.4	0.8	0.7	0.6	0.3	2.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	12.3	12.6	4.4	23.1	3.9	2.5	7.8	3.3	4.4	19.2	8.0
LnGrp Delay(d),s/veh	46.3	52.5	52.5	37.6	101.1	43.2	26.6	27.3	24.8	19.4	32.7	26.2
LnGrp LOS	D	D	D	D	F	D	C	C	C	B	C	C
Approach Vol, veh/h		845			1218			838			1706	
Approach Delay, s/veh		51.2			87.2			26.8			29.9	
Approach LOS		D			F			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.2	71.4	16.4	41.0	15.3	67.2	15.1	42.4				
Change Period (Y+Rc), s	4.1	6.0	4.1	6.0	4.1	6.0	4.1	6.0				
Max Green Setting (Gmax), s	30.9	33.0	20.9	35.0	30.9	33.0	20.9	35.0				
Max Q Clear Time (g_c+I1), s	7.0	39.9	12.2	37.0	10.9	17.7	10.9	25.9				
Green Ext Time (p_c), s	0.1	0.0	0.2	0.0	0.3	11.6	0.1	6.6				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			48.4									
HCM 2010 LOS			D									

























HCM 2010 Signalized Intersection Summary  
 18: Olive Ave & Victory Blvd

Future Conditions (2022)  
 PM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 		 	 	
Traffic Volume (veh/h)	215	1192	40	146	735	210	77	846	213	229	1020	228
Future Volume (veh/h)	215	1192	40	146	735	210	77	846	213	229	1020	228
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	234	1296	43	159	799	228	84	920	232	249	1109	248
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	260	947	31	197	853	382	210	1443	645	318	1636	732
Arrive On Green	0.11	0.27	0.27	0.08	0.24	0.24	0.04	0.41	0.41	0.10	0.46	0.46
Sat Flow, veh/h	1774	3496	116	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	234	656	683	159	799	228	84	920	232	249	1109	248
Grp Sat Flow(s),veh/h/ln	1774	1770	1842	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	13.5	37.9	37.9	9.3	31.0	17.9	3.8	29.1	14.2	11.0	34.4	14.0
Cycle Q Clear(g_c), s	13.5	37.9	37.9	9.3	31.0	17.9	3.8	29.1	14.2	11.0	34.4	14.0
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	260	479	499	197	853	382	210	1443	645	318	1636	732
V/C Ratio(X)	0.90	1.37	1.37	0.81	0.94	0.60	0.40	0.64	0.36	0.78	0.68	0.34
Avail Cap(c_a), veh/h	327	479	499	316	885	396	530	1443	645	540	1636	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	51.0	51.0	39.3	52.1	47.1	25.6	33.2	28.8	26.0	29.5	24.0
Incr Delay (d2), s/veh	20.3	178.2	178.7	3.2	16.7	2.3	0.5	2.2	1.6	1.6	2.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	42.2	44.0	4.7	17.2	8.1	1.9	14.6	6.5	5.5	17.3	6.3
LnGrp Delay(d),s/veh	57.1	229.3	229.7	42.5	68.7	49.4	26.0	35.4	30.3	27.6	31.8	25.3
LnGrp LOS	E	F	F	D	E	D	C	D	C	C	C	C
Approach Vol, veh/h		1573			1186			1236			1606	
Approach Delay, s/veh		203.8			61.5			33.8			30.1	
Approach LOS		F			E			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.8	70.7	19.7	39.7	17.5	63.1	15.6	43.9				
Change Period (Y+Rc), s	4.1	6.0	4.1	6.0	4.1	6.0	4.1	6.0				
Max Green Setting (Gmax), s	30.9	33.0	20.9	35.0	30.9	33.0	20.9	35.0				
Max Q Clear Time (g_c+I1), s	5.8	36.4	15.5	33.0	13.0	31.1	11.3	39.9				
Green Ext Time (p_c), s	0.1	0.0	0.2	0.8	0.3	1.8	0.1	0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			86.4									
HCM 2010 LOS			F									
























HCM 2010 Signalized Intersection Summary  
 18: Olive Ave & Victory Blvd

Future + Project Conditions (2022) + Mitigation  
 AM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	565	51	141	866	114	107	547	122	196	1104	305
Future Volume (veh/h)	181	565	51	141	866	114	107	547	122	196	1104	305
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	197	614	55	153	941	124	116	595	133	213	1200	332
Adj No. of Lanes	2	2	1	2	2	1	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	303	920	412	424	885	396	217	1772	793	825	1773	793
Arrive On Green	0.06	0.26	0.26	0.05	0.25	0.25	0.05	0.50	0.50	0.05	0.50	0.50
Sat Flow, veh/h	3442	3539	1583	3442	3539	1583	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	197	614	55	153	941	124	116	595	133	213	1200	332
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1583	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	5.9	21.7	3.7	4.6	35.0	8.9	4.4	14.1	6.4	4.2	35.8	18.5
Cycle Q Clear(g_c), s	5.9	21.7	3.7	4.6	35.0	8.9	4.4	14.1	6.4	4.2	35.8	18.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	303	920	412	424	885	396	217	1772	793	825	1773	793
V/C Ratio(X)	0.65	0.67	0.13	0.36	1.06	0.31	0.54	0.34	0.17	0.26	0.68	0.42
Avail Cap(c_a), veh/h	617	920	412	772	885	396	526	1772	793	1424	1773	793
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	46.4	39.7	37.7	52.5	42.7	22.3	21.0	19.1	16.1	26.4	22.1
Incr Delay (d2), s/veh	0.9	1.9	0.1	0.2	48.6	0.4	0.8	0.5	0.5	0.1	2.1	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	10.9	1.6	2.2	23.1	3.9	2.2	7.0	2.9	2.0	18.0	8.5
LnGrp Delay(d),s/veh	40.8	48.2	39.9	37.9	101.1	43.2	23.1	21.5	19.5	16.2	28.5	23.7
LnGrp LOS	D	D	D	D	F	D	C	C	B	B	C	C
Approach Vol, veh/h		866			1218			844			1745	
Approach Delay, s/veh		46.0			87.3			21.4			26.1	
Approach LOS		D			F			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	76.1	12.3	41.0	10.7	76.1	10.9	42.4				
Change Period (Y+Rc), s	4.1	6.0	4.1	6.0	4.1	6.0	4.1	6.0				
Max Green Setting (Gmax), s	30.9	33.0	20.9	35.0	30.9	33.0	20.9	35.0				
Max Q Clear Time (g_c+1), s	6.4	37.8	7.9	37.0	6.2	16.1	6.6	23.7				
Green Ext Time (p_c), s	0.1	0.0	0.3	0.0	0.4	12.6	0.2	7.8				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			44.9									
HCM 2010 LOS			D									

























HCM 2010 Signalized Intersection Summary  
 18: Olive Ave & Victory Blvd

Future + Project Conditions (2022)  
 AM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	565	51	141	866	114	107	547	122	196	1104	305
Future Volume (veh/h)	181	565	51	141	866	114	107	547	122	196	1104	305
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	197	614	55	153	941	124	116	595	133	213	1200	332
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	881	79	267	885	396	203	1514	677	422	1621	725
Arrive On Green	0.10	0.27	0.27	0.08	0.25	0.25	0.05	0.43	0.43	0.08	0.46	0.46
Sat Flow, veh/h	1774	3287	294	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	197	330	339	153	941	124	116	595	133	213	1200	332
Grp Sat Flow(s),veh/h/ln	1774	1770	1811	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	11.4	23.5	23.6	8.9	35.0	8.9	5.1	16.2	7.3	9.1	38.9	20.1
Cycle Q Clear(g_c), s	11.4	23.5	23.6	8.9	35.0	8.9	5.1	16.2	7.3	9.1	38.9	20.1
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	475	486	267	885	396	203	1514	677	422	1621	725
V/C Ratio(X)	0.88	0.70	0.70	0.57	1.06	0.31	0.57	0.39	0.20	0.51	0.74	0.46
Avail Cap(c_a), veh/h	316	475	486	393	885	396	504	1514	677	669	1621	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.8	46.1	46.1	36.5	52.5	42.7	26.9	27.5	25.0	19.7	31.1	26.0
Incr Delay (d2), s/veh	14.7	4.4	4.4	0.7	48.6	0.4	0.9	0.8	0.6	0.3	3.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	12.0	12.4	4.3	23.1	3.9	2.5	8.1	3.3	4.5	19.7	9.2
LnGrp Delay(d),s/veh	52.5	50.5	50.5	37.2	101.1	43.2	27.8	28.3	25.7	20.1	34.2	28.1
LnGrp LOS	D	D	D	D	F	D	C	C	C	C	C	C
Approach Vol, veh/h		866			1218			844			1745	
Approach Delay, s/veh		50.9			87.2			27.8			31.3	
Approach LOS		D			F			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.3	70.1	17.6	41.0	15.5	65.9	15.1	43.5				
Change Period (Y+Rc), s	4.1	6.0	4.1	6.0	4.1	6.0	4.1	6.0				
Max Green Setting (Gmax), s	30.9	33.0	20.9	35.0	30.9	33.0	20.9	35.0				
Max Q Clear Time (g_c+1), s	7.1	40.9	13.4	37.0	11.1	18.2	10.9	25.6				
Green Ext Time (p_c), s	0.1	0.0	0.2	0.0	0.3	11.4	0.1	6.7				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			48.9									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary  
18: Olive Ave & Victory Blvd




























Future + Project Conditions (2022) + Mitigation  
PM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	249	1192	40	146	735	210	77	855	213	229	1027	254
Future Volume (veh/h)	249	1192	40	146	735	210	77	855	213	229	1027	254
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	271	1296	43	159	799	228	84	929	232	249	1116	276
Adj No. of Lanes	2	2	1	2	2	1	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	381	941	421	275	854	382	223	1722	770	570	1779	796
Arrive On Green	0.07	0.27	0.27	0.05	0.24	0.24	0.04	0.49	0.49	0.05	0.50	0.50
Sat Flow, veh/h	3442	3539	1583	3442	3539	1583	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	271	1296	43	159	799	228	84	929	232	249	1116	276
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1583	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	8.1	37.2	2.9	4.8	31.0	17.9	3.3	25.6	12.3	5.0	32.1	14.7
Cycle Q Clear(g_c), s	8.1	37.2	2.9	4.8	31.0	17.9	3.3	25.6	12.3	5.0	32.1	14.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	381	941	421	275	854	382	223	1722	770	570	1779	796
V/C Ratio(X)	0.71	1.38	0.10	0.58	0.94	0.60	0.38	0.54	0.30	0.44	0.63	0.35
Avail Cap(c_a), veh/h	638	941	421	617	885	396	549	1722	770	1146	1779	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	51.4	38.8	40.9	52.1	47.1	20.7	25.0	21.6	19.1	25.3	21.0
Incr Delay (d2), s/veh	0.9	176.6	0.1	0.7	16.6	2.3	0.4	1.2	1.0	0.2	1.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	41.2	1.3	2.3	17.2	8.0	1.6	12.8	5.6	2.4	16.1	6.7
LnGrp Delay(d),s/veh	39.8	228.0	38.9	41.6	68.6	49.4	21.1	26.2	22.6	19.3	27.0	22.2
LnGrp LOS	D	F	D	D	E	D	C	C	C	B	C	C
Approach Vol, veh/h		1610			1186			1245			1641	
Approach Delay, s/veh		191.3			61.3			25.2			25.0	
Approach LOS		F			E			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	76.4	14.6	39.8	11.6	74.1	11.1	43.2				
Change Period (Y+Rc), s	4.1	6.0	4.1	6.0	4.1	6.0	4.1	6.0				
Max Green Setting (Gmax), s	30.9	33.0	20.9	35.0	30.9	33.0	20.9	35.0				
Max Q Clear Time (g_c+1), s	5.3	34.1	10.1	33.0	7.0	27.6	6.8	39.2				
Green Ext Time (p_c), s	0.1	0.0	0.4	0.8	0.4	4.9	0.2	0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			79.7									
HCM 2010 LOS			E									



HCM 2010 Signalized Intersection Summary  
 18: Olive Ave & Victory Blvd

Future + Project Conditions (2022)  
 PM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	249	1192	40	146	735	210	77	855	213	229	1027	254
Future Volume (veh/h)	249	1192	40	146	735	210	77	855	213	229	1027	254
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	271	1296	43	159	799	228	84	929	232	249	1116	276
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	294	1013	34	197	853	382	197	1365	611	307	1566	700
Arrive On Green	0.13	0.29	0.29	0.08	0.24	0.24	0.04	0.39	0.39	0.10	0.44	0.44
Sat Flow, veh/h	1774	3496	116	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	271	656	683	159	799	228	84	929	232	249	1116	276
Grp Sat Flow(s),veh/h/ln	1774	1770	1842	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	16.2	40.6	40.6	9.3	31.0	17.9	4.0	30.6	14.8	11.5	36.0	16.5
Cycle Q Clear(g_c), s	16.2	40.6	40.6	9.3	31.0	17.9	4.0	30.6	14.8	11.5	36.0	16.5
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	294	513	534	197	853	382	197	1365	611	307	1566	700
V/C Ratio(X)	0.92	1.28	1.28	0.81	0.94	0.60	0.43	0.68	0.38	0.81	0.71	0.39
Avail Cap(c_a), veh/h	327	513	534	316	885	396	515	1365	611	523	1566	700
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.3	49.7	49.7	39.3	52.1	47.1	27.7	35.8	31.0	27.9	31.8	26.4
Incr Delay (d2), s/veh	27.8	139.7	140.0	3.2	16.7	2.3	0.5	2.8	1.8	2.0	2.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	39.7	41.4	4.7	17.2	8.1	2.0	15.5	6.7	5.7	18.1	7.5
LnGrp Delay(d),s/veh	66.1	189.4	189.7	42.5	68.7	49.4	28.2	38.6	32.8	29.9	34.6	28.0
LnGrp LOS	E	F	F	D	E	D	C	D	C	C	C	C
Approach Vol, veh/h		1610			1186			1245			1641	
Approach Delay, s/veh		168.7			61.5			36.8			32.8	
Approach LOS		F			E			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.9	67.9	22.4	39.7	17.9	60.0	15.6	46.6				
Change Period (Y+Rc), s	4.1	6.0	4.1	6.0	4.1	6.0	4.1	6.0				
Max Green Setting (Gmax), s	30.9	33.0	20.9	35.0	30.9	33.0	20.9	35.0				
Max Q Clear Time (g_c+1), s	6.0	38.0	18.2	33.0	13.5	32.6	11.3	42.6				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.8	0.3	0.4	0.1	0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			78.2									
HCM 2010 LOS			E									

## **APPENDIX C**

### **Queuing Analysis Sheets**

**EXISTING BASE**

Queues

8: I-5 NB Off-Ramp & E Burbank Blvd/W Burbank Blvd

Existing Conditions

AM Peak Hour



Lane Group	EBT	WBT	NBR
Lane Group Flow (vph)	1102	1223	365
v/c Ratio	0.35	0.35	0.55
Control Delay	5.4	0.3	14.1
Queue Delay	0.0	0.0	0.0
Total Delay	5.4	0.3	14.1
Queue Length 50th (ft)	45	0	32
Queue Length 95th (ft)	78	0	65
Internal Link Dist (ft)	615	178	
Turn Bay Length (ft)			
Base Capacity (vph)	5046	3539	1756
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.22	0.35	0.21

Intersection Summary

Queues  
9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Existing Conditions  
AM Peak Hour



Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	2312	70	1855	252	12	171	177	309
v/c Ratio	0.94	0.60	0.62	0.90	0.04	0.56	0.56	0.92
Control Delay	56.0	115.0	29.7	119.7	0.3	85.7	85.5	99.9
Queue Delay	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0
Total Delay	56.0	115.0	33.6	119.7	0.3	85.7	85.5	99.9
Queue Length 50th (ft)	1113	96	626	345	0	228	235	351
Queue Length 95th (ft)	#1281	157	668	#505	0	326	335	#536
Internal Link Dist (ft)	111		615				1080	
Turn Bay Length (ft)		150			200	720		720
Base Capacity (vph)	2472	260	2991	295	313	320	331	349
Starvation Cap Reductn	0	0	1032	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.27	0.95	0.85	0.04	0.53	0.53	0.89

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Queues  
22: I-5 SB Ramps & Front St

Existing Conditions  
AM Peak Hour



Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	369	214	622	4	32
v/c Ratio	0.41	0.24	0.58	0.01	0.02
Control Delay	11.8	6.5	3.2	5.2	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	11.8	6.5	3.2	5.2	5.2
Queue Length 50th (ft)	25	20	0	0	1
Queue Length 95th (ft)	59	52	36	3	5
Internal Link Dist (ft)	486	384			429
Turn Bay Length (ft)	280			140	
Base Capacity (vph)	2530	1852	1577	1155	3518
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.15	0.12	0.39	0.00	0.01

Intersection Summary

Queues

8: I-5 NB Off-Ramp & E Burbank Blvd/W Burbank Blvd

Existing Conditions

PM Peak Hour



Lane Group	EBT	WBT	NBR
Lane Group Flow (vph)	1786	1247	592
v/c Ratio	0.61	0.35	0.73
Control Delay	11.4	0.3	28.9
Queue Delay	0.0	0.0	0.0
Total Delay	11.4	0.3	28.9
Queue Length 50th (ft)	171	0	132
Queue Length 95th (ft)	281	0	213
Internal Link Dist (ft)	615	178	
Turn Bay Length (ft)			
Base Capacity (vph)	3675	3539	1222
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.49	0.35	0.48

Intersection Summary

Queues  
9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Existing Conditions  
PM Peak Hour



Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	2514	21	1752	305	45	283	284	359
v/c Ratio	0.95	0.25	0.60	1.03	0.14	0.88	0.88	1.03
Control Delay	55.9	103.5	30.7	142.4	8.5	109.8	108.9	121.5
Queue Delay	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0
Total Delay	55.9	103.5	35.6	142.4	8.5	109.8	108.9	121.5
Queue Length 50th (ft)	~1271	29	573	~451	0	408	408	~458
Queue Length 95th (ft)	#1383	65	614	#671	27	#595	#594	#689
Internal Link Dist (ft)	111		615				1080	
Turn Bay Length (ft)		150			200	720		720
Base Capacity (vph)	2636	260	2898	295	313	320	323	349
Starvation Cap Reductn	0	0	1066	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.95	0.08	0.96	1.03	0.14	0.88	0.88	1.03

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.



Queues  
22: I-5 SB Ramps & Front St

Existing Conditions  
PM Peak Hour



Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	612	247	647	12	64
v/c Ratio	0.57	0.30	0.61	0.02	0.04
Control Delay	13.4	8.5	3.7	7.0	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.4	8.5	3.7	7.0	6.7
Queue Length 50th (ft)	47	28	0	1	3
Queue Length 95th (ft)	111	79	43	8	12
Internal Link Dist (ft)	549	464			349
Turn Bay Length (ft)	280			140	
Base Capacity (vph)	2287	1780	1541	1079	3381
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.27	0.14	0.42	0.01	0.02

Intersection Summary

**EXISTING PLUS PROJECT**

Queues

Existing + Project Conditions

8: I-5 NB Off-Ramp & E Burbank Blvd/W Burbank Blvd

AM Peak Hour



Lane Group	EBT	WBT	NBR
Lane Group Flow (vph)	1154	1238	365
v/c Ratio	0.37	0.35	0.55
Control Delay	5.6	0.3	14.9
Queue Delay	0.0	0.0	0.0
Total Delay	5.6	0.3	14.9
Queue Length 50th (ft)	50	0	35
Queue Length 95th (ft)	86	0	69
Internal Link Dist (ft)	615	178	
Turn Bay Length (ft)			
Base Capacity (vph)	5027	3539	1740
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.23	0.35	0.21

Intersection Summary

Queues  
9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Existing + Project Conditions  
AM Peak Hour



Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	2380	103	1855	349	90	182	187	309
v/c Ratio	1.02	0.70	0.63	1.18	0.29	0.60	0.59	0.92
Control Delay	73.7	116.9	30.7	181.0	31.6	87.4	86.8	99.9
Queue Delay	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0
Total Delay	73.7	116.9	36.6	181.0	31.6	87.4	86.8	99.9
Queue Length 50th (ft)	~1271	142	626	~577	37	244	251	351
Queue Length 95th (ft)	#1413	212	668	#803	102	347	352	#536
Internal Link Dist (ft)	111		615				1080	
Turn Bay Length (ft)		150			200	720		720
Base Capacity (vph)	2342	260	2945	295	313	320	332	349
Starvation Cap Reductn	0	0	1032	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.40	0.97	1.18	0.29	0.57	0.56	0.89

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Queues

Existing + Project Conditions

22: I-5 SB Ramps & Front St

AM Peak Hour



Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	369	233	622	18	43
v/c Ratio	0.41	0.27	0.58	0.03	0.03
Control Delay	11.8	6.7	3.2	5.5	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	11.8	6.7	3.2	5.5	5.3
Queue Length 50th (ft)	25	22	0	2	2
Queue Length 95th (ft)	59	56	36	8	7
Internal Link Dist (ft)	486	384			429
Turn Bay Length (ft)	280			140	
Base Capacity (vph)	2525	1852	1577	1135	3518
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.15	0.13	0.39	0.02	0.01

Intersection Summary

Queues

Existing + Project Conditions

8: I-5 NB Off-Ramp & E Burbank Blvd/W Burbank Blvd

PM Peak Hour



Lane Group	EBT	WBT	NBR
Lane Group Flow (vph)	1835	1274	592
v/c Ratio	0.62	0.36	0.73
Control Delay	11.6	0.3	29.5
Queue Delay	0.0	0.0	0.0
Total Delay	11.6	0.3	29.5
Queue Length 50th (ft)	183	0	139
Queue Length 95th (ft)	293	0	213
Internal Link Dist (ft)	615	178	
Turn Bay Length (ft)			
Base Capacity (vph)	3604	3539	1197
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.51	0.36	0.49

Intersection Summary

Queues  
9: N Front St/I-5 SB Off-Ramp & E Burbank Blvd

Existing + Project Conditions  
PM Peak Hour



Lane Group	EBT	WBL	WBT	NBL	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	2631	79	1752	396	117	299	305	359
v/c Ratio	1.10	0.63	0.60	1.34	0.37	0.93	0.94	1.03
Control Delay	102.5	116.1	30.7	235.0	41.7	117.8	118.8	121.5
Queue Delay	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0
Total Delay	102.5	116.1	35.6	235.0	41.7	117.8	118.8	121.5
Queue Length 50th (ft)	~1498	109	573	~711	71	435	445	~458
Queue Length 95th (ft)	#1620	173	614	#949	146	#647	#661	#689
Internal Link Dist (ft)	111		615				1080	
Turn Bay Length (ft)		150			200	720		720
Base Capacity (vph)	2384	260	2898	295	313	320	324	349
Starvation Cap Reductn	0	0	1066	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.10	0.30	0.96	1.34	0.37	0.93	0.94	1.03

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Queues

Existing + Project Conditions

22: I-5 SB Ramps & Front St

PM Peak Hour



Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	612	278	647	25	75
v/c Ratio	0.57	0.33	0.61	0.05	0.05
Control Delay	13.5	8.8	3.7	7.2	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.5	8.8	3.7	7.2	6.7
Queue Length 50th (ft)	47	33	0	3	4
Queue Length 95th (ft)	111	89	43	14	14
Internal Link Dist (ft)	549	464			349
Turn Bay Length (ft)	280			140	
Base Capacity (vph)	2272	1780	1541	1048	3381
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.27	0.16	0.42	0.02	0.02

Intersection Summary



**FUTURE BASE**

## Queues

Future Conditions (2022)

## 8: I-5 NB Off-Ramp &amp; E Burbank Blvd/W Burbank Blvd

AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	120	1245	1377	213	535	547	412
v/c Ratio	0.32	0.48	0.48	0.32	0.85	0.87	0.37
Control Delay	36.2	13.4	20.1	10.6	38.9	40.5	15.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	13.4	20.1	10.6	38.9	40.5	15.4
Queue Length 50th (ft)	29	140	132	34	262	270	64
Queue Length 95th (ft)	55	174	166	86	#473	#488	109
Internal Link Dist (ft)		414	622			1119	
Turn Bay Length (ft)				50			
Base Capacity (vph)	690	3215	2862	671	637	639	1117
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.39	0.48	0.32	0.84	0.86	0.37

## Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Queues

Future Conditions (2022)

9: N Front St/I-5 SB Off-Ramp & I-5 SB On-Ramp & E Burbank Blvd

AM Peak Hour



Lane Group	EBT	WBL2	WBL	WBT	NBL	NBR	SBL2	SBL	SBT	SBR
Lane Group Flow (vph)	2454	325	320	1997	263	12	152	152	241	227
v/c Ratio	1.04dr	1.46	1.30	0.66	0.92	0.05	0.54	0.54	0.83	0.76
Control Delay	63.5	284.0	223.0	29.9	121.5	74.3	86.7	86.7	98.2	76.9
Queue Delay	0.0	0.0	0.0	47.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.5	284.0	223.0	77.7	121.5	74.3	86.7	86.7	98.2	76.9
Queue Length 50th (ft)	968	~709	~591	686	363	14	203	203	308	236
Queue Length 95th (ft)	#1061	#968	#826	749	#540	38	290	290	425	352
Internal Link Dist (ft)	592			414					1085	
Turn Bay Length (ft)						200				
Base Capacity (vph)	2647	223	247	3045	295	263	320	320	329	334
Starvation Cap Reductn	0	0	0	1250	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.93	1.46	1.30	1.11	0.89	0.05	0.47	0.47	0.73	0.68

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

## Queues

Future Conditions (2022)

## 22: I-5 SB Ramps &amp; Front St

AM Peak Hour



Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	401	224	676	4	55
v/c Ratio	0.43	0.26	0.61	0.01	0.03
Control Delay	12.3	6.8	3.5	5.5	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	12.3	6.8	3.5	5.5	5.4
Queue Length 50th (ft)	28	21	0	0	2
Queue Length 95th (ft)	69	57	37	3	8
Internal Link Dist (ft)	739	762			632
Turn Bay Length (ft)	280			140	
Base Capacity (vph)	2475	1824	1564	1129	3465
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	0.12	0.43	0.00	0.02

## Intersection Summary

Queues

Future Conditions (2022)

8: I-5 NB Off-Ramp & E Burbank Blvd/W Burbank Blvd

PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	478	2000	1372	405	419	413	650
v/c Ratio	0.80	0.69	0.52	0.59	0.77	0.76	0.68
Control Delay	46.0	15.2	24.0	14.8	37.8	36.8	26.5
Queue Delay	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Total Delay	46.0	15.9	24.0	14.8	37.8	36.8	26.5
Queue Length 50th (ft)	134	280	153	82	217	213	154
Queue Length 95th (ft)	#201	335	183	178	#342	329	220
Internal Link Dist (ft)		414	622			1119	
Turn Bay Length (ft)				50			
Base Capacity (vph)	632	2944	2621	691	584	586	1019
Starvation Cap Reductn	0	531	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.83	0.52	0.59	0.72	0.70	0.64

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Queues

Future Conditions (2022)

9: N Front St/I-5 SB Off-Ramp & I-5 SB On-Ramp & E Burbank Blvd

PM Peak Hour



Lane Group	EBT	WBL2	WBL	WBT	NBL	NBR	SBL2	SBL	SBT	SBR
Lane Group Flow (vph)	2677	157	158	1862	335	46	312	313	225	223
v/c Ratio	1.00	0.84	0.76	0.64	1.14	0.17	0.97	0.98	0.71	0.67
Control Delay	76.0	123.7	111.8	31.9	167.1	77.2	126.1	126.8	83.0	68.1
Queue Delay	0.0	0.0	0.0	48.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.0	123.7	111.8	80.0	167.1	77.2	126.1	126.8	83.0	68.1
Queue Length 50th (ft)	~1128	250	225	630	-537	56	458	461	275	228
Queue Length 95th (ft)	#1218	355	320	672	#763	103	#689	#692	393	345
Internal Link Dist (ft)	592			414					1085	
Turn Bay Length (ft)						200				
Base Capacity (vph)	2672	223	247	2898	295	263	320	320	318	334
Starvation Cap Reductn	0	0	0	1284	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.70	0.64	1.15	1.14	0.17	0.97	0.98	0.71	0.67

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Queues

Future Conditions (2022)

22: I-5 SB Ramps & Front St

PM Peak Hour



Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	647	275	705	12	71
v/c Ratio	0.58	0.33	0.64	0.02	0.04
Control Delay	14.1	9.1	4.0	7.3	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.1	9.1	4.0	7.3	7.1
Queue Length 50th (ft)	50	33	0	1	3
Queue Length 95th (ft)	129	93	46	9	14
Internal Link Dist (ft)	585	394			356
Turn Bay Length (ft)	280			140	
Base Capacity (vph)	2192	1734	1522	1023	3295
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.30	0.16	0.46	0.01	0.02

Intersection Summary

## **FUTURE PLUS PROJECT**



Queues

Future + Project Conditions (2022)

8: I-5 NB Off-Ramp & E Burbank Blvd/W Burbank Blvd

AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	134	1266	1392	213	545	557	412
v/c Ratio	0.36	0.48	0.51	0.33	0.89	0.91	0.38
Control Delay	36.9	13.3	21.4	10.8	44.6	46.9	16.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.9	13.3	21.4	10.8	44.6	46.9	16.2
Queue Length 50th (ft)	33	143	134	34	271	280	65
Queue Length 95th (ft)	60	178	170	88	#490	#506	111
Internal Link Dist (ft)		414	622			1119	
Turn Bay Length (ft)				50			
Base Capacity (vph)	661	3083	2744	647	611	613	1072
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.41	0.51	0.33	0.89	0.91	0.38

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Queues

Future + Project Conditions (2022)

9: N Front St/I-5 SB Off-Ramp & I-5 SB On-Ramp & E Burbank Blvd

AM Peak Hour



Lane Group	EBT	WBL2	WBL	WBT	NBL	NBR	SBL2	SBL	SBT	SBR
Lane Group Flow (vph)	2521	341	341	1997	360	78	152	152	248	230
v/c Ratio	1.16dr	1.53	1.38	0.67	1.22	0.30	0.53	0.53	0.84	0.75
Control Delay	71.0	311.4	253.4	31.0	192.7	80.2	85.8	85.8	100.4	76.6
Queue Delay	0.0	0.0	0.0	47.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.0	311.4	253.4	78.7	192.7	80.2	85.8	85.8	100.4	76.6
Queue Length 50th (ft)	~1060	~761	~654	696	~608	96	201	201	322	240
Queue Length 95th (ft)	#1119	#1025	#892	749	#837	158	290	290	444	357
Internal Link Dist (ft)	592			414					1085	
Turn Bay Length (ft)						200				
Base Capacity (vph)	2586	223	247	3001	295	263	320	320	328	334
Starvation Cap Reductn	0	0	0	1238	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	1.53	1.38	1.13	1.22	0.30	0.47	0.47	0.76	0.69

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Queues

22: I-5 SB Ramps & Front St

Future + Project Conditions (2022)

AM Peak Hour



Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	401	251	676	30	67
v/c Ratio	0.44	0.29	0.61	0.06	0.04
Control Delay	12.3	7.0	3.5	5.8	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	12.3	7.0	3.5	5.8	5.4
Queue Length 50th (ft)	28	24	0	3	3
Queue Length 95th (ft)	69	64	37	12	10
Internal Link Dist (ft)	739	762			632
Turn Bay Length (ft)	280			140	
Base Capacity (vph)	2468	1824	1564	1099	3465
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	0.14	0.43	0.03	0.02

Intersection Summary

Queues

Future + Project Conditions (2022)

8: I-5 NB Off-Ramp & E Burbank Blvd/W Burbank Blvd

PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	491	2021	1399	405	438	431	650
v/c Ratio	0.82	0.70	0.54	0.59	0.81	0.79	0.68
Control Delay	47.4	15.5	24.2	15.2	40.0	38.8	26.4
Queue Delay	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Total Delay	47.4	16.2	24.2	15.2	40.0	38.8	26.4
Queue Length 50th (ft)	138	284	157	84	231	226	154
Queue Length 95th (ft)	#210	340	187	181	#385	#374	220
Internal Link Dist (ft)		414	622			1119	
Turn Bay Length (ft)				50			
Base Capacity (vph)	629	2930	2608	686	581	583	1015
Starvation Cap Reductn	0	527	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.84	0.54	0.59	0.75	0.74	0.64

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Queues

Future + Project Conditions (2022)

9: N Front St/I-5 SB Off-Ramp & I-5 SB On-Ramp & E Burbank Blvd

PM Peak Hour



Lane Group	EBT	WBL2	WBL	WBT	NBL	NBR	SBL2	SBL	SBT	SBR
Lane Group Flow (vph)	2794	188	191	1862	425	108	312	313	239	227
v/c Ratio	1.09	0.90	0.83	0.64	1.44	0.41	0.97	0.98	0.76	0.68
Control Delay	102.5	129.2	115.5	31.9	271.5	83.7	126.1	126.8	90.9	69.2
Queue Delay	0.0	0.0	0.0	48.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	102.5	129.2	115.5	80.0	271.5	83.7	126.1	126.8	90.9	69.2
Queue Length 50th (ft)	~1281	300	272	630	~794	136	458	461	311	233
Queue Length 95th (ft)	#1318	#469	#402	672	#1035	210	#689	#692	434	352
Internal Link Dist (ft)	592			414						1085
Turn Bay Length (ft)						200				
Base Capacity (vph)	2570	223	247	2898	295	263	320	320	313	334
Starvation Cap Reductn	0	0	0	1284	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.84	0.77	1.15	1.44	0.41	0.97	0.98	0.76	0.68

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

Future + Project Conditions (2022)

22: I-5 SB Ramps & Front St

PM Peak Hour



Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	647	322	705	36	82
v/c Ratio	0.59	0.38	0.64	0.07	0.05
Control Delay	14.9	9.5	3.9	7.6	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.9	9.5	3.9	7.6	7.0
Queue Length 50th (ft)	54	41	0	4	4
Queue Length 95th (ft)	136	111	45	19	16
Internal Link Dist (ft)	585	394			356
Turn Bay Length (ft)	280			140	
Base Capacity (vph)	2125	1699	1505	961	3227
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.30	0.19	0.47	0.04	0.03

Intersection Summary

## **APPENDIX D**

### **Driveway Level of Service Worksheets**

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Residential Driveway North

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B[ 12.8]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing traffic volumes and adjustments. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module:

Table with 12 columns showing critical gap and follow-up time values.

Capacity Module:

Table with 12 columns showing capacity-related metrics like conflict volume, potent capacity, and volume/capacity ratio.

Level Of Service Module:

Table with 12 columns showing level of service metrics like delay, LOS by move, and approach delay.

Note: Queue reported is the number of cars per lane.



Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Residential Driveway South

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[ 12.7]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing traffic volumes and adjustments. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module:

Table with 12 columns for critical gap and follow-up time. Rows include Critical Gp and FollowUpTim.

Capacity Module:

Table with 12 columns for capacity metrics. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module:

Table with 12 columns for level of service metrics. Rows include 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Hotel Driveway

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[ 12.6]

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and Movement (L - T - R). Rows include Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing different traffic volumes and adjustment factors like Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module:

Table with 12 columns showing critical gap and follow-up time values for different movements.

Capacity Module:

Table with 12 columns showing capacity-related metrics like Conflict Vol, Potent Cap, Move Cap, and Volume/Cap.

Level Of Service Module:

Table with 12 columns showing level of service metrics like 2Way95thQ, Control Del, LOS by Move, Shared Cap, Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Secondary Driveway

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[ 11.5]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing different traffic conditions and 7 rows of volume-related metrics.

Critical Gap Module:

Table with 12 columns and 2 rows showing critical gap and follow-up time values.

Capacity Module:

Table with 12 columns and 4 rows showing conflict volume, potent capacity, move capacity, and volume/capacity.

Level Of Service Module:

Table with 12 columns and 10 rows showing level of service metrics like 2Way95thQ, Control Del, LOS by Move, Shared Cap, Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Residential Driveway North

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[ 13.1]

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound), Movement (L-T-R), Control (Uncontrolled, Stop Sign), Rights (Include), Lanes (0-1).

Volume Module:

Table with 12 columns for traffic volume metrics: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Final Volume.

Critical Gap Module:

Table with 12 columns for critical gap metrics: Critical Gp, FollowUpTim.

Capacity Module:

Table with 12 columns for capacity metrics: Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Level Of Service Module:

Table with 12 columns for level of service metrics: 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Residential Driveway South

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[ 13.0]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing traffic volumes and adjustment factors like Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module:

Table with 12 columns showing critical gap and follow-up time values for different movements.

Capacity Module:

Table with 12 columns showing capacity-related metrics like Conflict Vol, Potent Cap, Move Cap, and Volume/Cap.

Level Of Service Module:

Table with 12 columns showing Level of Service (LOS) for various movements and approaches, including 2Way95thQ, Control Del, LOS by Move, Shared Cap, Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Hotel Driveway

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: B[ 13.3]

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and Movement (L, T, R). Rows include Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing different traffic movements. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module:

Table with 12 columns. Rows include Critical Gp and FollowUpTim.

Capacity Module:

Table with 12 columns. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module:

Table with 12 columns. Rows include 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Secondary Driveway

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[ 11.7]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing traffic volumes and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module:

Table with 12 columns for critical gap and follow-up time values.

Capacity Module:

Table with 12 columns for capacity-related metrics. Rows include Conflict Vol, Potent Cap, Move Cap, and Volume/Cap.

Level Of Service Module:

Table with 12 columns for level of service metrics. Rows include 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap, Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

**TABLE 1**  
**777 N FRONT STREET PROJECT - ALTERNATIVE 2**  
**PROJECT TRIP GENERATION ESTIMATES**

Land Use	Size	ITE Code	Trip Generation Rates [a]						Estimated Trip Generation									
			Daily Rate	AM Peak Hour			PM Peak Hour			Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips				
				Rate	In	Out	Rate	In	Out		In	Out	Total	In	Out	Total		
<b>Proposed Land Uses</b>																		
<b>Automobile Sales (New) [b]</b> <i>Less: Walk/transit/bike credit [c]</i> Total Driveway Trips	155 ksf	840	Equation 5%	1.87 5%	50%	50%	Equation 5%	48%	52%	4,411 (221) 4,190	145 (7) 138	145 (7) 138	290 (14) 276	144 (7) 137	157 (8) 149	301 (15) 286		
<b>TOTAL DRIVEWAY TRIPS</b>										<b>4,190</b>	<b>138</b>	<b>138</b>	<b>276</b>	<b>137</b>	<b>149</b>	<b>286</b>		

Notes:

- a. Source for trip generation rates: *Trip Generation Manual, 10th Edition*, Institute of Transportation Engineers (ITE), 2017.
- b. ITE code 840 Automobiles Sales (New) was used with the General Urban/Suburban setting rate.  
 Daily Equation:  $T = 28.65(X) - 29.45$   
 PM Equation:  $T = 1.80(X) - 21.60$
- c. A 5% walk/transit/bike credit was applied to account for the number and frequency of local bus service within walking distance of the Project.



**TABLE 2**  
**777 N FRONT STREET PROJECT - ALTERNATIVE 3**  
**PROJECT TRIP GENERATION ESTIMATES**

Land Use	Size	ITE Code	Trip Generation Rates [a]						Estimated Trip Generation								
			Daily Rate	AM Peak Hour		PM Peak Hour		Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips					
				Rate	In	Out	Rate		In	Out	In	Out	Total	In	Out	Total	
<b>Proposed Land Uses</b>																	
<b>Mid-Rise Apartments</b> [b] <i>Less: Walk/transit/bike credit [c]</i> Total Driveway Trips	880 DU	221	Equation 10%	Equation 10%	26%	74%	Equation 10%	61%	39%	4,794 (479)	75 (8)	213 (21)	288 (29)	218 (22)	139 (14)	357 (36)	
<b>TOTAL DRIVEWAY TRIPS</b>									<b>4,315</b>	<b>67</b>	<b>192</b>	<b>259</b>	<b>196</b>	<b>125</b>	<b>321</b>		

Notes:

- a. Source for trip generation rates: *Trip Generation Manual, 10th Edition*, Institute of Transportation Engineers (ITE), 2017.
- b. ITE code 221 Multifamily Housing Mid-Rise was used with the General Urban/Suburban setting rate.  
 Daily Equation:  $T = 5.45(X) - 1.75$   
 AM Equation:  $\ln(T) = 0.98 \ln(X) - 0.98$   
 PM Equation:  $\ln(T) = 0.96 \ln(X) - 0.63$
- c. A 10% walk/transit/bike credit was applied to account for the number and frequency of local bus service within walking distance of the Project.

**TABLE 3  
777 N FRONT STREET PROJECT - ALTERNATIVE 4  
PROJECT TRIP GENERATION ESTIMATES**

Land Use	Size	ITE Code	Trip Generation Rates [a]						Estimated Trip Generation							
			Daily Rate	AM Peak Hour		PM Peak Hour		Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips				
				Rate	In	Out	Rate		In	Out	In	Out	Total	In	Out	Total
<b>Proposed Land Uses</b>																
<b>Mid-Rise Apartments [b]</b>	315 DU	221	Equation	Equation	26%	74%	Equation	61%	39%	1,715	27	78	105	81	52	133
Less: Internal capture [c]			1%		1%	2%		1%	5%	(17)	0	(1)	(1)	(1)	(3)	(4)
Less: Walk/transit/bike credit [d]			10%	10%			10%			(172)	(3)	(8)	(11)	(8)	(5)	(13)
Total Driveway Trips										1,527	24	69	93	72	44	116
<b>Retail/Gallery Space</b>	0.587 ksf	820	37.75	0.94	62%	38%	3.81	48%	52%	22	1	0	1	1	1	2
Less: Internal capture [c]			25%		0%	0%		67%	67%	(6)	0	0	0	(1)	(1)	(2)
Less: Walk/transit/bike credit [d]			5%	5%			5%			(1)	0	0	0	0	0	0
Total Driveway Trips										15	1	0	1	0	0	0
<b>Hotel [d]</b>	169 rooms	310	8.36	Equation	59%	41%	Equation	51%	49%	1,413	47	32	79	52	49	101
Less: Internal capture [c]			1%		0%	2%		5%	1%	(14)	0	(1)	(1)	(3)	0	(3)
Less: Walk/transit/bike credit [d]			10%	10%			10%			(141)	(5)	(3)	(8)	(5)	(5)	(10)
Total Driveway Trips										1,258	42	28	70	44	44	88
<b>High-Turnover (Sit-Down) Restaurant [e]</b>	0.990 ksf	932	112.18	9.94	55%	45%	9.77	62%	38%	111	6	4	10	6	4	10
Less: Internal capture [c]			13%		24%	7%		26%	42%	(14)	(1)	0	(1)	(2)	(2)	(4)
Less: Walk/transit/bike credit [d]			5%	5%			5%			(6)	0	0	0	0	0	0
Total Driveway Trips										91	5	4	9	4	2	6
<b>TOTAL DRIVEWAY TRIPS</b>										<b>2,891</b>	<b>72</b>	<b>101</b>	<b>173</b>	<b>120</b>	<b>90</b>	<b>210</b>

Notes:

a. Source for trip generation rates: *Trip Generation Manual, 10th Edition*, Institute of Transportation Engineers (ITE), 2017.

b. ITE code 221 Multifamily Housing Mid-Rise was used with the General Urban/Suburban setting rate.  
 Daily Equation:  $T = 5.45(X) - 1.75$   
 AM Equation:  $\ln(T) = 0.98 \ln(X) - 0.98$   
 PM Equation:  $\ln(T) = 0.96 \ln(X) - 0.63$

c. Internal capture represents the percentage of trips between land uses that occur within the site. Transportation Research Board (TRB) National Cooperative Highway Research Program (NCHRP) Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments, 2011.

d. A 5-10% walk/transit/bike credit was applied to account for the number and frequency of local bus service within walking distance of the Project.

e. AM Equation:  $T = 0.50(X) - 5.34$   
 PM Equation:  $T = 0.75(X) - 26.02$